



AP ENVIRONMENTAL SCIENCE

Description

AP Environmental Science is a college level course designed for science and non-science majors alike. Environmental Science utilizes background knowledge from biology, chemistry, and earth science to study man's impact on the environment. Topics covered include global warming, ozone depletion, water and air pollution, resource use and land degradation. There is an emphasis on labs as well as a field trip to the Bethabara wetlands. Students also examine alternative solutions for current environmental problems that are often in the news.

Special requirements

Prerequisites: Biology, and Chemistry or Physics

AP Environmental Science is open to students who are sophomores (if space is available), juniors, and seniors who have successfully completed biology, as well as chemistry or physics – due to the interdisciplinary nature of the course. Students should have also successfully completed algebra.

Student costs/Materials to be supplied by students

Other information

Students are expected to access the course website daily and keep up with the readings.

Students may receive college credit for this course by taking the Advanced Placement Examination and earning a score acceptable to their college. This acceptable score varies from school to school and department to department.

AP Environmental Science



Why take
APES @
CAREER
CENTER

It's your
choice

The Course:

The overall theme of the APES course can be seen as balance vs. imbalance: A balanced system survives while an imbalanced system collapses. The various environmental crises humans face are the result of ignoring and upsetting critical ecological balances. This course is broadly interdisciplinary and students will be incorporating ecology, geology, chemistry, physics, political science, economics, and ethics. Students will leave this class with a greater understanding and appreciation of the world around them. Everything is connected.

"When one tugs at a single thing in nature, he finds it attached to the rest of the world" -John Muir

Proven experience:

With 24 years combined experience of EXCLUSIVELY teaching AP Environmental Science and 32 years teaching high school science in North Carolina, Ms. Knudsen and Mr. Scott know what is expected in order for students to succeed at a high level on the College Board AP Environmental Science Exam. Last year, Career Center students excelled on the AP Environmental Science Exam scoring 29 percentage points higher than the national average (78% vs 49%) which

puts our students in a position to earn at least 4 college science credit hours.

The broad topics of the class include:

- Ecosystems, Energy Flow, and Matter Cycling
- Climate and Terrestrial Biodiversity
- Aquatic Ecology and Biodiversity
- Water Quality and Pollution
- Sustaining Biodiversity
- Population Ecology and the Human Population
- Food, Soil, and Pest Management
- Geology and Nonrenewable Resources
- Energy Efficiency and Renewable Energy
- Atmosphere and Air Pollution
- Solid and Hazardous Waste

TEACHERS

Preparation for college:

The rigorous curriculum designed by Mr. Scott and Ms. Knudsen aligns exactly with a 100-level college environmental science course for science majors. Students are provided exposure to college-level environmental content, expectations, and pace of learning. Former students thrive at the college level and beyond.

Ms. Andrea Knudsen

- 15 years teaching experience (12 in AP Environmental Science)
- B.S. Biology; University of North Dakota
- M.A.T.; St. Thomas University
- 3 years research laboratory experience
- Experienced College Board AP Reader

Mr. Tim Scott

- 17 years teaching experience (12 in AP Environmental Science)
- B.S. Biology; High Point University
- 2 years research laboratory experience
- Experienced College Board AP Reader

CONTACT US

We'd love to answer any questions that you have about AP Environmental Science @ Career Center!

Ms. Knudsen
aknudsen@wsfcs.k12.nc.us

Mr. Scott
thscott@wsfcs.k12.nc.us



Photos: AP Environmental Science students testing the water quality of a local stream. A Career Center tradition.

Quotes from our former students:

"You'll remember most of the things you learn in here because they are actually applicable to real life..."

Ruth M.

"It's a class that's both eye-opening and practical. It's about learning the material, but more importantly how to make a change..."

Hannah R.

"This course helps strengthen and extend basic concepts of our environment. I feel more knowledgeable in general due to this class..."

Carrie M.

"APES with Mr. Scott remains the best AP class I took in High School. The subject material is very relevant and interesting and he makes the class fun by telling lots of stories. Don't miss out on the opportunity to take this class before you graduate."

-Rose O. RJR - 2014 Wake Forest - 2018

"APES with Ms.K has made me most definitively choose the path and the major that I want to pursue. This class will change your view on the world around you, but you will be happy with what this knowledge has revealed..."

-Kayla E.

"I am currently in an environmental statistics class and I would not be passing without the background Mr. Scott gave me in APES. You will learn information that is vital to being an informed citizen and problem-solving skills that will help you tremendously going forward. You would be doing yourself a disservice not to take APES with Mr. Scott."

-Elizabeth W. RJR - 2014 Stanford - 2018

"APES is interesting, fun, and has lots of real world applications – my favorite class this year... Thanks Ms. K!"

-Elisa S.

"APES taught me that even though I am a singular individual, my actions can help or hinder the health of the Earth. Mr. Scott's class both helped me develop a strong work ethic and enlightened me about the problems facing the world and how I can help."

-Lance P. Reagan - 2018