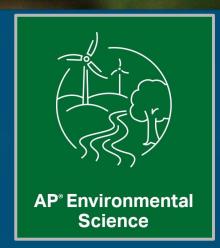




# Miss Syjem

- Teaching science for 14+ years
- Currently teaching Biology & AP
  - **Environmental Science**







#### **Content**

 Topics: ecosystems, pollution (water, air, land), human and animal populations, energy, land use, soil





### Fall

#### Course Outline

Fall Semester

Unit Topic Module Labs/Activities Length							
Unit	Topic	Module					
		Notes/Videos					
0	Introduction to APES		Happy Fishing Lab (Tragedy	2.5 wks			
			of the Commons)				
			Feedback Loops Stations				
			Climate Change & Cities				
			Design Lab				
1	The Living World – Ecosystems	1-2, 6, 7, 12,	Owl Pellet Dissection	3.5 wks			
	100	13, 20	Climatograms Activity				
81 - 3			Nitrogen Cycle Journey				
2	The Living World – Biodiversity	1-2, 8, 14-15,	Island Biogeography Lab	3 wks			
		17-19, 21, 29,	Ecocolumns Lab	0.000			
		59, 65	Primary Productivity ESRI				
3	Populations	17-19, 22, 23,	Bubble Lab	3 wks			
		31	Cemetery Lab				
			Demographic Transition				
			Jigsaw				
7 & 9	Atmospheric Pollution	30, 35, 46-48,	Airborne Particulates Lab	3 wks			
	(C)	49-50, 62-64	Tropospheric Ozone Lab				
		×00	Radon Case Study				
8A	Aquatic & Terrestrial Pollution	41-44, 57, 60,	Oil Spill Lab	2.5 wks			
	***	41, 44, 57	Biomagnification Lab				



# Spring

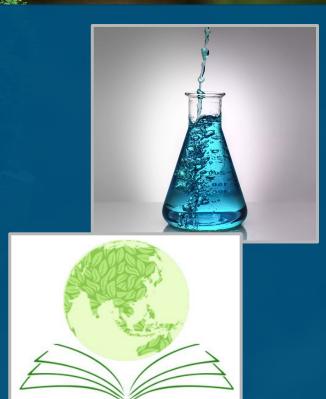
Spring Semester

Unit	Topic	Modules	Labs/Activities	Length
8B	Aquatic & Terrestrial Pollution	41,	Toxins LD-50 Lab	2.5 wks
	204	46-47,	Water Quality Lab	
		51-58, 64	2,000 (A)	
5	Land and Water Use	2, 23,	Salinization Lab	4 wks
		25-26,	ESRI Megacities	
		29-30,	Cookie Mining Lab	
		32-33,	Mining Google Earth	
		37, 60,	Build a Sustainable Farm	
		65, 66	Google Earth Land Use	
			Survey	
4	Earth Systems & Resources	8-11,	Soil in a Jar Lab	2.5 wks
		24-25, 33	El Nino Stations	
			Demonstration	
			Coriolis Effect Activity	
6	Energy Resources &	27, 34-40	Killawatt Lab	3.5 wks
	Consumption		Energy Speed Dating	
Review				After spring
				break
	AP Class Final	Cumulative		Late April



#### **Recommended Prerequisites**

- Two years of high school laboratory science, including life science and physical science,
- At least one year of algebra
- Chemistry can be taken concurrently





#### **Class Structure**

- Packet: lecture notes, news articles & videos
- Reading videos
- 25% labs virtual and hands-on
- Collaborative group work
- AP Final (end of April)
- AP Exam (early May)
- No summer homework :)







#### AP Exam

~3 hrs total

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	Multiple-choice questions	80	60%	90 minutes
п	Free-response questions	3	40%	70 minutes
	Question 1: Design an investigation (10 points)			
	Question 2: Analyze an environmental problem and propose a solution (10 points)			
	Question 3: Analyze an environmental problem and propose a solution doing calculations (10 points)			



#### **Expectations**

- AP coursework is intense high level thinking and analyzing the information
- Recommend 3 hrs independent studying each week
- Time management is crucial



National Pass Rate 2024 = 54.3%

2024 Score Distributions: Sciences						
Exam	5	4	3	2	1	3+
AP Biology	16.8%	23.1%	28.4%	21.7%	10.0%	68.3%
AP Chemistry	17.9%	27.4%	30.3%	16.9%	7.5%	75.6%
AP Environmental Science	9.2%	27.5%	17.4%	25.8%	20.1%	54.1%
AP Physics 1	10.2%	17.9%	19.2%	26.1%	26.6%	47.3%
AP Physics 2	19.1%	18.0%	33.4%	22.9%	6.6%	70.5%
AP Physics C: Electricity and Magnetism	35.2%	21.6%	14.8%	17.4%	11%	71.6%
AP Physics C: Mechanics	28.5%	26.8%	20.9%	13.2%	10.5%	76.3%



# Past words of Wisdom

I didn't realize everything together and how helpful it was. Like during the exam frq, I remember doing a similar question on our class test frq and it helped a lot. The practice exams were extremely helpful as I got a scope of what I actually needed to focus on. Everything you did had a hidden purpose and I wish I tried harder doing them more meaningfully.

Make sure you do the packets, kahoots, and edpuzzles as much as you can because even some of the information will help you later on, especially on the AP test.

Definitely use the packets that Ms. Syiem provides. Also take the reading notes as they often show up as answers on a test.

PAY ATTENTION AND ACTUALLY

TRY TO LEARN IN CLASS I SWEAR

IT WORKS

We did a lot of hands on

labs and projects which

helped me learn the

material better because it

was laid in front of me.

I think that Mrs. Syiem really prepared for for the AP Exam, thank you!!! :D

To prepare for the AP Environmental class pay attention in class! And review the Edpuzzles!

Stay organized, you will get a lot

of papers that you need to keep.

Make sure to turn in all of your

work on time.



#### **Communication**

- Sign up for Remind.com
- EdPuzzle videos
- Use Google Classroom for content and curriculum
- Email: esibon\_syiem@chino.k12.ca.us



#### **Questions?**

Email me or stop by Rm 237!

