INTRODUCTORY LOGIC − Glossary of key terms

This glossary includes terms that are defined in the text, in the lesson and on the page noted.

A statement   Lesson 13, page 91

A categorical statement of the form *All S is P*, also called a universal affirmative.

Accent   Lesson 34, page 265

Changing the meaning of a sentence through improper emphasis. A fallacy of ambiguity.

Ad baculum   Lesson 33, page 258

Latin for "to the stick"; an illegitimate appeal to force, usually a thinly-veiled threat. A fallacy of distraction.

Ad hominem   Lesson 33, page 259

Latin for "to the man"; a verbal attack on the character of one's opponent. A fallacy of distraction.

Ad ignorantiam   Lesson 33, page 260

Latin for "to ignorance"; an argument from lack of evidence. A fallacy of distraction.

Ad populum   Lesson 33, page 258

Latin for "to the people"; an illegitimate appeal to a majority. A fallacy of distraction.

Affirming the consequent   Lesson 31, page 229

An invalid mixed hypothetical syllogism of the form *If p then q, q, therefore p*.

Ambiguous   Lesson 1, page 10

Having more than one possible meaning.

Amphiboly   Lesson 34, page 266

A vagueness of grammar that disguises or alters the meaning. A fallacy of ambiguity.

Antecedent   Lesson 31, page 228

In a hypothetical statement *if p then q*, the antecedent is the statement represented by the *p*.

Apparent disagreement   Lesson 10, page 77

A difference of opinion or perception.

Apriorism   Lesson 35, page 273

A hasty generalization. A fallacy of form.

Argument   Lesson 19, page 141

A set of statements, one of which appears to be implied or supported by the others.

Bulverism   Lesson 33, page 259

Attacking a position by pointing out how the arguer came to hold it. A fallacy of distraction.

Categorical logic   Introduction, page 6

A branch of deductive logic that deals with categorical syllogisms, in which the basic unit of thought is the category or term.

Categorical statement   Lesson 12, page 85

A statement that affirms or denies something about a given subject. A categorical statement connects a subject and a predicate, and has both quantity and quality.

Categorical syllogism   Lesson 20, page 145

A syllogism with each statement in categorical form.

Chronological snobbery   Lesson 33, page 260

To reject or affirm a position based merely on the passage of time. A fallacy of distraction.

Circular reasoning   Lesson 35, page 271

Secretly assuming in a premise what is to be proven in the conclusion. A fallacy of form.

Complement   Lesson 27, page 197

The negation of a term; the complement of *P* is *non-P*, and vice versa.

Complex question   Lesson 35, page 272

A question crafted to exclude a legitimate response, also called a "loaded question." A fallacy of form.

Composition   Lesson 34, page 266

Arguing that what is true of each of the individual parts must be true of the thing as a whole. A fallacy of ambiguity.

Conclusion   Lesson 19, page 141

The statement in an argument that appears to be implied or supported by the others.

Consequent   Lesson 31, page 228

In a hypothetical statement *if p then q*, the consequent is the statement represented by the *q*.

Consistent   Lesson 9, page 69

Statements are consistent if they can be true at the same time.

Contradiction   Lesson 14, page 95

The relationship between A and O statements, or E and I statements, on the square of opposition. Two statements contradict if and only if they have opposite truth values.

Contrapositive   Lesson 27, page 198

The contrapositive of a statement switches the subject and predicate, and changes both to their complements. Contrapositive is valid for A and O statements.

Contrariety   Lesson 15, page 101

The relationship between A and E statements on the square of opposition. Contrary statements can both be false but cannot both be true.

Converse   Lesson 27, page 197

The converse of a statement switches the subject and predicate of the statement. Converse is valid for E and I statements.

Counterexample   Lesson 24, page 163

A syllogism that shows another syllogism to be invalid, by substituting terms to make the premises true and the conclusion false.

Deduction   Introduction, page 5

Formal logic that deals with reasoning from premises to conclusions, conclusions that are either valid or invalid.

Definition   Lesson 1, page 9

A statement that gives the meaning of a term.

Denying the antecedent   Lesson 31, page 230

An invalid mixed hypothetical syllogism of the form *If p then q, not p, therefore not q.*

Distributed   Lesson 25, page 169

A term is distributed when it refers to all members of its category (that is, its entire extension). The subject of universal statements and the predicates of negative statements are distributed.

Division   Lesson 34, page 267

Arguing that what is true of the thing as a whole must be true of any individual part. A fallacy of ambiguity.

E statement   Lesson 13, page 91

A categorical statement of the form *No S is P*, also called a universal negative.

