



## Essentials of Formal Logic with Joelle Hodge

### Lesson 29: Chapter 8.2

#### Outline:

##### Chapter 8, Lesson 8.2

- Determining the Validity of Syllogisms
- Evaluating Validity: Terminological Rules 1 and 2
- Points to the Remember
  - There are seven rules for determining the validity of a syllogism.
  - The first four rules are terminological rules (term study).
  - The last three rules are qualitative rules (quality of propositions).
  - The first rule of validity is: **There are only three terms in a syllogism.**
  - The second rule of validity is: **The middle term cannot be in the conclusion.**
- Rules 1-7
  - Rule 1: There are only three terms in a syllogism.
  - Rule 2: The middle term cannot be in the conclusion.
  - Rule 3: The middle term must be distributed at least once.
  - Rule 4: If a term is distributed in the conclusion, it must be distributed in the premises as well.
  - Rule 5: No conclusion can follow two negative premises.
  - Rule 6: If the premises are positive, the conclusion must be positive.
  - Rule 7: If either premise is negative, the conclusion must be negative.
  - You may not have realized it when you read through the rules, but the first
- Rule 1: There are only three terms in a syllogism.
  - All pursuits of happiness are pursuits that are natural rights of men.
  - Smoking marijuana is a pursuit of happiness.
  - Therefore, smoking marijuana is a natural right of men.
  - If you analyze this syllogism, you will realize that this is an AAA-1 syllogism, which means it has a valid mood and figure. Furthermore, the premises are true. Our Declaration of Independence does state that the rights of men are “life, liberty, and the pursuit of happiness.” It is also true that, at least temporarily, smoking marijuana does make some people happy. Therefore, on the face of it, this syllogism seems to be sound, meaning it seems to be both valid and true. However, there is a problem with it. It actually commits the fallacy of four terms.
  - Equivocation is a sneaky way to get a fourth term into the argument.
- Rule 2: The middle term cannot be in the conclusion.



- The job of the middle term is to relate the major and minor terms in the premises so that these terms can be connected in the conclusion. Once the middle term has done this, its job is finished, and it drops out of the conclusion.
- The syllogism is not about the middle term, the syllogism is about the major term and the minor term.
- Consider that sometimes when we are making a deductive argument on the spot, we can get sidetracked from our original argument and may introduce irrelevant items or attempt to make connections between terms that are not really connected or between which we have not actually established a clear connection.
- We are more apt to make inferential leaps between points that really cannot be justified.
- Start with the conclusion and beware of an imposter.