

2^x



$x+y$

science

PLANNING FOR HONORS?

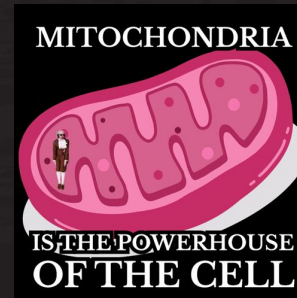
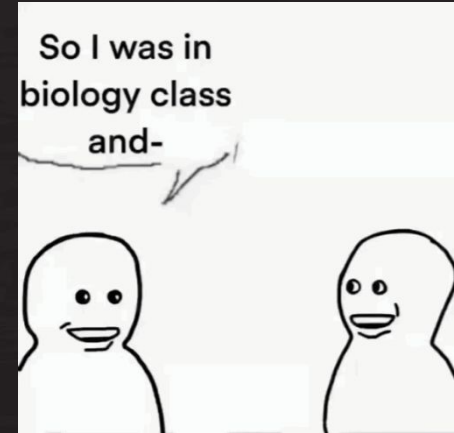
2^x

2*

PRE AP BIOLOGY HONORS

x+y

- Do you enjoy science and problem-solving?
- Did you do well in middle school science?
- Ready to take on the Honors challenge?
- Accelerated biology curriculum with a faster pace and deeper exploration of topics such as cellular processes, genetics, homeostasis, and experimental design.
- Emphasis on scientific thinking, data analysis, and evidence-based reasoning.
- Class will help prepare students for AP science courses, including AP Biology.



2*

HONORS PHYSICS

x+y

- Requires a teacher recommendation
- Do you like science and math? Did you do well in biology and math? Take on the Honors challenge!
- Math is a MUST!
 - Concurrent enrollment in an Honors math course is recommended.
- CP Physics material + faster pace & deeper content including projectile motion and electricity
 - Independent projects outside of class
 - Class will help you prepare for AP science courses.
- Get ahead summer school opportunity!



HONORS CHEMISTRY



- 3rd year science course
- HIGHLY recommended for college bound students
- Class will help you prepare for AP science courses.
- Students will...
 - develop reading, writing, and analytical skills.
 - solve chemical problems using appropriate tools.
 - perform experiments to investigate matter and energy.
- If you are interested in a STEM career, this class is a MUST!



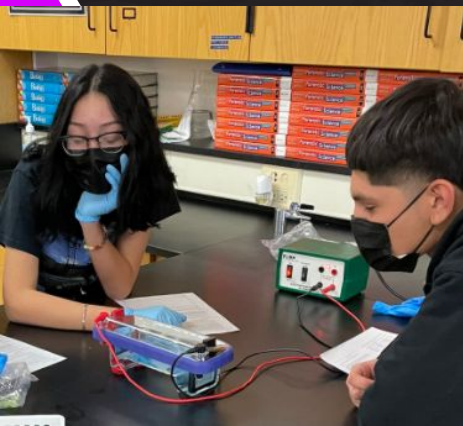
MRS. BARKER

FORENSIC SCIENCE



DR. KLINE

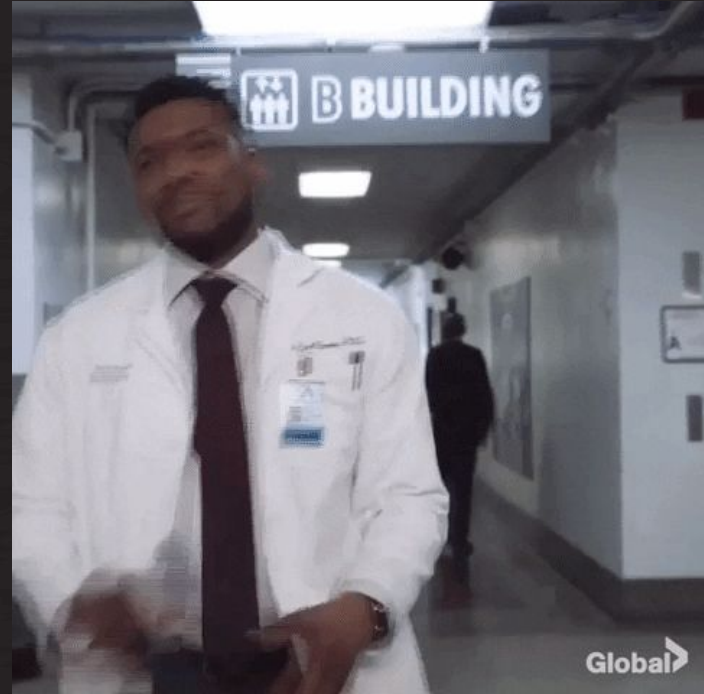
- You need to pass Forensics I to take Forensics II
- Collection, examination, and analysis of physical evidence. Very hands on and lab based!
- Topics → DNA, blood typing, blood splatter patterns, human remains, forgery, toxicology, criminal profiling, ballistics, and more!
- Must pass the full year of Pre-AP Biology (9th course) to be eligible.



