

SAVE OUR CITIES: SAVE OUR SOIL



Why Study Environmental Science?

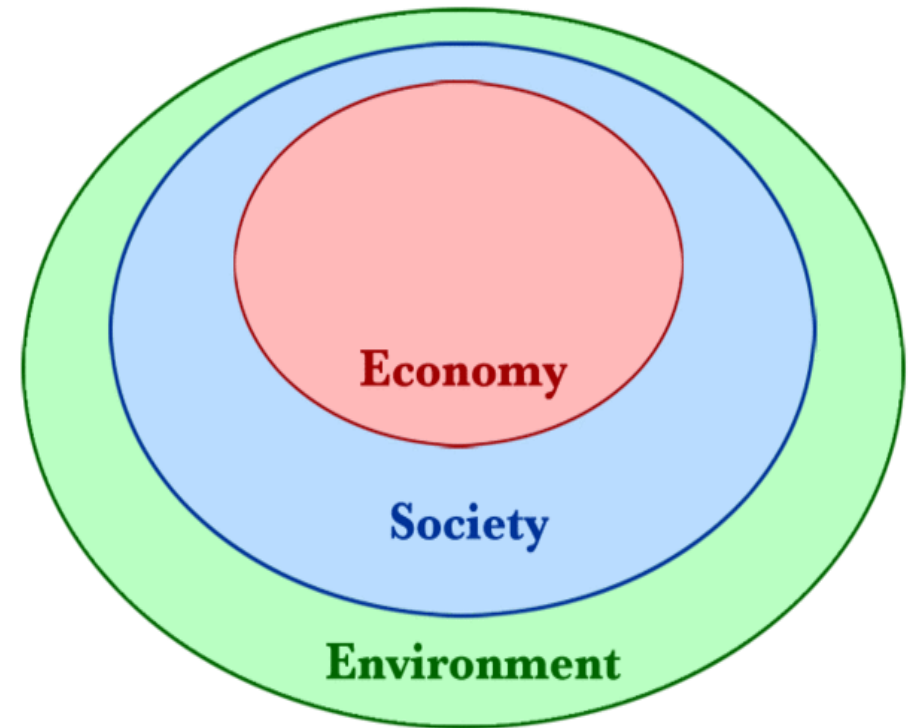
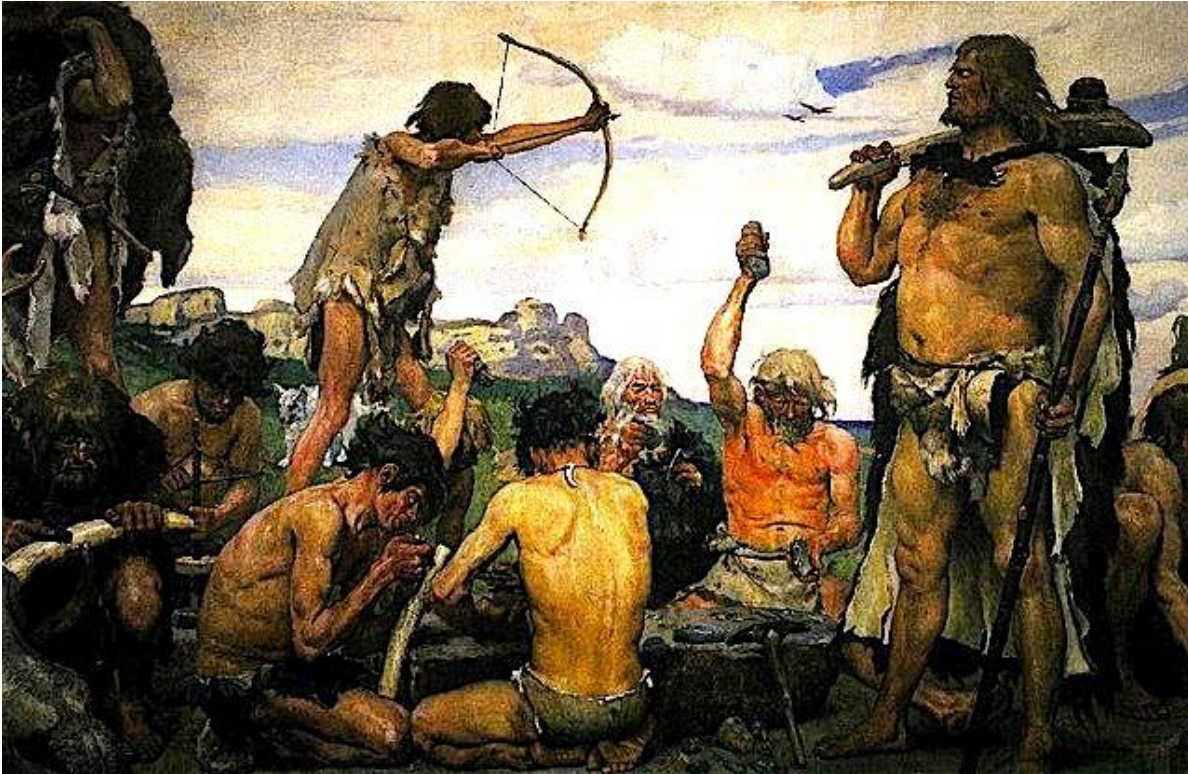
UNITED STATES • SIX CENTS

