**Handout on inductive arguments and their corresponding fallacies:**

**I. Argument from discrediting the source:**
P1: Person *S* says that *Q*.

P2: *S* has allegedly negative characteristic *N*.

[P3: If (P1) and (P2), then *Q* should not be believed.]

C: *Q* should not be believed.

In general, an argument from discrediting the source is strong if (P3) is true, and commits the ***ad hominem* fallacy** if (P3) is false.

**II. Appeal to authority:**

P1: Person *S* says that *Q*.

P2: *S* is a credible authority [about *Q*].

[P3: If (P1) and (P2), then *Q*.]

C: *Q*.

In general, an appeal to authority is strong if (P2) and (P3) are true, and commits the fallacy of **appeal to false authority** if (P2) or (P3) is false.

**III. Appeal to ignorance:**

P1: So far, *X* has not been discovered.

[P2: If (P1), then (C).]

C: *X* does not exist.

In general, an appeal to ignorance is strong if (P2) is true, and commits the **fallacy of appeal to ignorance** if (P2) is false.

**IV. Generalization:**

P1: Sample *S*, included in whole population *W*, has characteristic *Q*.

[P2: *S* is representative of *W*.]

C: *W* has *Q*.

In general, a generalization is strong if (P2) is true, and commits the fallacy of **hasty generalization** if (P2) is false.

**V. Causal argument** (or: **argument from causation**):

**Form 1 (from an event to its alleged effect):**

P1: Event *C* occurs.

[P2: *C* is a cause of event *E*.]

C: *E* will occur.

**Form 2 (from an event to its alleged cause):**

P1: Event *E* occurs.

[P2: *E* is caused by event *C*.]

C: *C* occurred.

In general, a causal argument is strong if (P2) is true, and commits the fallacy of **false cause** if (P2) is false.

**VI. Slippery slope argument:**

P1: If event *E* occurred, then undesirable consequence *U* would occur.

[(P2): *E* would inevitably lead to *U*.]

C: *E* ought not to occur.

In general, a slippery slope argument is strong if (P2) is true, and commits the **slippery slope fallacy** if (P2) is false.

**VII. Argument from analogy:**

P1: Thing *T*1 has characteristic *Q*.

P2: *T*1is similar to thing *T*2 (where *T*1isn’t included in *T*2 and *T*2isn’t included in *T*1).

[(P3):The similarity between *T*1and *T*2 is ***relevant*** to *Q*.]

C: *T*2 has *Q*.

In general, a slippery slope argument is strong if (P3) is true, and commits the fallacy of **weak analogy** if (P3) is false.

**VIII. Fallacy of suppressed evidence:**

The fallacy of suppressed evidence is committed when a strong inductive argument is uncogent because of the omission of a true statement that, if supplied as a premise, would render the original argument weak.

**IX. Fallacy of false dichotomy:**

P1: ~*P*

[P2: *P* ∨ *Q*]

C: *Q*

Although this enthymeme can be interpreted as a valid disjunctive syllogism, it commits the fallacy of **false dichotomy** if (P2) is false.

**X. Fallacy of straw man:**

P1: Person *S* makes argument *A*.

P2: *A* is unsound or uncogent.

C: *S* made an unsound or uncogent argument.

The fallacy of **straw man** is committed if (P1) is false, i.e., if person *S* didn’t make the argument attributed to him or her.

**XI. Fallacy of complex question:**

Question: is *S* (a) *P*?

[Assumption: *S* exists (or is true).]

The fallacy of complex question is committed if there’s a reasonable question as to whether *S* exists (or is true).