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So far, you know that arguments are made up of a conclusion

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and the premises offered to defend or uphold it.

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Some arguments are deductive,

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that is, if the premises are true and the former the argument is valid,

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then the conclusion has to be true and the argument is sound.

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Other arguments are inductive. An

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inductive argument if the premises are either true

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or at least acceptable remember that means that

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their relevant to the issue at hand and provide sufficient justification

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then the conclusion is likely to be true and we consider these inductive

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arguments to be strong

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in questioning both types of arguments

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there are a number of evaluations you can make to determine the soundness

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or strength up the argument in this module

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you learn about two main ways to evaluate an argument

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first you'll hear about how to evaluate premises

01:01

in and of themselves on their own merits then

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you learn how to evaluate the logical link that connects the premises to the

01:09

conclusion

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this module provides an overview of the key evaluation approaches you should use

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to assess

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any argument you encounter later modules will dig deeper into each approach

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and explain how you can effectively use the techniques to evaluate different

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types of arguments

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evaluating premises truth and acceptability

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premises supply the evidence on which an argument is based

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and their strength can range from the strongest premises that are

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straightforward facts

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such as the Earth revolves around the Sun to weaker premises

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my personal opinions are value judgments can like your friend saying

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this music is awful one standard for evaluating a premise

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is to determine whether it's true or false we can use observed or empirical

01:56

evidence

01:57

that is things we see touch hear smell taste and so on

02:01

to figure out whether certain kinds of premises are true

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now it may not be easy to determine the truth repress

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for a lot of early human history proving that the earth revolved around the

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sun was quite difficult but we at least know how we're supposed to go

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determining its truth which means proving or disproving the premise

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sometimes while it may be possible in

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theory to actually observe the truth to the premise it may be

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practically speaking impossible to do so for example

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take the claim that all swans are white in order to definitively proved this to

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be true

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we would be defined every single Swan on the planet to see what color it is

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a daunting task especially considering more swans are being born all the time

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however we could rely on Swan experts

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conducting research involving as many Swan says is reasonable

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and investigating aspects of swan biology

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to Tolleson experts view once one color while we wouldn't prove that the premise

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was true

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we could judge it to be more or less acceptable

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in addition to hard to prove

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empirical claims there are other premises that cannot be evaluated on

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whether they're true or not

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premises that relate to a static moral or ethical claims

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fall in that category opinions and value judgments

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represent personal cultural communal social and religious perspectives

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and police these by their very nature cannot be proven or disproven

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however that does not mean that they cannot

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or should not be subjected to scrutiny and evaluation to determine

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whether they provide acceptable reasons for agreeing with the particular

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argument

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throughout your personal academic and professional life

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you grapple with the number of arguments based on opinions or value judgments

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you should resist the temptation to simply say

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well everyone's entitled to their own opinions and to accept all such argument

04:03

is equally possible

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there are many important issues and problems
about what you'll find serious

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disagreements

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critical thinking is meant are you with the tools and
resources to carefully

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consider those arguments

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assess the relative strengths and weaknesses and
come to an informed and

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considered opinion

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above which one you believe to be true were
reasonable relating premises

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and conclusions validity relevance insufficiency

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it's not enough to simply evaluate
individual premises to determine their

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truth or acceptability

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consider the following argument the sky is blue

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therefore I should wear sunglasses when I'm outside

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now it is true that the skies blue

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but a reasonable person might wonder what in the heck does the sky being blue

04:51

have to do with wearing sunglasses

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the truth the premise does not necessarily guarantee that you're

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dealing with a valid

04:58

argument instead consider an argument that says

05:02

the Sun is bright I should make sure to wear my sunglasses today

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now this argument seems much stronger

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and it is stronger because one the premise

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years or can be determined to be upon visual
examination

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true and two there's a reasonable connection

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between brightness and the wearing sunglasses
remember that deductive

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arguments are those were the true to the premise

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can lead to a valid conclusion so when evaluating
deductive arguments

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you should look for whether the former the argument
is valid

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a deductive argument has a valid form if it is

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impossible for the premises to be true and the
conclusion to be false

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so to illustrate this consider an example of an
argument with an

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invalid for your friend tells you the old business building is worn out

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and it's unsafe so we should tear it down for the safety of the students

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while the premise is that the building is old and safe

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are true they don't necessarily lead to the conclusion

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that the building has to be torn down one obvious alternative

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is that repairs could be made to make the building safe in this case

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even though the premise is true it's still possible for the conclusion to be

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false

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because it's not necessarily related to the promise now

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think about this alternative example that has a valid
for

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your friend says your business buildings and safe
because it doesn't have a fire

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alarm system

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which makes it unsafe so we should install a fire
alarm system for the

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safety the students

06:36

here

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clearly if the premise is true then the conclusion

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must also be true for

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inductive arguments two separate standards must
be used to evaluate

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arguments logical validity relevance and sufficiency

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instead of the true or not standard used for deductive arguments

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inductive arguments rely more or less on acceptable premises to make them

07:02

stronger or weaker

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this makes the relationship between the premises and conclusions

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much more complicated it's not the case that a premise

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you judge to be true conserve on its own to defend a conclusion

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instead you're dealing with premises better

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often opinion rather than fact and these premises have a range in their

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acceptability

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so one thing you must do in evaluating an inductive argument

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is the first figure out if the premises are relevant to the issue at hand

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and the conclusion that strong imagine your professor asked the class

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should I hold a review session before the midterm exam

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your classmate responds by saying no you shouldn't

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the text book for this class was really expensive now the claim that the

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textbook was expensive

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maybe a perfectly acceptable claim but doesn't have

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anything to do with the conclusion that there should not be a review session

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consider an alternative response no you shouldn't

08:01

my friends in the other section in this class and they
aren't having a review

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session

08:06

I don't think it would be fair if we have one in this
case

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you will still want to evaluate the acceptability of the
premises about

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fairness

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but it is clear that there is a connection between the
premises

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and the conclusion in addition to figuring out whether
the premises are

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relevant

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you must also assess whether they are sufficient

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that means you must think about whether the claims made premises

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or enough to justify the conclusion let's go back to the second response on

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the midterm review question

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the one we're classmate says no we shouldn't my friends in the other

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section and they are having a review session

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let's say you determine the following things one

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it is true that the other section is not having a river

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you to fairness between sections is a reasonable

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and acceptable thing to be concerned about in three

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what's happening in the other section is relevant for your class

09:01

Joe's at it do you accept your classmates argument
is strong enough

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or might you instead say well I see your point

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it is important to be fair and I feel bad that the other
class won't get to

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have a review

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but why should we suffer too that's not a good
enough reason

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essentially you're saying that your classmates
premises are not sufficient

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reasons to accept his conclusion

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that is it's not enough to justify the conclusion

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now you should have some idea of how to go about
evaluating deductive

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an inductive arguments you should examine the
premises themselves

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and tried to determine whether they're true
acceptable then

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you need to consider the connection between
premises and conclusions

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are the premises relevant to the issue and the
conclusion reached

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or the sufficient to justify that conclusion knowing to
ask these

09:53

questions

09:53

is an important step in critical thinking in
later modules

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you learn more about how to answer these
questions

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