FOUR WAYS OF KNOWING  
(Justifiable True Belief)

1. Sensory input;  
2. Authoritative knowledge;  
3. Logic and reason;  
4. Faith and intuition

Argumentative Fallacies

The Logic of Writing and Debate
from http://www.unc.edu/depts/wcweb/handouts/fallacies.html

• What is an “Argument”? (p 1)
An argument is a spoken or written work "composed of premises, or statements that express your reasons or evidence that are arranged in the right way to support your conclusion, or the main claim or interpretation you are offering."
**Argumentative Fallacies**

The Logic of Writing and Debate

- **What makes a good argument?**
  
  "Arguments present reasons to believe things. Good arguments present good reasons to believe things."
  
  - R. Feldman, RIT

  A **fallacy** is a defect that weakens arguments. Avoiding logical fallacies is key to creating a good argument.

  But, in order to avoid such a pitfall or trap, one must be aware of it.

- **What are fallacies?** (p 1)
  
  A **fallacy** is a defect that weakens arguments. They are very common and can be persuasive.

  They are hard to evaluate and may lead to various levels of weakness in an argument.

  **Critical thinking** involves avoiding fallacies in your arguments and finding them in others.

- **What types of fallacies exist?** (p 2-8)

  1. Hasty generalization
  2. Missing the point
  3. Post hoc (also called False Cause)
  4. Slippery slope
  5. Weak analogy
  6. Appeal to authority
  7. **Ad populum**
  8. **Ad hominem** and tu quoque
  9. Appeal to pity
  10. Appeal to ignorance
  11. Straw man
  12. Red herring
  13. False Alternatives
  14. **Begging the Question**
  15. Equivocation
Post Hoc (False Cause)
- Assuming that because B comes after A, A caused B. Of course, sometimes one event really does cause another one that comes later, but correlation does not equal causation.
- Example:
  "President Bush raised taxes, and then the rate of violent crime went up. Bush is responsible for the rise in crime."

Appeal to Emotion (Pity)
- When an arguer tries to get people to accept a conclusion by making them feel sorry for someone (or happy, angry, etc.).
- Example:
  "I know the exam is graded based on performance, but you should give me an A. My cat has been sick, my car broke down, and I've had a cold, so it was really hard for me to study!"

Missing the Point
- Occurs when the premise given to support a conclusion has little or no relevance to the conclusion.
- Example:
  "TV can't be harmful for children because it occupies their attention for hours and keeps them off the streets."
Slippery slope
(overexaggeration)
- If the first in a possible series of steps or events occurs, the other steps or events are inevitable.
  - Example: "If you don't pick up your clothes before you go to bed at night, pretty soon you'll be knee-deep in dirty clothes."

Equivocation
- "Word Games"; sliding between two or more different meanings of a single word or phrase that is important to the argument.
  - Example:
    - Wisenberg: "The statement that there was "no sex of any kind in any manner, shape or form, with President Clinton," was an utterly false statement. Is that correct?"
    - Clinton: "That depends on what the definition of 'is' is." - President Bill Clinton in his deposition on the Monica Lewinsky case

Appeal to Authority
- Trying to get others to agree with us simply by impressing them with a famous name or by appealing to a supposed authority who really isn't much of an expert.
  - Example:
    - "Dr. Reymers believes that 2+2=5, so we should believe it, too. After all, he has a Ph.D. and we don't."
Appeal to Ignorance

- Occurs when it is argued that because we cannot prove a proposition to be true, it must be false; or if we cannot prove a proposition to be false, it must be true.
- Example:
  "There has never been any scandal about this candidate for president. Therefore, he must be an honest, moral person."

Hasty generalization
(jumping to conclusions; stereotyping)

- Occurs when an isolated or exceptional case is used as the basis for a general conclusion; making a conclusion about a population based on information obtained from a biased sample.
- Example:
  "I never read a book by a woman because I never met a woman who had sense enough to write a book."

Ad populum

- Literally, "to the people." The arguer takes advantage of the desire most people have to be liked and to fit in with others and uses that desire to try to get the audience to accept his or her argument.
- Example:
  "Gay marriages are just immoral. 70% of Americans think so!"
Red Herring

- The arguer diverts your attention away from the real issue. The "red herring" is the other issue used to divert you.

Example:

**Parent:** "Why didn't you call me when you didn't come home by 11 p.m. from your date?"

**Kid:** "My brother doesn't have a curfew for dates."

Straw Man

- The arguer sets up a weak, wimpy version of the opponent's position and tries to score points by knocking it down.

Example:

"Feminists want to ban all pornography and punish everyone who reads it! But such harsh measures are surely inappropriate, so the feminists are wrong: porn and its readers should be left in peace."

Begging the Question (or Circular Argument)

- The fallacy occurs when the solution to the problem is a restatement of the problem.

Example:

"I asked my doctor why my mouth was so dry and he told me that it was because my saliva glands are not producing enough saliva."
Ad hominem
(or tu quoque)
• Literally, “against the person” (“you, too!”). Involves an attack on the person arguing, not the argument itself. The reason for not believing the argument is because So-and-So is either a bad person (ad hominem) or a hypocrite (tu quoque).

Example:
Your parents have explained to you why you shouldn't smoke, and they've given a lot of good reasons—the damage to your health, the cost, and so forth. You reply, "I won't accept your argument, because you used to smoke when you were my age. You did it, too!"

Weak Analogy
• An attempt is made to make two situations seem more similar than they actually are.
  • Example:
    "Guns are like hammers—they're both tools with metal parts that could be used to kill someone. And yet it would be ridiculous to restrict the purchase of hammers—so restrictions on purchasing guns are equally ridiculous."

False Dichotomy
(or False Alternatives)
• Also called black and white thinking, the fallacy occurs when it is presumed that a classification is exclusive. It often takes the form of overlooking alternatives that exist between two polar opposites.

Example:
• Ad: "If you know about BMW, you either own one or want one."
More examples:

**What Kind of Fallacy is it?**

1. We need to buy a camera phone right away. Everyone else has one.
   *Ad Populum*

2. She doesn’t know anything about computer programming – she’s a blond.
   *Ad hominem* or *hasty generalization* (it could depend on the context it was said in).

3. Morrisville should upgrade to Windows Server 2003; it works really well for Colgate.
   *Weak Analogy* (there are significant differences between a company like Colgate and Morrisville College). It is also a *generalization*.

More examples:

**What Kind of Fallacy is it?**

4. I’ll never learn to use PowerPoint—I tried working with it for 2 days and my presentation is a mess.
   *Hasty generalization*

5. You can stop eating animal products and be healthy or keep eating them and be unhealthy.
   *False Dichotomy*

6. “Mom, I am not playing video games, I’m studying for my computer class.” [Alt+Tab] (blam!blam!)
   *Red herring*

Fallacies do not make an argument WRONG, they just make it BAD.

“A fallacy-free argument isn’t necessarily a great one, of course: there are a number of obvious and plausible objections to the argument we’ve just given. The strength of an argument depends not just on avoiding fallacies, but also on the truth of the premises, the completeness of the author’s knowledge, the quality of the evidence used, and so forth.”

Source: https://writingcenter.unc.edu/handouts/fallacies/sample-arguments-with-fallacies/fallacy-adjunct/