

Honors Chemistry (college credit; can be taken instead of Chemistry)

Grade Level: 10, 11, 12

Length of Course: Year

Prerequisites: Successful completion of Physics, enrolled in Algebra II or Math 10 Honors, A/B in previous science class, instructor approval

Credit: 1

College Credit: 4 UCC credits, Introductory Chemistry CH104 (*optional*)

Course Overview: Honors Chemistry is a rigorous course designed to support students who have an interest in pursuing studies or careers in the science or medical fields. First semester focuses on measurement and dimensional analysis, properties of matter, atomic structure, elements and compounds, periodic table and trends, and nomenclature. Second semester topics include the mole, chemical equations, stoichiometry, states of matter, gas laws, solutions, acids and bases, nuclear chemistry, basic biochemistry, and other selected topics.

(Continued on next slide...)

Honors Chemistry (college credit; can be taken instead of Chemistry)

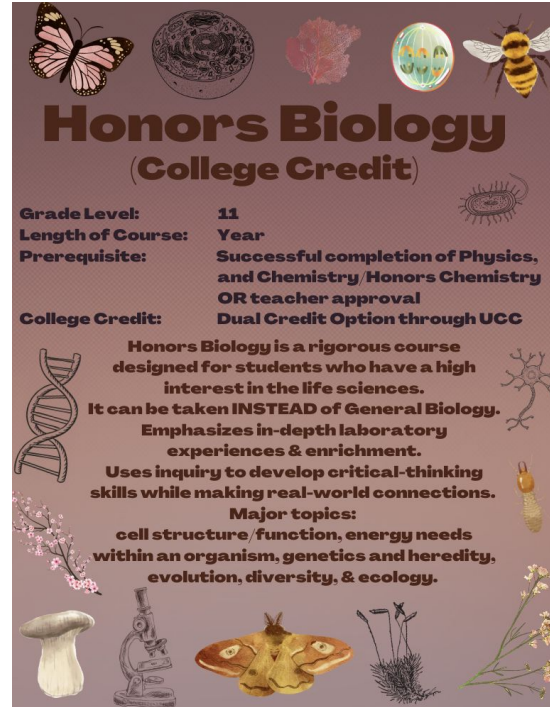
Other Important Considerations:

- Registration for CH104 credit through UCC is *optional* and will take place during second semester.
- The *topics* in the course will benefit any student whose college program requires chemistry credit.
- *College credit* from this course typically *does not* count toward college program requirements for students wanting to major in chemistry, physics, biology, pre-medicine, or pre-dentistry. See the specific program requirements at the colleges you are interested in attending.
- *The course will move rapidly and will require excellent study skills and strong personal commitment.*

HONORS BIOLOGY - see link below for pretty poster

https://www.canva.com/design/DAGeJye0jXo/QB21VRkRpamaF8e-zPJp6Q/edit?utm_content=DAGeJye0jXo&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

See example of what link is to the right



Honors Biology
(College Credit)

Grade Level: 11
Length of Course: Year
Prerequisite: Successful completion of Physics, and Chemistry/Honors Chemistry OR teacher approval
College Credit: Dual Credit Option through UCC

Honors Biology is a rigorous course designed for students who have a high interest in the life sciences. It can be taken INSTEAD of General Biology. Emphasizes in-depth laboratory experiences & enrichment. Uses inquiry to develop critical-thinking skills while making real-world connections.

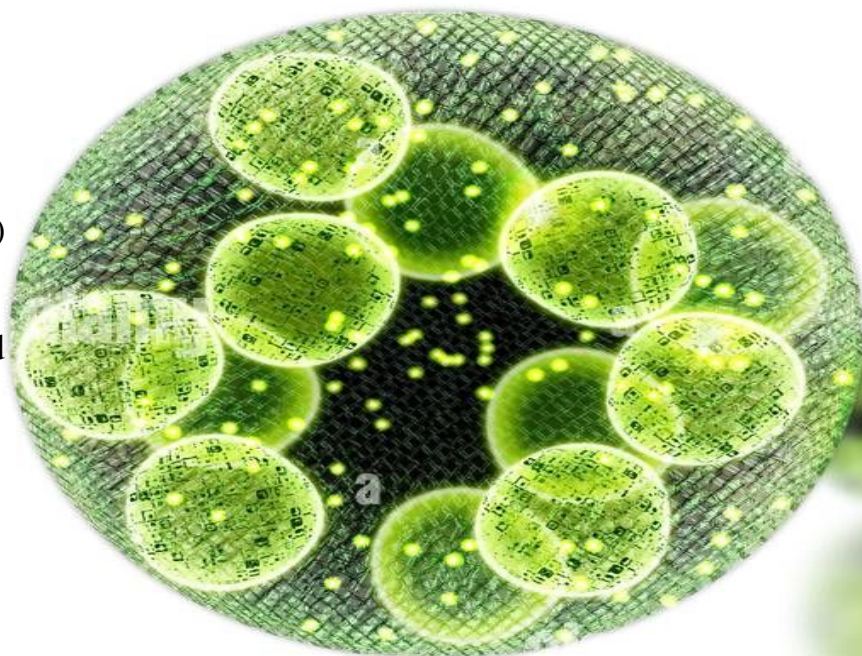
Major topics:
cell structure/function, energy needs within an organism, genetics and heredity, evolution, diversity, & ecology.

