

Common Fallacies

The purpose of this list of fallacies is not to provide you with an exhaustive list of common errors in reasoning, but to provide you with some common fallacies that we may encounter in the course of the semester. Many of the technical fallacies are not listed here, because I do not presuppose that you have taken a course in logic. However, knowing some of the more common mistakes in reasoning is helpful whether you have or have not taken a formal logic course. Let's start with some concepts. A fallacy is a mistake in reasoning. Some mistakes in reasoning are so obvious that no one is apt to be taken in by them. For example, probably no one would find the following argument compelling.

Two plus Two equals four, therefore Santa Claus exists.

Other errors in reasoning tend to be psychologically persuasive. There are what are commonly referred to as the fallacies. Most often, these fallacies appear in television commercials or in political debates. Knowing that these are mistakes in reasoning free one from being persuaded by them.

1. False Dilemma: Usually in the form of an either/or sentence. False dilemmas have the form where a choice is offered and there are other possibilities that are not considered. For example: Either I will have steak for dinner or I will have a hamburger. Notice that there are other possible dinner items than just steak or hamburger. If the example were a premise in an argument, this alone would make it invalid and unsound.
2. Strawman: An argument that is intentionally the weaker version of an opponent's views. This mischaracterization is presented so as to more easily defeat the opponent.
3. Slippery slope: Usually in the form of: the difference between A and B is really the same as the difference between A and Z, because B is just one little step to Z. For example: we must not decriminalize pot smoking because that would lead to a causal attitude about drug use, and to a greater demand for other drugs, and ultimately to a widespread availability of all drugs.
4. Loaded Questions: Usually of the form: So, have you stopped beating your wife? This question is loaded because either a negative or a positive response presupposes that the person in question has beaten his wife.
5. Circular Argument: The conclusion of the argument is needed as a basis for justifying one of the premises in the argument. For example, all survivors are strong because only the strong survive.
6. *Ad hominem* (Against Man): These arguments usually have a premise that calls into question the other premise of the argument by drawing attention to the personality traits of another person. For example, Billy Bob thinks that wearing seat belts is important for safety. But, Billy Bob beats his dog. So, wearing seat belts must not be important for

safety.

7. **Appeal to Unwarranted Authority:** Where one of the premises in an argument uses as its justification an appeal to a recognized authority or authority figure, but the authority has no bearing on the matter. For example, if smoking is not harmful, then it is not wrong. The Tobacco companies say that smoking is not harmful, so it is not wrong. Notice that the argument hinges on the authority of the tobacco companies. What do business men know about the medical nature of smoking? Would the argument not be more compelling if the justification came from a medical authority and not someone or a group of people that had something to gain by people smoking?
8. **Appeal to Force:** Similar to #7, except an implied threat is used to justify the position. For example, He should have listened to his wife, because she will make him sorry for it now.
9. **Appeal to Pity:** Similar to #7, except what justifies the premise is an emotional appeal or using guilt. For example, I do not mind working long hours to produce the results you have requested. But, I hope that you appreciate all of the personal time I have devoted to this project. I look forward to your appraisal.
10. **Appeal to the People:** Similar to #7, except the justification used is the desire to be accepted by or valued by others. For example, I'm a Pepper, He's a Pepper, wouldn't you like to be a Pepper too?
11. **Fallacy of Large Numbers:** Where one of the premises involves a questionable use of numbers to smoke screen possible objections. For example, 4 out of 5 doctors surveyed choose Trident for their patents who chew gum. What do we really know about these 4 doctors? Are they on the Trident company pay roll? Did the 5th doctor simply not receive his check? Simply stated, just because there are numbers involved in an argument, this does not necessarily answer all of the questions as to how the sample was chosen. Also, perhaps the 5th doctor is correct!
12. **Beside the Point:** When one of the premises in an argument is not relevant to the conclusion, but is used to justify the conclusion. For example, the victim's murder was especially brutal, and so we must make sure that the defendant is convicted to show our condemnation of such killings. Notice that whether or not the murder was especially brutal is beside the point of the conviction. This is used to justify the condemnation of the killing. Another example: (Girlfriend) Where were you last night? No one answered when I called. (Boyfriend) Don't you trust me? How can we have a relationship if you do not trust me? Notice in this example the irrelevant question about trust is beside the point of where he was last night.
13. **Arguing from Ignorance:** Assuming something must be true because no one has shown otherwise or assuming that something must be false because no one has shown that it is true. For example, Bigfoot must not exist, because no one has brought in a big foot body.

