Reference Sheet 3.7.
Rules of Traditional Logic

S, **P**, **M** are variables that represent both affirmative terms and negative terms.

Elementary Equivalences For Traditional Logic

Term Double Negation (**Term DN**)

P ═ non-non-**P**

where **P** is the subject term or the predicate term of a sentence,
and where the rest of the sentence must be kept constant in the inference.

The Quantifier-Negation laws (**QN**)

not (all **S** are **P**) ═ some **S** are non-**P**
not (some **S** are **P**) ═ all **S** are non-**P**
no **S** are **P** ═ all **S** are non-**P**
no **S** are **P** ═ not (some **S** are **P**)

Conversion (**Conv**)

some **S** are **P** ═ some **P** are **S**
no **S** are **P** ═ no **P** are **S**

Contraposition (**Contrap**)

all **S** are **P** ═ all **opposite**[**P**] are **opposite**[**S**]

Elementary Argument Forms For Traditional Logic

Univ Syll

all **S** are **M**
all **M** are **P**
∴ all **S** are **P**

Part Syll

some **S** are **M**
all **M** are **P**
∴ some **S** are **P**

One may also **supersize** these rules by adding the appropriate **continuation** premisses.

Additional rules for Traditional Logic

Sing Univ Syll

all **S** are **P**
n is **S**
∴ **n** is **P**

Sing Part Syll

n is **S**
n is **P**
∴ some **S** are **P**

Name-Negation Law

~(**n** is **P**) ═ **n** is non-**P**