Departmental Title: Science

Head of Department: Lori Castleberry

Number of Teachers: 5

Average Class Size: 15 - 20

Teaching Assistants: 3 and 1 lab docent

Facilities: 5 lab Classrooms

Course Title	Grade Level[s]	Course Description	Textbook/eBook Title
Integrated Science	**7**	Trimester 1: Life Science; cell biology, single and multi-celled organisms Trimester 2: Earth Science; convection currents, plate tectonics, and geological time with a correlation to local environment Trimester 3: Chemistry; introduction to matter, periodic table and density	Text book: Science-saurus, Houghton, Mifflin Harcourt, 2004 Edition Mc Dougal Littell's Earth Science Chapters: 1.1, 2, 3, 4 (emphasis on 4.3), 11, and 15 Additional Teacher Resource Environmental Science Textbook
Integrated Science	**8**	Trimester 1: Physics; measurement, motion, forces, work, simple machines and energy Trimester 2: Chemistry; structure of matter, the periodic table, atomic structure and bonding Trimester 3: Biology; ecosystems and human interactions	Text book: Science-saurus, Houghton, Mifflin, Harcourt, 2004 Edition Life Science by McDougal Little; Physical Science by Glencoe
Biology	**9**	Better understanding of living world; basis of life, chemistry of life, cell functions, genetics, evolution, ecology, and human biology.	Biology by Houghton, Mifflin and Harcourt, 2016 Edition

Honors Biology	**9**	Better understanding of living world; basis of life, chemistry of life, cell functions, evolution, ecology, and human biology. Greater emphasis on biotechnologies, applied genetics, chemistry of life.	Biology by Houghton, Mifflin and Harcourt 2017 Edition
Chemistry	**10**	Introduction into atomic theory, stoichiometry, gas laws, chemical periodicity, bonding, chemical kinetics, and equilibrium	Modern Chemistry Holt Reinhart Winston, 2008 Edition
Honors Chemistry	**10**	Introduction into atomic theory, stoichiometry, gas laws, chemical periodicity, bonding, chemical kinetics, equilibrium, reaction rates, thermodynamics, and acid and bases	Chemistry Prentice Hall, 1999 Edition
AP Physics	**10**	This course focuses on mechanics; linear motion projectile motion, forces and Newton's Laws, work, power and energy and circular motion.	Physics Giancolli, 2012 Edition
Physics	**11-12**	This course focuses on mechanics; linear motion projectile motion, forces and Newton's Laws, work, power and energy and circular motion.	Physics, Serway, Holt McDougal, 2012 Edition
AP Physics	**11-12**	Two year course. In order to take the second year you must have a 3 or better on the AP exam for the first year. First year is for 10-12 graders, focuses on mechanics and thermo-dynamics and the second year is for 11 – 12 grade and focuses on electricity , magnetism and waves	College Physics, *A Strategic Approach* Randall Knight Pearson, 2017 Edition
AP Chemistry	**11-12**	Covers the topics of a first year college chemistry course	Chemistry: The Central Science Brown,Lemay et al, 2016 Edition
AP Biology	**11**	Covers the topics of a first year college biology course	Biology, Campbell, Reece et. Al. 10th AP Edition, 2016 Edition
Environmental Science	**11-12**	Elective: focus on current environmental issues in the media, ecology, resource management, energy use, global climate cycles, the changing Earth over time, population ecosystems, biodiversity, pollution and energy use.	Environmental Science Holt, 2016 Edition