Notice that whether or not there is or is not a big foot is not the point. What is used to justify that there is no such thing as a big foot is. This fallacy looks at the justification used to establish the truth or falsity of the claim.

This small list of common fallacies is offered to give you some idea of common mistakes in reasoning. A number of these often show up on papers. Knowing something about these sorts of mistakes will, perhaps, free you from being persuaded by them, or even from falling into the trap of using them yourself.

Exercises involving fallacies: For the following exercises, attempt to identify the name of the fallacy involved.

1. Social Darwinists such as Herbert Spenser hold that the development and structure of human societies can be explained in terms of evolutionary principles such as the survival of the fittest. But I reject Social Darwinism because Spenser was a real bonehead.
2. Your Honor, it's true that I killed by parents. I fully admit that I murdered them in cold blood. But I should get a light sentence. After all, I *am* an orphan.
3. As I travel around and talk to people I find that many do not even know what genetic engineering is. Well, genetic engineering is best defined as the most recent in a long line of attempts on the part of human beings to play God. Of course, the proponents of genetic engineering overlook just one little fact: We humans are not God. And that is why genetic engineering is profoundly immoral.
4. All the really hot new thinkers are using principles from sociobiology. It's the new wave in ethics. So, you should accept the principles of sociobiology.
5. Although they have certainly tried, scientists have not been able to demonstrate that ESP is a myth. So, ESP is probably real.
6. It is quite clear what the proponents of legalized euthanasia are seeking. Put simply, they are seeking the power to kill anyone who has a serious illness. And that is why I stand opposed to legalized euthanasia.
7. Professor Jackson, this paper merits at least a "B". I stayed up all night working on it. And if I don't get a "B" I'll be put on academic probation.
8. Of course, it is reasonable to believe that we have been visited by extraterrestrial beings. After all, plenty of sceptics have tried, but none has been able to disprove that such visitations have occurred.
9. Since you became a member of this club, you've raised quite a ruckus about women's rights. And I know you sincerely believe in feminism. But, if you go on holding these extreme views, I will see to it that you are never voted in as an officer of this club. And

you know I can make good on that threat. I hope you follow me. Your feminist views are too radical and need to be toned down.

10. The future free actions of humans can be known in advance only if time travel is possible. But, you are a fool if you think that time travel is possible. So, it is not true that the future free actions of humans can be known in advance.
11. Dr. Herzheimer has written essays criticizing self-help books from the standpoint of logic and science. I realize Dr. Herzheimer is a famous philosopher, but I think it's immature and cold-hearted to criticize people who are trying to help others get their lives together. Thus, I myself give no credence to Dr. Herzheimer's work whatsoever.
12. Republicans are people who believe that the rich should get richer and the poor poorer. They are against welfare and against taxes for people who can well afford to pay taxes. Republicans also hold that the only good immigrants are either wealthy or well educated. Thus, I strongly urge you not to be a Republican.
13. Excuse me, Mr. Smith, did I hear you correctly? Did you say that boxing should be banned? Sure, boxing is a little dangerous, but real men love boxing. Therefore, boxing should not be banned.
14. Mr. Johnson argues that we should stop eating meat. But did you know that Mr. Johnson owns the Vegetables Forever Produce Company? Oh yes. He stands to gain a lot, financially speaking, if the rest of us become vegetarians. I think we can safely ignore his line of argument.
15. I do not have very much information about Mr. Reed, but there is nothing in his file to disprove that he's a communist. So, he probably is one.
16. I find it mildly amusing that Mr. and Mrs. Billings are advocating school reforms. But I certainly do not see any reason to take their proposal seriously. Both of them were poor students in high school.
17. Intelligent, refined people insist on the best wines. Our Old World Merlot is the best red wine available. Obviously, Old World Merlot is for you.
18. The school needs a football team. I hope you agree. One thing I can tell you for sure. IF you want to fit in around here, you'll see this issue the way the rest of us do. And we all think the school needs a football team.
19. Yes, Jill argues for deconstruction. But her mind is so open her brains are falling out. You can safely ignore whatever she has to say.
20. After centuries of trying, no one has been able to prove that God exists. The attempt seems to be futile. So, at this point, I think we can safely conclude that there is no God.

