## **Common Logical Fallacies**<sup>1</sup>

1. **Non-sequitur**: a statement which draws a conclusion not supported by the premises.

| Non-sequitur example                              | Explanation                           |
|---|---------------------------------------|
| Education is the only way to combat unemployment. | (many educated people are unemployed) |

2. **Ad hominem**: an ad hominem argument appeals to the feelings of the audience about the moral integrity of the speaker.

| Ad hominem example   | Explanation   |
|--|---|
| Clinton's infidelity to his wife invalidates his Mideast peace policy. | (marital infidelity has no direct connection with international policy) |

3. **Appeal to authority**: when an expert in one field pronounces upon another, there may be an inappropriate use of authority to support an argument.

| Appeal to authority example           | Explanation   |
|---------------------------------------|---|
| Drink Vichy water; Paris Hilton does. | (Ms. Hilton may enjoy foul, expensive, or even toxic water) |

4. **False Analogy**: it is an assertion that because a similarity exists in one aspect, it must also exist in other aspects.

| False analogy example   | Explanation  |
|---|--|
| Defending his rationale for pursuing the<br>Vietnam War, president Lyndon Johnson<br>said, "We learned from Hitler at Munich<br>that success only feeds the appetite of<br>aggression." | (Aster, Sidney. "A Shaky Grasp of<br>History." Globe and Mail [Toronto] 25<br>Feb. 2003:A19) Aster points out that<br>many politicians have relied heavily upon<br>the analogy of appeasing Hitler, whether<br>or not the circumstances justify the<br>comparison. |

5. **Bandwagon argument**: a bandwagon argument depends on popular generalizations and associations to support its claim.

| Bandwagon example   | Explanation                     |
|---|---------------------------------|
| Jim MacPherson should be<br>treasurer; as everyone knows, the<br>Scots are naturally thrifty. | ("everyone" may be quite wrong) |

6. **Circular reasoning / begging the question** treats matters under debate as already established.

| Begging the question example   | Explanation  |
|--|--|
| We must carefully identify these<br>promoters of hatred so that they can<br>be removed from positions in the<br>public services. | (This assumes that you agree on a definition of "promoters of hatred," and on the necessity of denying them basic human rights; it also assumes that "these" particular haters exist and can be identified.) |
| Clearly, Mary is failing the class because she cannot manage to  | (a restatement of a point is not a proof of it)  |

| achieve at the level required to pass. |  |
|--|--|
|--|--|

7. **False Dichotomy**: this is the fallacious presentation of two possibilities as the only possibilities.

| False dichotomy example                          | Explanation                              |
|--|--|
| I must pass Calculus, or my life will be ruined. | (this bars second chances and new paths) |

8. **Post hoc, ergo propter hoc** is an error created by assuming that sequence indicates causation.

| Post hoc example  | Explanation  |
|---|--|
| Withdrawals have increased substantially<br>since Professor Tod started teaching<br>history at UNB; clearly he has driven<br>students away. | (there is no necessary connection<br>between the higher dropout rates and<br>Tod's teaching; they are related<br>sequentially and the case for causation<br>cannot be assumed) |

**Cum hoc** arguments are based on accompaniment rather than sequence, but they are equally fallacious.

9. In argument, a **red herring** describes a statement introducing an unrelated point as evidence.

| Red herring example | Explanation  |
|---------------------|--|
| •                   | (the assignment of homework is irrelevant to the emission of greenhouse gases) |

10. **Arguments from ignorance** assume that because something has not been proven false, it is therefore true. Conversely, such an argument may assume that because something has not been proven true, it must therefore be false.

| Argument from ignorance example   | Explanation   |
|---|---|
| The US has not proved that Iraq has weapons of mass destruction; therefore, Iraq has no such weapons. | (consider the reverse: Iraq has not<br>disproved that it has weapons of mass<br>destruction; therefore, it has such<br>weapons) |

## **Insufficient Evidence in an Argument**

## What makes evidence sufficient?<sup>2</sup>

- It completely supports the claim (not just part of the claim). Warrants are important to provide enough information to support a claim.
- There are multiple types of evidence (not only relying on one type).
- No important information is left out.

## References

- 1. The UNB writing center (Fredericton). *Common Logical Fallacies* [Powerpoint Presentation]. Retrieved from <u>https://www.unb.ca/fredericton/studentservices/\_resources/pdfs/wss/fallacies.pdf</u>
- Warren County Schools. (2014) Evaluating Evidence [Powerpoint Presentation]. Retrieved from http://www.warrencountyschools.org/userfiles/3381/Classes/162058/14-15%20evaluating%20evidence.pdf?id=542601