Phil 57 section 03
Fall 2010

Propositional Logic: definitions of operators.

Negation (~P, "not-P")

P	**~P**
T	F
F	T

Material conditional (P→Q, "If P then Q")

P	**Q**	**P→Q**
T	T	T
T	F	F
F	T	T
F	F	T

Conjunction (P•Q, "P and Q")

P	**Q**	**P•Q**
T	T	T
T	F	F
F	T	F
F	F	F

Biconditional (P↔Q, "P if and only if Q")

P	**Q**	**P↔Q**
T	T	T
T	F	F
F	T	F
F	F	T

Disjunction (P∨Q, "P or Q")

P	**Q**	**P∨Q**
T	T	T
T	F	T
F	T	T
F	F	F