MEDICAL TERMINOLOGY



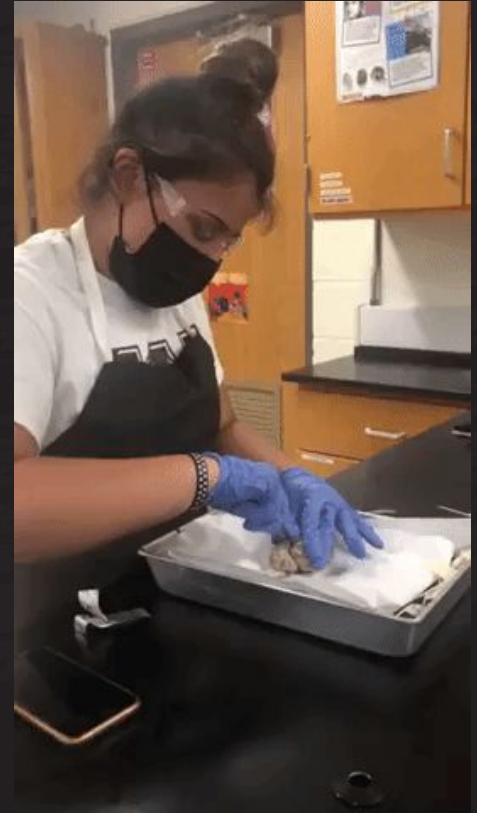
- Elective semester class
- Students will study the language of medicine in the various allied health professions.
- Significant vocabulary will be developed, with an emphasis on the context for understanding and building medical terms while learning about the various body systems.



PROJECT LEAD THE WAY

BIOMEDICAL SCIENCE

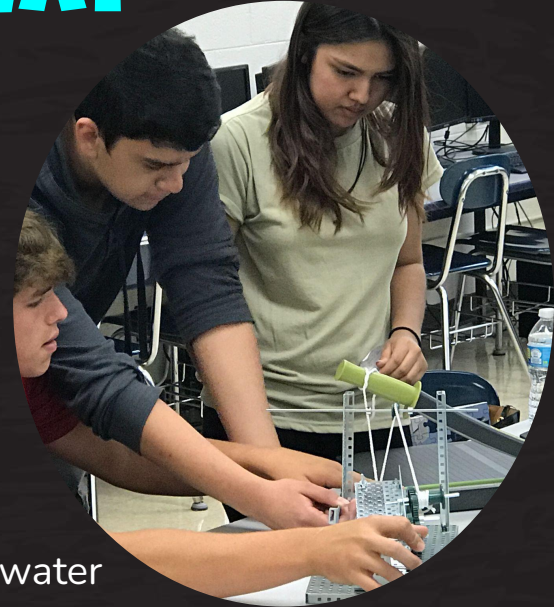
- Courses:
 - Principles of Biomedical Science
 - Human Body Systems (Must pass PBS!)
 - Medical Interventions (Must pass HBS!)
 - Biomedical Innovation (Must pass MI!)
- Nationally recognized program
- Honors weighted elective
- Possible college credit awarded
- Career focused field trips and guest speakers
- Hands-on, project-based learning courses that provide students with the skills to solve real-world challenges in the medical field!





PROJECT LEAD THE WAY ENGINEERING

- Courses:
 - Introduction to Engineering Design
 - Principles of Engineering
 - (must pass IED or have teacher recommendation)
- Nationally recognized program
- Honors weighted elective
- Possible college credit awarded
- Career focused field trips and guest speakers
- From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers.





ADVANCED PLACEMENT OPPORTUNITIES

- Weighted electives
- College-paced courses meant to give students an advantage in earning early college credit, save money & time, and stand out to post-secondary institutions.
- Courses:
 - AP Biology - Contact Ms. Baxter (West) and Dr. Boyle (Central)
 - AP Physics - Contact Mr. Conard (West) and Mr. Jern (Central)
 - AP Chemistry - Contact Mr. Otry (West) and Mr. Zorn (Central)
 - AP Environmental Science - Contact Ms. Bloom (West) and Dr. Kline (Central)



AP[®]

 CollegeBoard

AP ENVIRONMENTAL Science



- Elective year long class
 - Sophomore (with biology teacher support) and up are eligible
- This course focuses on key principles that govern how nature works, the interactions between human society and ecosystems, and current and potential solutions to environmental problems.
 - Integration of science and social dynamics, economics, policy, and human behavior.
- Study the effects of the growing human population on the hydrosphere, atmosphere, and geosphere.
- Includes a focus on data analysis, experimental design, and solutions to environmental problems



AP PHYSICS 1+2

- Consider your current math course!