UNITED STATES • SIX CENTS

SAVE OUR AIR: SAVE OUR WATER

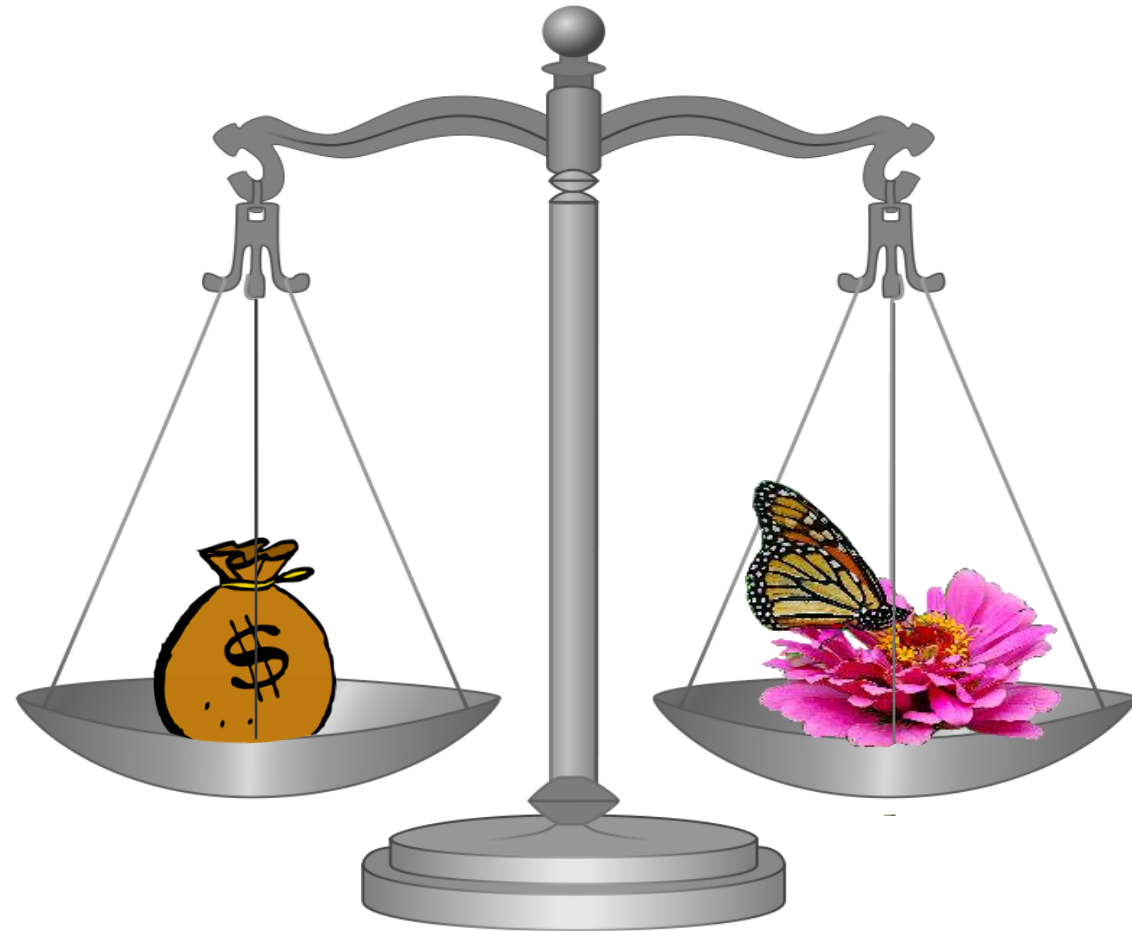
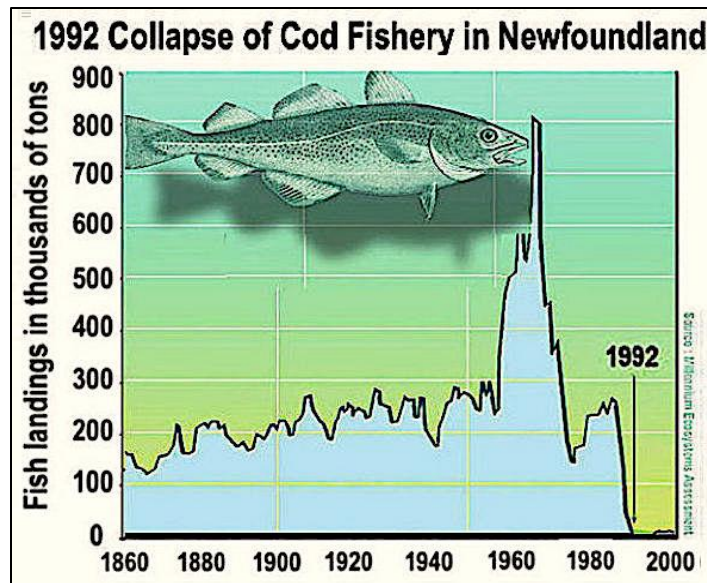


