

Environmental Science 2024-2025

Hi, my name is Mr. Dangerfield.

This school year marks my 18th year teaching Science in California, and my third year here at Silver Springs. I have had experience teaching Earth Science, Integrated Science, Biology and Chemistry and Video Production. I am credentialed in Geoscience (aka Earth Science), Biology, Chemistry and have a CTE Credential in Media Arts. In addition, I have taught at both continuation and general high school settings.

My goal is to have students be able to see the physical world around them with wider eyes by gaining an understanding of how the things we need and use from Earth were created; what is in the items we buy, food we eat, water we drink and the air we breathe...and how do we interact with them? The goal is to not only learn in class, but to have that spark to be a lifelong learner (because the learning really only begins in the classroom).

School Site: silversprings.njuhsd.com

Email: adangerfield@njuhsd.com

Class Site: dangerfieldclass.com

Communications

Daily pacing plan is posted on my class site and most assignments will be posted in Schoology, so it is important to check it daily.

Essential Learning Outcomes (ELOs)

Semester 1

INTRO- Ch. 1, 3

ELO1: Explain the focus of Environmental Science.

ELO2: Describe Earth's systems and how they interact.

UNIT 1: LAND- Ch. 11, 12, 13,17

ELO3: Explain how we can balance the ways we use land with the needs of the environment.

ELO4: Describe the challenges that sustainable forestry faces.

ELO 5: Explain how we can balance our growing demand for food with our need to protect the environment.

ELO 6: Describe the types of resources that are mined and if we can make the benefits of mining outweigh the costs of accessing and processing these resources.

ELO 7: Explain the effect that nonrenewable energy resources have on the environment.

UNIT 2: LIFE - Ch 4, 5, 6, 7

ELO 8: Describe how populations can be distributed and potential limiting abiotic and biotic factors that can affect population growth.

ELO 9: Describe how species interact in nature, and how speciation and extinction affect biodiversity.

ELO 10: Describe the different biomes (including aquatic) and how organisms have adapted to thrive in specific ones.

ELO 11: Describe the components of biodiversity and how we can protect the environment from biodiversity loss.

Semester 2

UNIT 3: AIR- Ch. 9, 15, 16

ELO 12: Explain how toxins and natural disasters in our environment affect our health.

ELO 13: Describe the atmosphere and how we can limit and detect atmospheric pollution.

ELO 14: Explain climate change, its impact on food availability for organisms and how we can detect current and past atmospheric greenhouse gas levels.

UNIT 4: WATER- Ch. 14, 18, 19

ELO 15: Explain why water can be a renewable resource but can also be a scarce limiting factor.

ELO 16: Describe renewable energy alternatives and discuss the pros and cons in regards to their benefits in comparison to costs.

ELO 17: Describe the impact that our current waste disposal system has on the environment and discuss the best practices for managing solid and hazardous waste.

Participation Expectations

Students are expected to be fully engaged during class. This means that students are expected to attend class on time, complete class work, contribute to group work/labs and be prepared. A class set of textbooks will be available in the classroom and students have digital access to their textbook on the school issued chromebook. So don't panic if you forget your book!

Students keep a notebook (composition book) for this class. This contains class work, chapter notes, etc. I allow you to use your notes on quizzes! We will record our labs with lab reports which will be graded with a rubric. Class notebooks are to be kept in class and handed out/returned by either me or a weekly student TA.

Grading Policy

Each chapter is based on an ELO, which is based on NGSS standards. Each chapter begins with an investigative phenomenon and a closing example. In addition we will have many labs/activities to help reinforce the ELO for the chapter.

Grade	Percentage	ELO correlation
A	89-100%	Excellent mastery of nearly all of ELOs
B	79-88%	Mastery of majority of ELOs
C	69-78%	Average mastery of a large portion of ELOs
D	59-68%	Sufficient mastery of a large portion of ELOs
F	Below 59%	Insufficient mastery of majority of ELOs

30% of Grade = Labs

30% of Grade = Class Work

30% of Grade = Assessments

10% of Grade = Participation

If a grade average is within 1% of the next highest grade, I will round it up to that (ex. 79.3% would go up to 80%...from a C+ to a B-).

Student Late Policy

Make-up work can be found on the Schoology class site and/or my Classroom copies file cabinet. If a student is absent, it is the student's responsibility to check Schoology for the missed work. If a student has questions regarding missing work, it is the student's responsibility to contact me with questions they have regarding the posted work when they return to class and have reviewed our class site and Schoology.

A student will be marked tardy if they enter the classroom after the bell rings. I do not assign homework so any assignment we do is done so that class time is allowed for it, but any missed work in class becomes that by default. There are accommodations given as needed per IEPs and 504 plans.

Classroom Norms

The Core Rules

1. Be present
 - a. Put your cell phone on silent and place it away in your purse, pocket or pack. Cell phones are not allowed out in class.
 - b. We will be doing hands-on labs and activities to reinforce our ELOs so be prepared to participate with peers.
2. Practice Quality Communication
 - a. Kindness looks good on everyone, so don't be afraid to show it.
 - b. Be respectful when addressing others.
 - c. If you have a question write it down to ask me privately, ask a peer during group work or individual work or just pop your hand up to ask me directly in class.
3. Contribute to a space for learning
 - a. Make sure to conduct yourself in a professional manner.
 - b. Again, being kind doesn't cost anything, so please sprinkle it wherever you go in life.
 - c. Disrespect will not be tolerated.