Honors Geometry as a freshman OR Upperclassmen who have completed a year of physics

- Consider your post-secondary interests-especially if it is STEM or Health and Medicine.
- Additional content to prepare you for the AP Physics 1+2 exam in May.
- Additional units not in honors physics; faster pace.
- Emphasis on lab writing to help you prepare for AP test.
- Benefit of earning college credit and taking AP Physics 1+2.
- Reach out to one of the honors physics teachers:

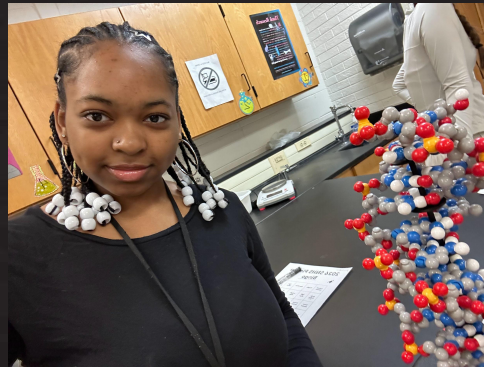


AP BIOLOGY

Conduct a transformation experiment to genetically engineer bacteria to **glow** in the dark

Understand human patterns of DNA variation by extracting your own DNA, amplify it using PCR and analyzing an enzyme digest and gel electrophoresis.

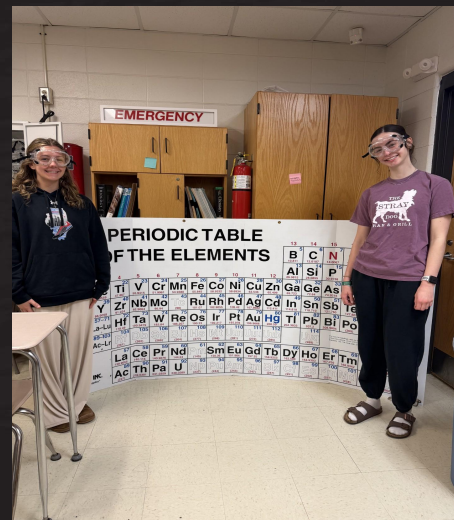
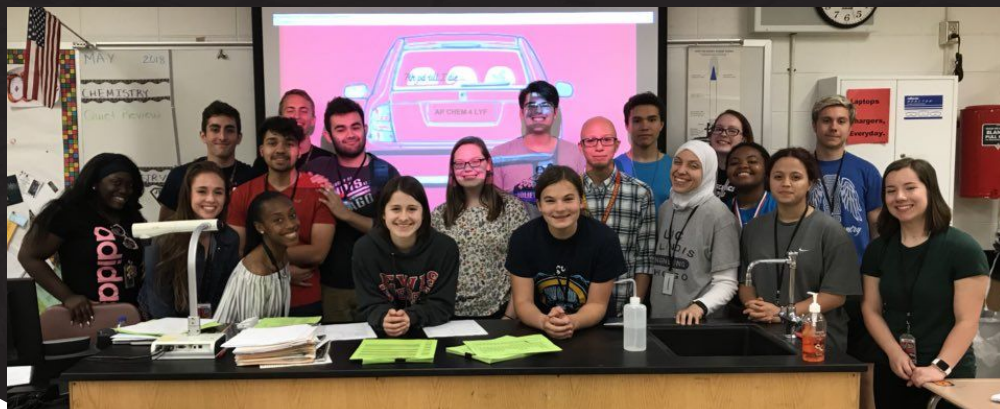
Use a spectrophotometer to understand how poisons inhibit enzymes



AP CHEMISTRY

Use redox titration procedures to find the mass percent of iron in an iron supplement

Devise and implement an experiment procedure to determine how many atoms thick a sheet of aluminum foil is





DUAL ENROLLMENT OPPORTUNITIES - GO TO JJC!

- Take actual college courses at Joliet Junior College for college credit!
- Student who meet the testing requirements can enroll in JJC classes their senior year and take courses alongside college students.
- Transportation and cost of the course are the responsibility of the student.
- Courses:
 - Biology 151/152
 - Chemistry 101/102



JOLIET
JUNIOR COLLEGE
— 1901 —

INCOMING FRESHmen?

- Sign up for the Accelerated Summer Camp!
 - Free opportunity with transportation included!
 - June 22-25
 - 8am - 1pm each day
- This one-week camp is designed to help students smoothly transition into Honors coursework at Joliet Township High School District 204. Through engaging activities, students will build foundational skills, explore advanced topics, and develop strategies to succeed in challenging classes.
- Enroll at tinyurl.com/AccelCamp