Without an economy or social order, life is “poor, nasty, brutish, and short,”* but neither of these can exist in the absence of natural resources.

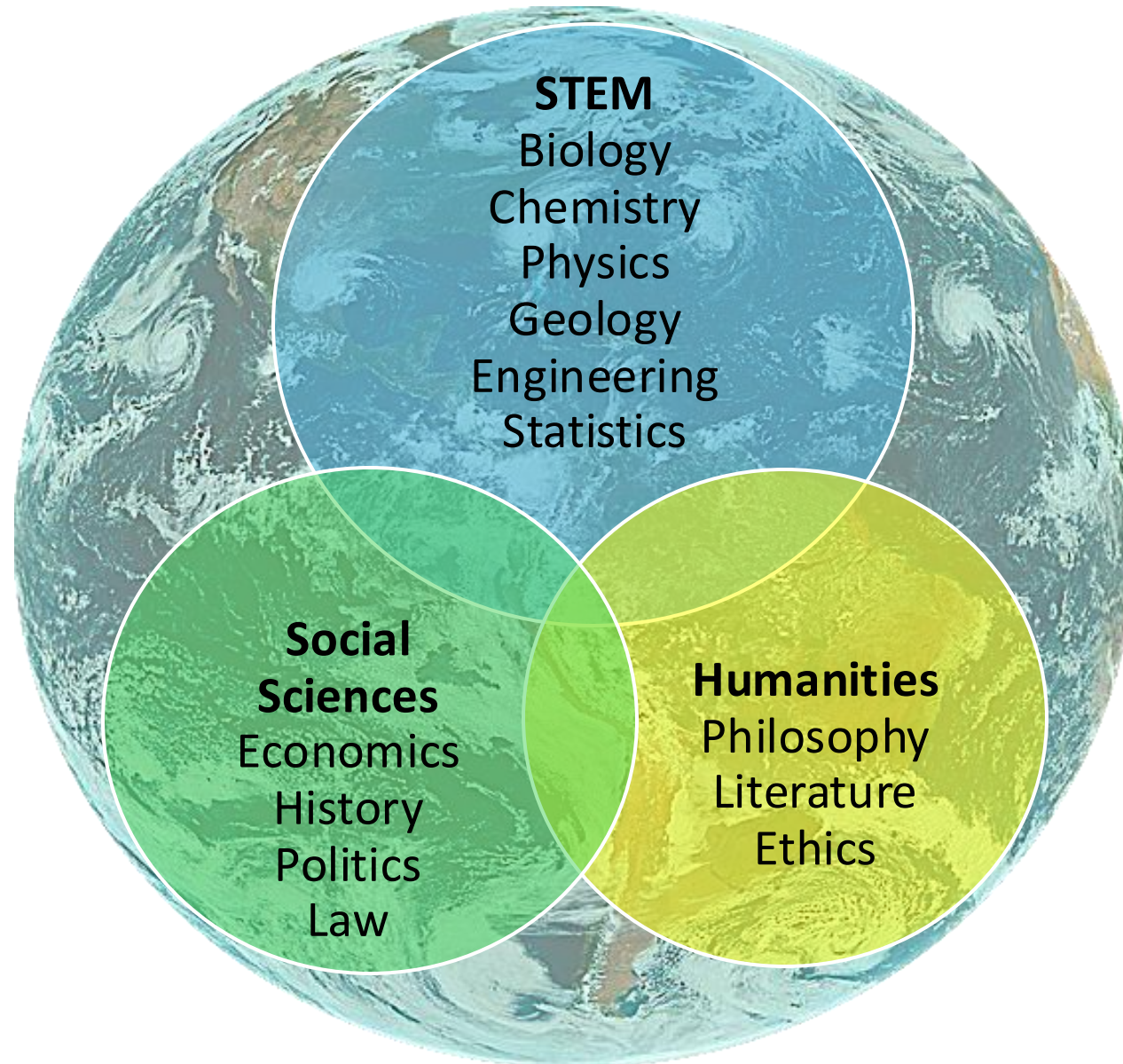


* Quote from "The Leviathan" by Thomas Hobbes

Environmental scientists and policy-makers deal with issues like pollution and resource depletion...