Microbiology - Elective

Grade Level: 11, 12
Length of Course: Semester
Prerequisite: Biology
(can be taken concurrently with)

Credit: 1/2

Course Overview: Although they can't be seen without a microscope, microbes are always around us and affect us in countless ways. In this one-semester course, students will learn how some microbes can cause lethal infections while others give us life-saving medicines, delicious food and could even be our last hope to survive climate change. This course is ideal for students who plan on pursuing careers in science, agriculture, or medicine.



Medical Terminology (I) - College Credit Elective

Grade Level:

11, 12

Length of Course:

Semester

Prerequisite:

Successful completion of Physics and Chemistry/Honors Chemistry

Credit:

$\frac{1}{2}$

Course Overview: This course emphasizes the terminology related to the healthcare profession and specialties, equipment, drugs, symbols and abbreviations, the anatomy, physiology, and pathophysiology of the digestive, urinary, reproductive, nervous, and cardiovascular systems. The approach is one of practical application in the workplace using case studies, diagnostics, and laboratory reports.

Medical Terminology (II) - College Credit Elective

Grade Level:	11, 12
Length of Course:	Semester
Prerequisite:	Successful completion of Medical Terminology I with an A/B (college requirement)
Credit:	½

Course Overview: This is the continuation of the body systems covered in Medical Terminology I. The focus of this course is the respiratory, lymphatic, musculoskeletal, and integumentary systems. Oncology and radiology will also be discussed. The origin of terms and the use of anatomical, general, operative, and symptomatic terms are explored using a variety of techniques. Both of these classes are the stepping-stones into an entry-level occupation in the Health Services field.

Anatomy and Physiology - Elective

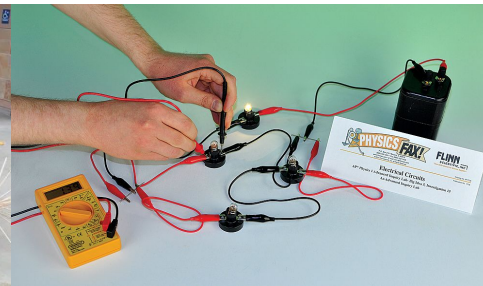
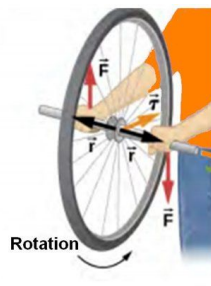
Grade Level:	12
Length of Course:	Year
Prerequisite:	Successful completion of Physics, Chemistry/Honors Chemistry, and Biology/Honors Biology
Credit:	1

Course Overview: Anatomy and Physiology is a course designed to familiarize students with the major anatomical structures, the related physiology, and various diseases of the human body. Students will identify macroscopic and microscopic structures in the body. Areas of study will include histology, skeletal, muscular, digestive, circulatory, and urinary. Emphasis will be placed on the medical aspects of these systems. Dissections are part of this course.

Physics II - College Credit Available

Grade Level:	11,12
Length of Course:	Year
Pre or Corequisite:	Precalculus (Math 111Z equivalent)
Credit:	1
College Credit:	Up to 15 UCC credits - General Physics with Algebra PH 201/202/203

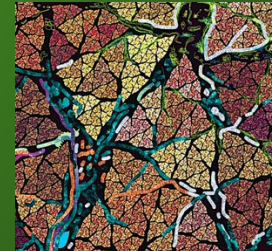
Course Overview: Physics II is an exciting and rigorous course designed to introduce students to the major concepts in physics in greater depth and complexity. The course uses laboratory experiences to reinforce classroom instruction and seeks to develop critical-thinking skills while making connections to real-world phenomena. Major topics include: units, vectors, motion, dynamics, energy, momentum, rotation, gravitation, equilibrium, fluids, and thermodynamics, waves, sound, electricity, magnetism, light, and optics.



