

Logic

•**Definition:** [definition]

•**Goal:** [definition]

•**Purpose:** [definition]

Arguments, etc.

•**Argument:** [definition]

•**Premises:** [definition]

•**Conclusion:** [definition]

Reasoning

•**Inference:** [definition]

•**Style:** [definition]

•**Efficacy:** [definition]

•**Justification:** [definition]

•**Rationality:** [definition]

•**Rational:** [definition]

•**Irrational:** [definition]

Statements

•**Content:** [definition]

•**Force:** [definition]

•**Expression:** [definition]

Styles of Inference

Deductive:

Inductive:

Deduction

Induction

Dimensions of Reasoning

•**Inferential:** the varying inferential relations premises and conclusions stand in when connected together via reasoning

•**Representational:** the varying degrees of accuracy statements exhibit when connected with reality via assertion and belief

Norms of Reasoning

Rationality: norm for evaluating the inferential dimension of arguments

Rational: premises successfully justify the inferred conclusion

[*positive* inferential "value"]

Irrational: premises fail to justify the inferred conclusion

[*negative* inferential "value"]

Accuracy: norm for evaluating the representational dimension of arguments

True: *positive* inferential "value"

Irrational: *negative* inferential "value"

Inaccurate: statement successfully

[*positive* representational "value"]

False: statement fails to veridically represent the actual facts

[*negative* representational "value"]

Recognizing Statements

1. Indicator Words

2. Common Types of Non-Statement

- Commands
- Proposals
- Requests

Recognizing Arguments

1. Indicator Words

2. Logical Order

3. Background Context

4. Common Types of Argument

5. Common Types of Non-Argument

Assessing Validity

Form & Substitution

Assessing Validity, Pt. 2

Conditional Statements

Common Non-Arguments

•[definition]

- Advice
- Assertion
- Description
- Explanation
- Exposition
- Illustration
- Reporting
- Quotation
- Warning

Validity vs. Strength: Similarities

1. Both depend on whether the truth-conditions of the premises and the truth-conditions of the conclusion are correctly related.

2. Neither depend on the actual true-value of the premises or the conclusion.

Validity vs. Strength: Differences

1. Only deductive inferences can be valid/invalid, and only inductive inferences can be strong/weak.

2. When the premises in a valid argument are all true, it's *impossible* the conclusion is false. When the premises in a strong argument are all true, it's only *improbable* the conclusion is false.

3. Validity is all-or-nothing, but strength is a matter of degree.

1.

For strong arguments, when

it is still For strong arguments, even if the premises are true, the conclusion can still be false.