...with the ultimate goal of striking a balance between our economic needs and the environment.



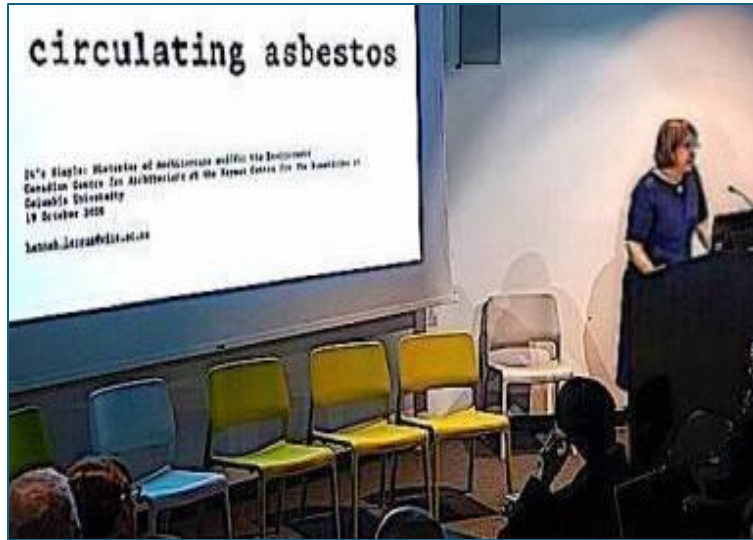
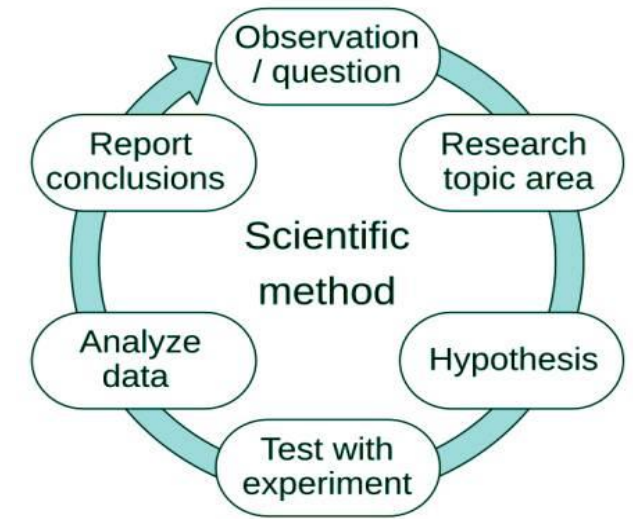
This is why environmental science is the most interdisciplinary of the natural sciences.



