

# AP Biology

Dear Parent/Guardian:

The staff at Tuscola High is pleased that your child is considering taking one or more advanced classes next year.

For the AP (Advanced Placement) courses, the college-level work is strenuous, but the rewards for making the commitment & seeing it through are great. You may already know that a passing grade on a College Board AP test in high school allows a student to enter college with credit earned ahead of time. Each year Tuscola has a significant number of students who enter college with various amounts of credit earned through AP courses. To compensate for the increased difficulty of the AP & Advanced courses, AP classes are weighted with two extra points awarded in computing a student's Grade Point Average, while Advanced courses are awarded one extra point.

Please understand Tuscola's policies concerning all advanced courses. Once students have made their final class selections, changes will not be made except in cases of administrative decisions. Thus, both students & parents should be very certain of the commitment they are making. Additionally, students taking AP classes are offered the National Advanced Placement Test for each AP course at a cost of \$89 per test, which a student must take & pass in order to receive college credit. The fee for each test will be collected in December. Please understand that class availability will be based on student interested and qualification. Therefore a class may or may not be available and the number of sections will also be determined by this.

Should you have any questions concerning the AP courses or tests, please feel free to contact the Tuscola Counseling Center at 456 – 2408.

***I have reviewed the contents of this letter as well as criteria & modifications listed for each AP course to which my child is applying. I understand the AP courses require college level work which is much more rigorous than normal high school courses. I also understand that participation in any AP class requires that my child pass the National Advanced Placement Test in order to receive college credit.***

Student (Print Name) \_\_\_\_\_

Student Signature (Sign Name) \_\_\_\_\_

Parent/Guardian (Print Name) \_\_\_\_\_

Parent/Guardian (Sign Name) \_\_\_\_\_

AP Biology Application Form

Name \_\_\_\_\_ Date \_\_\_\_\_  
Please Return by February 19, 2014

### Course Description

AP Biology is designed to be the equivalent of two semesters of college level biology. The curriculum emphasizes inquiry and four big ideas: Evolution, Energy, information and Interactions. Students will be required to complete weekly online assignments. All topics in this class are framed in an evolutionary context which is introduced through summer reading prior to class.

### Course Prerequisites & Co-requisite

- Biology
- Chemistry

### Requirements

1. A or B average in previous science courses
2. Exceptional performance on biology end-of-course test (level IV only) OR identified by the College Board as having the potential for success
3. Application essay
4. Recommendation from biology teacher
5. Commitment to take the AP Biology exam at the end of the year (\$89 fee)
6. Commitment to complete summer reading assignment & participation in online discussion forum.

### Procedure

1. Write your essay
2. Have your current science teacher sign the attached recommendation statement.
3. You and your parents read and sign the parent/student agreement
4. Send Ms. Neff an email from an address where you can be reached reliably over the summer. Her email is: rneff@haywood.k12.nc.us

# Essay for AP Biology Enrollment

The class focuses on these 4 BIG IDEAS in BIOLOGY:

1. The process of evolution drives the diversity and unity of life.
2. Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.
3. Living systems store, retrieve, transmit, and respond to information essential to life processes.
4. Biological systems interact, and these systems and their interactions possess complex properties.

*To demonstrate that you have a serious desire to take this course, please write a one page essay which explains your interest in one of the above topics. Please include a paragraph about your career goals and what you hope to get from this class.*

# AP Biology Recommendation

STUDENT NAME: \_\_\_\_\_

TEACHER NAME: \_\_\_\_\_

Please sign if you agree that this student has demonstrated academic ability and maturity and is capable of succeeding in a college level science class.

---

Teacher Signature

Date

# Parent and Student Agreement

Student: \_\_\_\_\_ (printed name)

## SUMMER READING AGREEMENT FOR AP BIOLOGY

**Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body** by Neil Shubin

2008 Paperback: 256 pages ; **ISBN-10:** 0307277453 or **ISBN-13:** 978-0307277459

### A Note from Author Neil Shubin

This book grew out of an extraordinary circumstance in my life. On account of faculty departures, I ended up directing the human anatomy course at the University of Chicago medical school. Anatomy is the course during which nervous first-year medical students dissect human cadavers while learning the names and organization of most of the organs, holes, nerves, and vessels in the body. This is their grand entrance to the world of medicine, a formative experience on their path to becoming physicians. At first glance, you couldn't have imagined a worse candidate for the job of training the next generation of doctors: I'm a fish paleontologist.

It turns out that being a paleontologist is a huge advantage in teaching human anatomy. Why? The best roadmaps to human bodies lie in the bodies of other animals. The simplest way to teach students the nerves in the human head is to show them the state of affairs in sharks. The easiest roadmap to their limbs lies in fish. Reptiles are a real help with the structure of the brain. The reason is that the bodies of these creatures are simpler versions of ours.

During the summer of my second year leading the course, working in the Arctic, my colleagues and I discovered fossil fish that gave us powerful new insights into the invasion of land by fish over 375 million years ago. That discovery and my foray into teaching human anatomy led me to a profound connection. That connection became this book.

## STUDENT AGREEMENT

*I agree to purchase and read the book described above and prepare to discuss it as requested during the summer before enrollment in AP Biology at Tuscola HS.*

\_\_\_\_\_  
Student signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent signature

\_\_\_\_\_  
Date