21. In a recent speech, the president of General Motors asserted that our country has drifted dangerously away from its religious and ethical moorings. In light of this, the cheery optimism of the liberals is no longer reasonable.
22. Every American is either a Republican or a Democrat. Dr. Porter is an American, but she is not a Republican. So, she must be a Democrat.
23. Sleeping pills work because they cause people to go to sleep.
24. Either men are superior to women, or women are superior to men. Men are not superior to women, so women are superior to men.
25. Obviously humans have free will because they have the power to make choices.
26. Keegan is a reliable authority on military history. Keegan says that it was morally wrong for the Americans to fight in World War I. Hence, it was morally wrong for Americans to fight in World War I.
27. Folk dancing is bad because it leads to ballroom dancing, which in turn leads to modern dancing. And modern dancing leads to promiscuity, which causes a total breakdown in the moral fabric of a country, and hence a lapse into primitive savagery.
28. Scientists have shown that a person loses a very small but measurable amount of weight at the time of death. This weight loss is probably due to the soul's leaving the body at that time. What else could account for this phenomenon? Here we have unexpected scientific evidence for the existence of an immaterial soul.
29. Why is murder wrong? Because it takes away everything the victim has and everything he or she will ever have, including all the interesting experiences, fulfilling activities, rewarding personal relationships.
30. Either God exists or we are just biological organisms reacting to stimuli. Clearly we think of ourselves and others as more than that.
31. Eighteen-year-olds shouldn't have the right to vote, because if they aren't old enough to drink at that age, they aren't responsible enough to vote.
32. At first she will study in the evening, after cleaning the kitchen, when the children are sleeping. But as exams approach and papers are due, she will gradually neglect more and more of the housework. She will not cook. The shopping will not be done. She will forget to check her daughter's homework and will forget to take her son to his doctor's appointment. Eventually the whole family will be in immense chaos. Nobody should try to finish a degree and care for small children at the same time.
33. We need more governmental regulation of the media. TV news becomes more and more

influential ever year, and as the Sesame Street generation comes of age, it is coming to be their sole source of information. If the situation is not brought in check, the news anchors will have more influence than the President.

34. Finishing my degree is important for my self-esteem, because graduating is essential for my own sense of self-worth.
35. Never let your neighbor borrow anything. First, it's a cup of sugar, then your favorite scarf, and the next thing you know, she'll want to borrow your spouse to do some "jobs" around the house.
36. Everyone in the room thinks that John stole the money. So, I wouldn't speak up for him if I were you.
37. We can go out to dinner and have a thick, juicy steak at the Scotch and Sirloin Restaurant, or we can have a thin, dry one at the Big Sky Steak House.
38. Those who support abortion believe that a woman has the right to kill another human being. We know that nobody has that right. So, abortion should not be legal.
39. Despite the fact that he had several relationships with other women during his marriage, he was never disloyal to his wife, because he always told her the truth about his affairs.
40. All survivors are strong, because only the strong survive.
41. The welfare system gives every low life the kind of life that others have had to work hard for. People who pull themselves up by their bootstraps and work to make an economic contribution deserve what they earn. The welfare system just rewards the undeserving.
42. As a politician you should recognize that older people have a strong voice and use it. They turn out for the polls. Any changes in the social security system will cost you votes. Don't you agree that the social security system should be left the way that it is?
43. I do not mind working long hours to produce the results that you have requested. But I hope that you appreciate the personal time I have devoted to this project. I look forward to your appraisal.
44. We need better controls on guns. The other side opposes controls because registering guns is inconvenient. But without more controls on guns, violence in the cities will continue to escalate. A little inconvenience is filling out a few forms or in waiting for a background check is not too high a price to pay for safer cities.
45. We should not have just one final letter grade for a course. Although some students like to have such simple evaluations, a single, final evaluation on a set letter scale is undesirable.

46. Forbes wants a flat tax, but he is a billionaire, and so we can be sure that his proposals are going to work against the great majority, whose yearly hard-earned incomes are less than his average hourly income from his investments.
47. John doesn't really respect free speech. Even though he voted in favor of allowing the astrologer to make a presentation on campus, he said that astrology was stupid., and that he did not think it was worth anyone's time. That does not show much respect.
48. If Mark buys a boat, he's bound to run out of money. First, he'll buy the boat and then he'll need to spend money for gas and engine repairs. He will pay for dockage and new gadgets for his "little baby", and eventually he'll outgrow that boat and have to get a bigger one. Then he'll start buying new things for that boat and taking it on expensive trips. Very soon he'll be bankrupt!
49. The idea of raising the age for licensed drivers is ludicrous. It is supported by unstable people. These are people who are biased from losing loved ones in situations that involved young drivers, and they need counseling.
50. Abortion is wrong, because the Bible says so.