Environmental science is not only interdisciplinary, it also confronts issues that are deeply controversial. Passion is a powerful force, but without rational discussion it cannot provide helpful solutions.



The conscientious scientist presents data that is carefully vetted...
...and listens to other perspectives...
...in hopes that cooler heads prevail,
...because at the end of the day, science is not a religion:
It is an ongoing *process*.



Scientific progress is vital to our quality of life, but it is often messy...

...and not all results are presented in good faith!



A major goal of this course is to give you skills to *objectively* discern the issues without wasting time on junk science or bottomless rabbit holes.

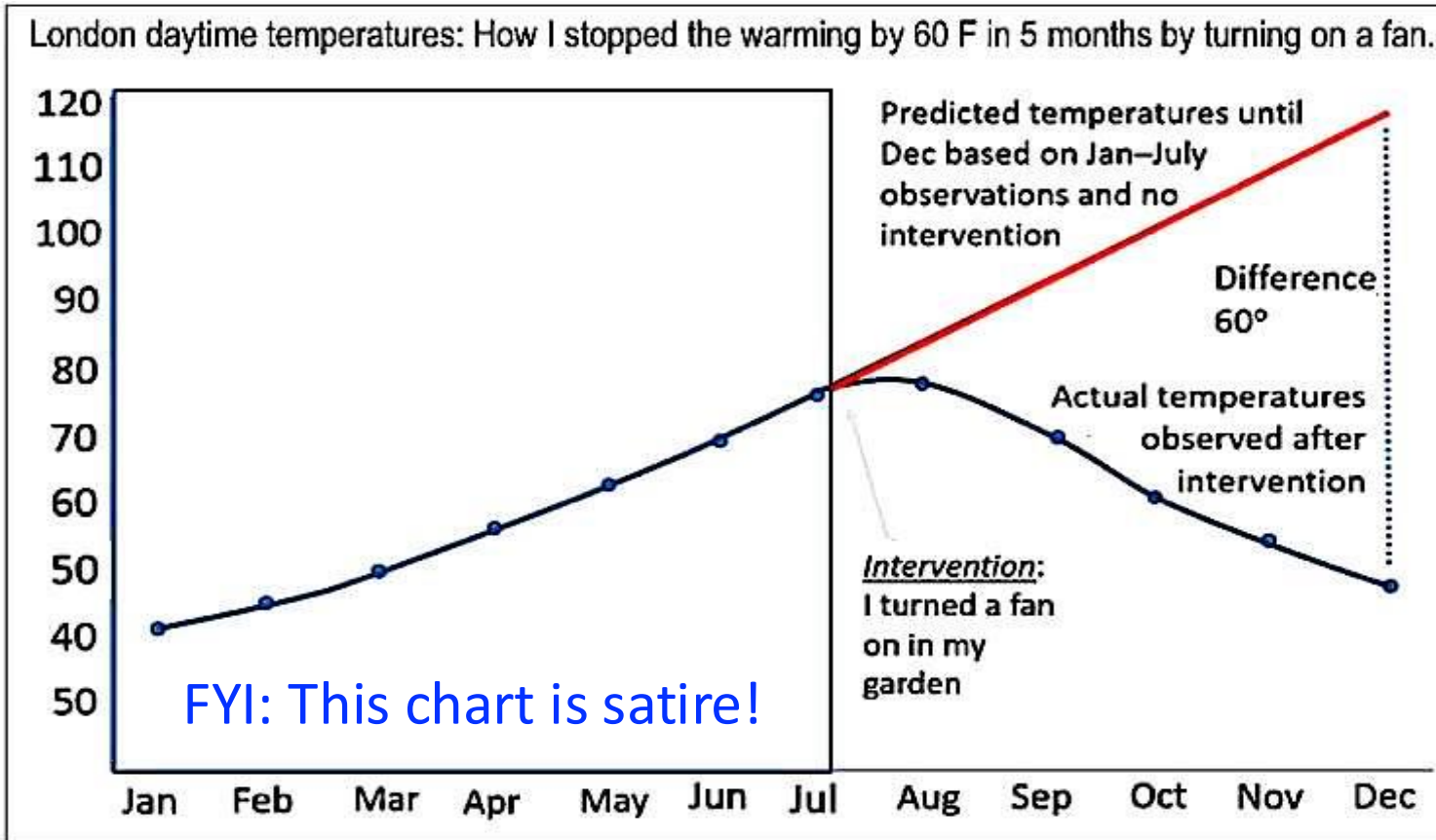
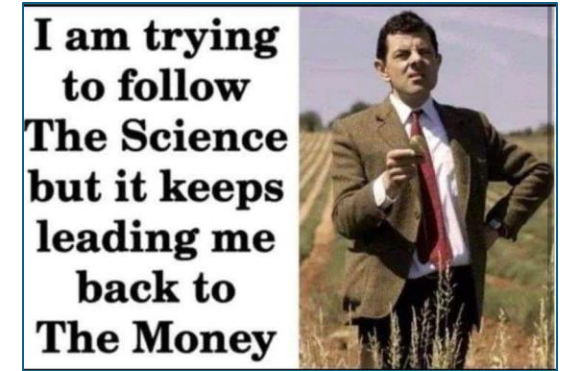
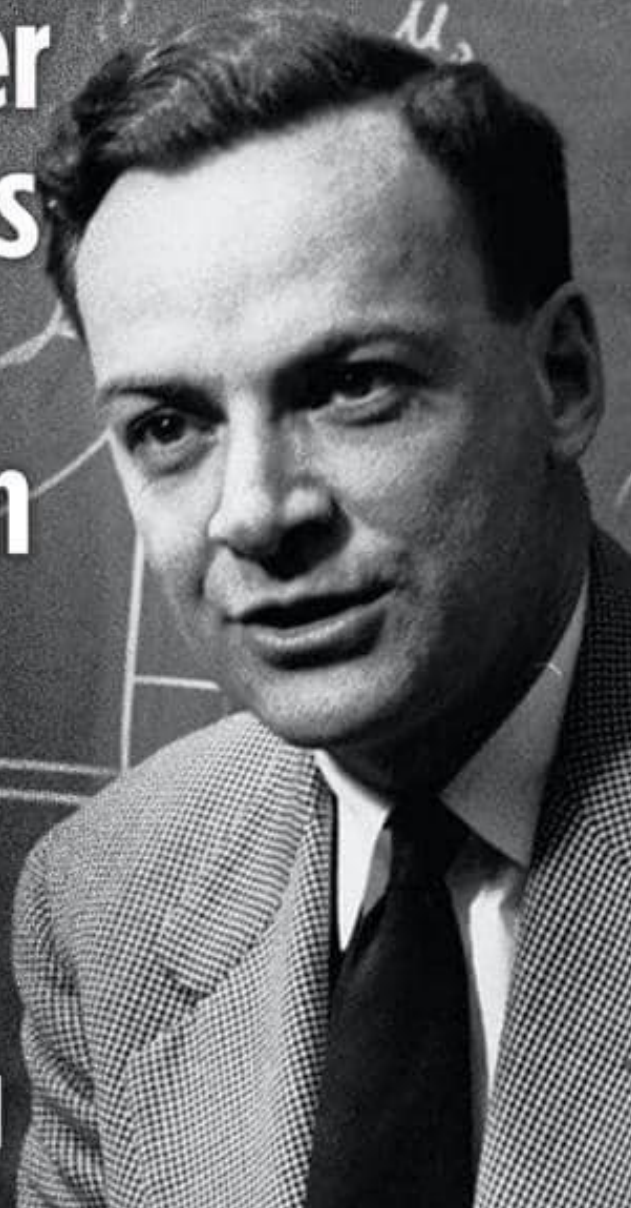


