Definition 3.5. [OOD] *A* ***propositional logic*** *is a language, with associated an alphabet of variables (which for convenience in the following we will identify with the Italian alphabet) and a family of connectives* [a]

negation, NOT	$\neg$
conjunction, AND	$\wedge$
disjunction, OR	$\vee$
implication	$\Rightarrow$
biconditional, iff	$\Leftrightarrow$

to these symbols we add parentheses, which are used to group parts of the formula (when there is a risk of ambiguity); the parentheses are omitted when the precedence of the operators allows; the operators are listed in the previous list in descending order of precedence. [b]

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[a] In logic texts, the symbol $\rightarrow$ is often used for the implication and the symbol $\leftrightarrow$ for the double implication

[b] Some scholars use a different order of precedence, some consider ”the implication” as preceding the ”disjunction”. For this reason it is always better to use parentheses to group the parts of phrase where these connectives are used.