Either/or   Lesson 35, page 272

An argument that oversimplifies the choices. Also called "bifurcation." A fallacy of form.

Enthymeme   Lesson 30, page 219

A syllogism in which one statement is left assumed.

Equivocation   Lesson 34, page 265

Changing the meaning of a term in the middle of an argument. A fallacy of ambiguity.

Exclusive   Lesson 29, page 213

A word in a statement that set boundaries, referring only to a limited class of things, such as *only, unless,* and *except.*

Extension   Lesson 3, page 21

The extension of a term is the sum of all the individual things described by the term.

Fallacy of ambiguity   Lesson 34, page 265

An informal fallacy that confuses the issue through unclear meanings.

Fallacy of distraction   Lesson 33, page 257

An informal fallacy that confuses the issue by pointing to information that is irrelevant to the conclusion.

Fallacy of form   Lesson 35, page 271

An informal fallacy that fails to establish the conclusion due to a weakness in logical structure.

Figure   Lesson 22, page 153

The figure of a syllogism is a number (from 1 to 4) identifying the placement of its middle term.

Form   Lesson 22, page 154

The form of a syllogism is the mood and figure of a syllogism (see Appendix B).

Formal logic   Introduction, page 5

Logic that deals directly with reasoning by means of logical arguments.

Genus   Lesson 2, page 15

A term that is more general, broad, or abstract than the original term and includes it.

Genus and difference   Lesson 4, page 28

A method of defining a term by providing the genus of the term along with descriptive words that distinguish that term from every other species under that genus.

Genus and species hierarchy   Lesson 2, page 15

A chart that shows the relationships between the genera and species of a set of terms.

Hypothetical statement   Lesson 28, page 207

A statement of the form *If p then q*.

Hypothetical syllogism   Lesson 31, page 227

A syllogism that uses at least one hypothetical statement.

I statement   Lesson 13, page 91

A categorical statement of the form *Some S is P*, also called a particular affirmative.

Illicit major   Lesson 26, page 175

A fallacy in which the major term is distributed in the conclusion but not in the premise.

Illicit minor   Lesson 26, page 175

A fallacy in which the minor term is distributed in the conclusion but not in the premise.

Immediate inference   Lesson 27, page 197

A statement that can be inferred directly from another statement. Equivalent immediate inferences include converse, obverse, and contrapositive.

Implication   Lesson 9, page 69

Two statements are related by implication if the truth of one requires the truth of the other.

Inclusive   Lesson 29, page 211

A word in a statement, often a relative pronoun or adverb, that refers to a broad range of things or times, such as *whoever, whatever, wherever, whenever, however, always,* and *never.*

Inconsistent   Lesson 9, page 69

Statements are inconsistent if they cannot be true at the same time.

Indefinite statement   Lesson 28, page 206

A statement in which the subject not explicitly distributed.

Independent   Lesson 9, page 71

Two statements are independent if the truth value of one has no effect on the truth value of the other.

Induction   Introduction, page 5

Formal logic that deals with reasoning from examples or experience to probable conclusions. Inductive conclusions are either strong or weak.

Informal fallacy   Lesson 33, page 257

A popular but invalid (or unhelpful) form of argument.

Informal logic   Introduction, page 5

Logic that deals with operations of thinking that are indirectly related to reasoning, and support the process of reasoning, such as defining terms and determining the truth of statements.

Intension   Lesson 3, page 21

The intension of a term is the sum of all the common attributes denoted by the term.

Invalid   Lesson 23, page 159

In an invalid argument, it is possible for the premises to be true and the conclusion false.

Ipse dixit   Lesson 33, page 258

Latin for "he has said it himself"; an illegitimate appeal to authority. A fallacy of distraction.

Law of Excluded Middle   Introduction, page 3

A statement is either true or false.

Law of Identity   Introduction, page 4

If a statement is true, then it is true.

Law of Noncontradiction   Introduction, page 4

A statement cannot be both true and false.

Negative premise and affirmative conclusion   Lesson 26, page 176
A fallacy in which at least one premise of a syllogism is negative, and the conclusion is affirmative.

Non sequiter   Lesson 31, page 230
Latin for "It does not follow"; an invalid argument.

O statement   Lesson 13, page 92
A categorical statement of the form *Some S is not P*, also called a particular negative.

Obverse   Lesson 27, page 197
The obverse of a statement changes the quality of the statement and changes the predicate to its complement. Obverse is valid for all statements.

Particular affirmative   Lesson 12, page 86
A categorical statement of the form *Some S is P*, also called an I statement.

Particular negative   Lesson 12, page 86
A categorical statement of the form *Some S is not P*, also called an O statement.