Chart by Norman Fenton https://www.youtube.com/watch?v=8Avq_tMz2LU&t=74s

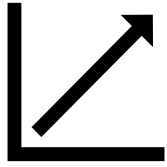
Image generated by Bing AI.

**“I would rather
have questions
that can't be
answered than
answers that
can't be
questioned.”**

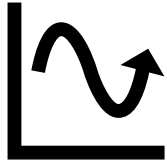
—RICHARD FEYNMAN



Guidelines for Dealing with Controversy:



Occam's razor: a scientific and philosophical rule that entities should not be multiplied unnecessarily which is interpreted as requiring that **the simplest of competing theories be preferred to the more complex** or that explanations of unknown phenomena be sought first in terms of known quantities.



Merriam-Webster: <https://www.merriam-webster.com/dictionary/Occam's%20razor>

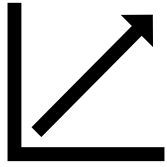
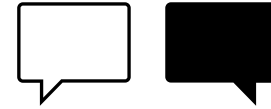
Occam's Razor Example: You hear hoofbeats.



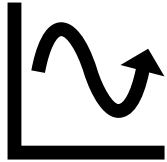
The answer that requires the fewest assumptions is generally the correct one.

Your Dictionary: <https://www.yourdictionary.com/articles/examples-occams-razor>

Guidelines for Dealing with Controversy:



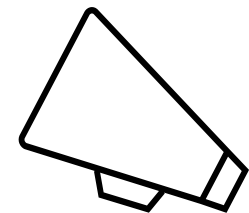
Occam's razor: a scientific and philosophical rule that entities should not be multiplied unnecessarily which is interpreted as requiring that **the simplest of competing theories be preferred to the more complex** or that explanations of unknown phenomena be sought first in terms of known quantities.



Merriam-Webster: <https://www.merriam-webster.com/dictionary/Occam's%20razor>

Hitchen's razor: What can be asserted without evidence can be dismissed without evidence.

Life Lessons: <https://lifelessons.co/critical-thinking/philosophical-razors/>

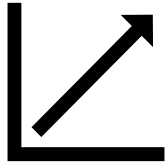




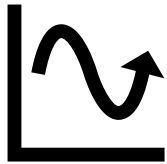
In a court of law, the burden of proof *always* rests on the claimant, not the suspect. This is why regardless of public opinion, unsupported allegations *never* go to trial. The same standard should apply to unsupported talking points.



Guidelines for Dealing with Controversy:



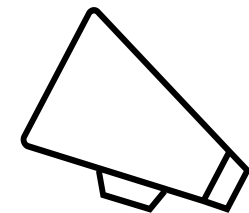
Occam's razor: a scientific and philosophical rule that entities should not be multiplied unnecessarily which is interpreted as requiring that **the simplest of competing theories be preferred to the more complex** or that explanations of unknown phenomena be sought first in terms of known quantities.



Merriam-Webster: <https://www.merriam-webster.com/dictionary/Occam's%20razor>

Hitchen's razor: What can be asserted without evidence can be dismissed without evidence.

Life Lessons: <https://lifelessons.co/critical-thinking/philosophical-razors/>



Key Bridge Collapse in Baltimore (3/26/24)

Hanlon's razor: Never attribute to malice that which can be adequately explained by incompetence or stupidity.

Life Lessons: <https://lifelessons.co/critical-thinking/philosophical-razors/>

Survival Guide for this Course



Photography by: T3N60

Check your announcements on a daily basis.

The screenshot displays a course management system interface. At the top, the course ID '202130 - BIOL-105-30055' and the page title 'Home Page' are visible. A dark sidebar on the left contains a navigation menu with the following items: Home Page, Syllabus, Course Content, Discussions, **Announcements** (circled in red), Tools, Course Mail, Library Research Help, Library Course Reserves, For Faculty: Embed Library Instructional Content, MC Resources, and Help. The main content area shows the 'Home Page' title and an 'Add Course Module' button. Below this, there are two sections: 'My Announcements' and 'What's New'. The 'My Announcements' section displays a link for '202130 - BIOL-105-30055' with the text '> How the optional module will (and will not) help your grade' and a 'more announcements...' link. The 'What's New' section features a user profile icon, 'Edit Notification Settings', and 'Actions' buttons, followed by a list of content types: 'Announcements (12)', 'Assessments (8)', 'Messages (11)', and 'Other new content (1)', each with a dropdown arrow.

The same goes for your course mail.

The screenshot displays a course management interface for the course '202130 - BIOL-105-30055'. The top navigation bar includes the course ID and 'Home Page'. A left-hand sidebar menu lists various course components: Home Page, Syllabus, Course Content, Discussions, Announcements, Tools, **Course Mail** (highlighted with a red circle), Library Research Help, Library Course Reserves, For Faculty: Embed Library Instructional Content, MC Resources, and Help. The main content area shows a 'Home Page' section with an 'Add Course Module' button. Below this, there are two sections: 'My Announcements' and 'What's New'. The 'My Announcements' section contains an announcement for the course with a link to 'How the optional module will (and will not) help your grade' and a 'more announcements...' link. The 'What's New' section features a user profile icon, 'Edit Notification Settings', and 'Actions' buttons, along with a list of new content: Announcements (12), Assessments (8), Messages (11), and Other new content (1).

