

## Welcome Freshmen!

I am the ninth grade Integrated Science teacher and South House/Ecology House advisor. While all of you will get to know me as one of your four core academic teachers, I am also the art and dance teacher on campus. You may have noticed some of my student's murals on campus...there are 5 of them. You can meet my dance team at the first spirit rally or at Back to School Night. This upcoming 2011-2012 year will be my 14<sup>th</sup> year here at iPoly.

Despite what many people think, my (and most other scientists too) degree is not just in 'science.' There are hundreds of different types of scientists and science degrees. I earned a B.S. degree (that's Bachelor's of Science) in Biology with a minor emphasis in Zoology, and yes, I have worked in a zoo as a zookeeper. I have been bit by toucan Sam, yelled at by howler monkeys, sneezed on by a 100 pound rodent called a capybara, and hugged by a giant three-toed sloth. This just seemed the natural progression of things after working through college as a vet technician in a veterinary hospital. Once, we repaired a tortoise shell with surfboard fiberglass after it was run over by a car. Obviously I am an animal lover, as you can tell from my room, but I also love forensic science. Some of my favorite classes in school were forensic anthropology, pathology, myrmecology and parasitology. My senior project in college was on parasites. Gross, I know, but interesting. I have some stories to tell, but those will come in time.

As you may already know, science is mandatory for all four years here at iPoly, so it is my job to give you the general overview of all of the different branches of science, while reviewing and preparing you for your next three years. We will explore biology, ecology, botany, genetics, geology, seismology, cytology, oceanography, microbiology, immunology and even a little chemistry and physics....hence integrated science. My science course is U.C. approved and is a graduation requirement for iPoly.

There are two books you will be using: Biology; Cycles of Life and Environmental Science. These will be used as reference books for my content. Sometimes I assign chapters in the book, but most of the time, you are to be reading the book as it parallels content in my class on your own. I expect you to take notes a lot and I expect you to think about what you are learning. I expect you to comprehend material and understand it, not just memorize facts. Expect to do a lot of labs, group presentations, activities and experiments. Oh, and be prepared to draw a lot for your lab book. Don't worry, I'll teach you. Lab work is usually worth 25 points. Homework is usually worth 10. Tests are 100. Project components are 100, and quizzes around 20. Your final grade in my class will be earned on a point system. Late work is not accepted, unless from an absence, so remember to do your work! There is no extra credit and my class must be passed with an "AP," or a "C" to meet college entrance requirements.

Materials for my class are a composition book, a metric ruler, a compass, colored pencils, an art pencil and eraser and an art book. The art supplies will be checked at a later date. If you have questions, remember the 9<sup>th</sup> grade teachers have a group email: [iPoly9@gmail.com](mailto:iPoly9@gmail.com). It is only checked once a week, so do not ask me something the night before something is due!

**Ms. Cancino**  
**9<sup>th</sup> Grade Integrated Science**  
**International Polytechnic High School**

# Welcome Freshmen!

The following is a science pre-test to show me what level of knowledge my students are entering my class with. It gives me a direction and frame of reference for where to start and how much I need to review. Some of it will be easy, and some of it may be difficult. Do the very best you can, but don't worry, I am not grading it. I will give you credit for completing it, but will not be checking every problem. This is a quiz, so there will be no talking. Sorry no calculators.

The metric system is based on powers or units of \_\_\_\_\_

100 g is equal to \_\_\_\_\_ kg. Show the math if you know how.

How many increments/marks are in an inch? \_\_\_\_\_

14 is what percent of 20? \_\_\_\_\_ Show the math if you can.

What letter is the vertical (up and down) axis of a graph represented by? \_\_\_\_\_

Put 250,000 into scientific notation. \_\_\_\_\_

$P = IE$  can also be written as  $E =$  \_\_\_\_\_

What is DNA? \_\_\_\_\_

What parts of a cell do you know/remember? \_\_\_\_\_

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Solve the following Punnett square:

	B	b
B		
b		

Draw the structure of a water molecule:

What are the first two elements on the Periodic Table of the Elements? \_\_\_\_\_ and \_\_\_\_\_.

What are the main components of an atom? \_\_\_\_\_

Did humans live on the earth at the same time as the dinosaurs? \_\_\_\_\_

Are the continents moving around on the earth? \_\_\_\_\_

How old is the earth according to scientists? \_\_\_\_\_

Name an endangered animal. \_\_\_\_\_

What is the number one most serious environmental problem we are facing today and where did you learn about it or how do you know about it? \_\_\_\_\_

**When you are finished**, please write me a letter and answer the following questions:

## Welcome Freshmen!

Why did you come to iPoly? Do you have brothers, sisters, cousins, etc. that go/went here? If so, who? (full name please). Do you have any fears about being here? What school did you come from, and what city was it in? Public school? Private school? What is your favorite subject in school? Your least favorite subject? What are your extra curricular activities or hobbies? Anything else you want me to know? When you are done, put your name on the test side in the top right hand corner with your assigned house (north, south, east or west).