Persuasive definition   Lesson 1, page 11
A definition intended to influence the attitudes and emotions of an audience toward the term.

Post hoc ergo propter hoc   Lesson 35, page 272
Latin for "after this, therefore because of this"; improperly assuming that a sequence in time implies a cause and effect. Also called a "false cause." A fallacy of form.

Precising definition   Lesson 1, page 10
A definition that reduces the vagueness of a term in a particular situation.

Premise   Lesson 19, page 141
A statement in an argument meant to imply or support the conclusion.

Propositional logic   Introduction, page 6
A branch of deductive logic in which the basic unit of thought is the proposition.

Pure hypothetical syllogism   Lesson 31, page 227
An argument that uses only hypothetical statements.

Quality   Lesson 12, page 86

The quality of a statement is the affirmative or negative nature of its claim about the subject: affirmative (asserts something) or negative (denies something).

Quantity   Lesson 12, page 86

The quantity of a statement is the scope of the claim about the extension of the subject: universal (entire extension) or particular (partial extension).

Real disagreement   Lesson 10, page 77

An actual inconsistency between two statements: they cannot both be true at the same time.

Reasoning   Introduction, page 1

Drawing proper conclusions from other information.

Schema   Lesson 21, page 151

A schema is a representation of a syllogism, having statements in standard order with standard abbreviations of all of its terms: S for the minor term, P for the major term, M for the middle term.

Self-contradiction   Lesson 7, page 62

A statement that is false by logical structure.

Self-report   Lesson 7, page 61

A statement by a person referring to his or her own desires, beliefs, or feelings.

Self-supporting statement   Lesson 7, page 61

A statement with a truth value that can be determined from the statement itself, such as a self-report, a statement that is true or false by logical structure, or a statement that is true or false by definition.

Singular statement   Lesson 28, page 206

A statement that refers to a single person or thing.

Sound   Lesson 23, page 160

A sound argument is valid and has true premises and a true conclusion.

Species   Lesson 2, page 15

A term that is more specific, narrow, or concrete than the original term and is included by it; a type, kind, or example of the term.

Square of opposition   Lesson 13, page 91

A diagram of the basic relationships between categorical statements that have the same subject and predicate (see Appendix A).

Statement   Lesson 6, page 57

A sentence that is either true or false.

Stipulative definition   Lesson 1, page 10

A definition for a new word, or for an existing word applied in a new way.

Subcontrariety   Lesson 16, page 105

The relationship between I and O statements on the square of opposition. Subcontrary statements can both be true but cannot both be false.

Subimplication   Lesson 17, page 109

The relationship from an A to an I statement, or from an E to an O statement, on the square of opposition. In subimplication, if the universal statement is true then the particular statement of the same quality must be true.

Superimplication   Lesson 18, page 111

The relationship from an I to an A statement, or from an O to an E statement, on the square of opposition. In superimplication, if the particular statement is false then the universal statement of the same quality must be false.

Supported statement   Lesson 8, page 65

A statement with a truth value that depends on evidence or information from outside of the statement itself.

Syllogism   Lesson 20, page 145

A deductive argument with two premises and three terms: major, minor, and middle.

Tautology   Lesson 7, page 61

A statement that is true by logical structure.

Term   Lesson 1, page 9

A concept that is expressed precisely in words.

Theoretical definition   Lesson 1, page 11

A definition that provides a theoretical (e.g. scientific or philosophical) meaning of a term.

Truth value   Lesson 6, page 57

Truth or falsity of a statement.

Tu quoque   Lesson 33, page 260

Latin for "you also"; verbally defending oneself by pointing to an inconsistency between an opponent's argument and his behavior. A fallacy of distraction.

Two affirmative premises and a negative conclusion Lesson 26, page 176

A fallacy in which btoh premises of a syllogism are affirmative, and the conclusion is negative.

Two negative premises   Lesson 26, page 175

A fallacy in which both premises in a syllogism are negative.

Undistributed middle   Lesson 26, page 174

A fallacy in which the middle term is not distributed in either premise.

Universal affirmative   Lesson 12, page 86

A categorical statement of the form *All S is P*, also called an A statement.

Universal negative   Lesson 12, page 86

A categorical statement of the form *No S is P*, also called an E statement.

Vague   Lesson 1, page 10

Unclear in extent.

Valid   Lesson 23, page 159

A syllogism is valid if and only if the premises imply the conclusion.

Validity   Lesson 23, page 159

The condition of an argument, valid or invalid, depending on the form of the argument.

Verbal disagreement   Lesson 10, page 77

A misunderstanding due to differing definitions for one or more words.