Open this link for access to power points, quizzes and assignments.

202130 - BIOL-105-30055 Home Page

Home Page


Add Course Module

My Announcements

202130 - BIOL-105-30055

> [How the optional module will \(and will not\) help your grade](#) [more announcements...](#)

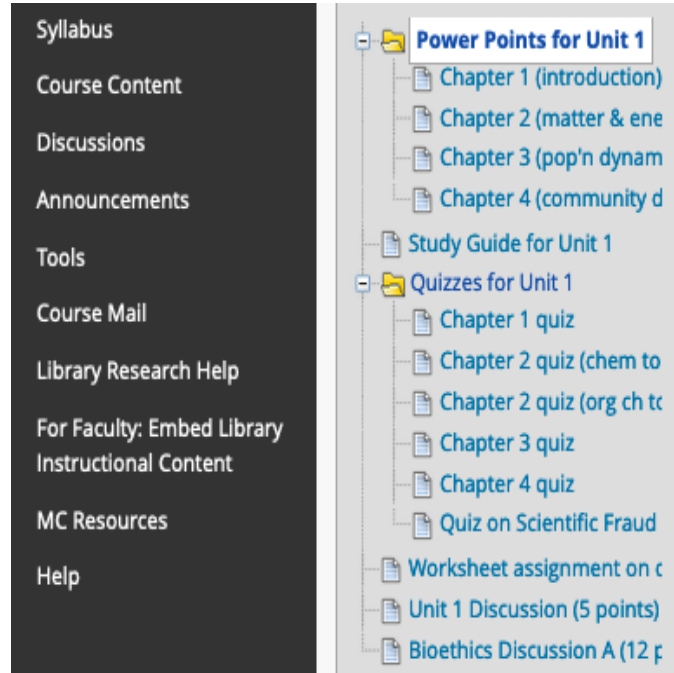
What's New

 [Edit Notification Settings](#) [Actions](#)

- ▶ [Announcements](#) (12)
- ▶ [Assessments](#) (8)
- ▶ [Messages](#) (11)
- ▶ [Other new content](#) (1)

Course Management

Your unit folder should look something like this.



Please complete all unit assignments before the deadlines posted on the syllabus schedule

Do not forget to post to online discussions!

202130 - BIOL-105-30055 Home Page

Home Page


Add Course Module

My Announcements

202130 - BIOL-105-30055

> [How the optional module will \(and will not\) help your grade](#) [more announcements...](#)

What's New

 [Edit Notification Settings](#) [Actions](#)

- ▶ [Announcements](#) (12)
- ▶ [Assessments](#) (8)
- ▶ [Messages](#) (11)
- ▶ [Other new content](#) (1)


Course Management

202130 - BIOL-105-30055

- Home Page
- Syllabus
- Course Content
- Discussions**
- Announcements
- Tools
- Course Mail
- Library Research Help
- Library Course Reserves
- For Faculty: Embed Library Instructional Content
- MC Resources
- Help

Click here to post your response.

FORUM	DESCRIPTION	TOTAL POSTS	UNREAD POSTS	UNREAD REPLIES TO ME	TOTAL PARTICIPANTS
Unit 1 Discussion (5 points)	<p>For the first posting you need to list one item from Chapters 1-4 or any related paper assignments that surprised, interested, and/or upset/annoyed you. You must also explain why it made you feel this way. The first posting is worth 3 points. For the second posting you need to respond to one post by another fellow student. The second posting is worth 2 points. For the second posting use the following format:</p> <p>1) I like how because</p> <p>or</p> <p>2) I agree/disagree with because</p> <p>or</p> <p>3) This relates tobecause</p>	0	0	0	0


Click here

Acknowledgement:



Unless otherwise indicated, all images in this presentation were downloaded from **Wikimedia Commons**: https://commons.wikimedia.org/wiki/Main_Page