Environmental Science -

Elective
Length of Course: Year
Prerequisite: None
Credit: 1

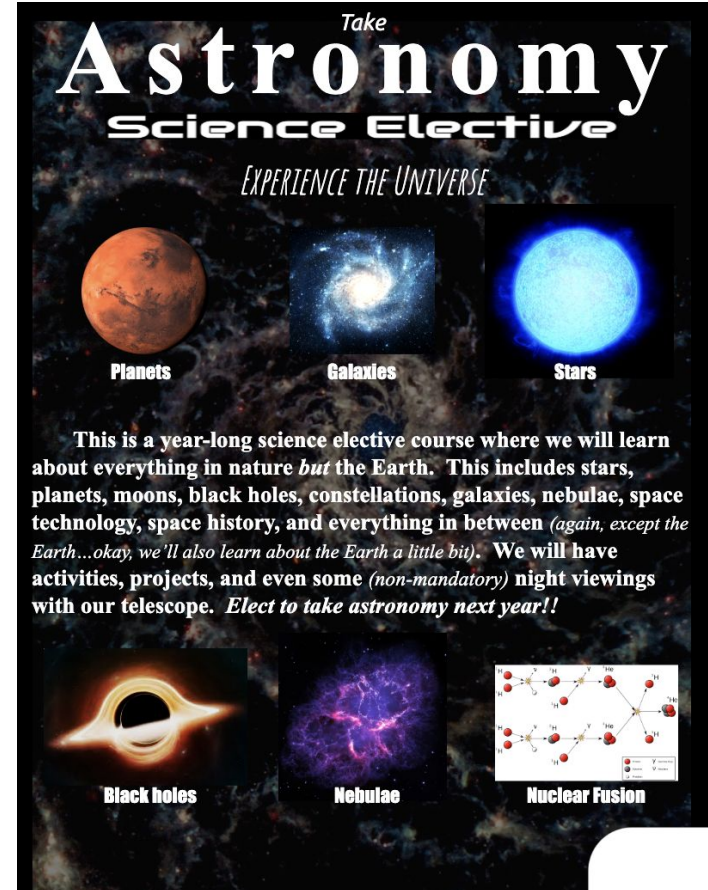
Course Overview: Environmental Science is designed to be an exploration of the Earth and its many different ecological systems. The course will cover topics such as Ecology, Humans and the Environment, and Earth's Resources. Students will be exposed to practical aspects of the above topics; and will participate in a variety of activities designed to provide a framework for learning inquiry-based science.



Link to Astronomy poster

<https://docs.google.com/document/d/1KYmb6KS-S-3MhGJDluVSduUrCCmzIJD7NY67uwkYX8R4/edit?usp=sharing>

See example of what link is to the right



Take
Astronomy
Science Elective

EXPERIENCE THE UNIVERSE

Planets Galaxies Stars

This is a year-long science elective course where we will learn about everything in nature *but* the Earth. This includes stars, planets, moons, black holes, constellations, galaxies, nebulae, space technology, space history, and everything in between (*again, except the Earth...okay, we'll also learn about the Earth a little bit*). We will have activities, projects, and even some (*non-mandatory*) night viewings with our telescope. Elect to take astronomy next year!!

Black holes Nebulae Nuclear Fusion

The poster features a dark space background with various astronomical images. At the top, the word 'Astronomy' is written in a large, white, serif font, with 'Science Elective' in a smaller, white, sans-serif font below it. The phrase 'EXPERIENCE THE UNIVERSE' is written in a white, italicized, serif font. Below this, there are three circular images: a reddish planet (Mars), a blue and white galaxy, and a bright blue star. Each image is labeled with its respective category: 'Planets', 'Galaxies', and 'Stars'. In the center, there is a paragraph of text describing the course. At the bottom, there are three more images: a black hole with a glowing accretion disk, a purple and pink nebula, and a diagram of nuclear fusion showing atoms and particles. Each image is labeled: 'Black holes', 'Nebulae', and 'Nuclear Fusion'.

Link to Canva File for Forensic Science Poster

https://www.canva.com/design/DAGdaU5Q7y8/agtvmfa-0y5PMTBtNRasTA/edit?utm_content=DAGdaU5Q7y8&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

See example of what link is to the right

