

SCIENCE & TECHNOLOGY (CCST)

CCST 101 Topics in Physical Science 3 cr

Designed for non-STEM majors, this course will examine fundamental concepts in physical science. Scientific reasoning, discovery, and invention provide a context for understanding reality-based applications of science. Topics will vary by semester and be identified by subtitle.

Attributes: Core Science & Tech w/o lab (CST)

Repeatable: Unlimited Credits

CCST 102 A Case Study Approach to Science 3 cr

Introduces students to the use of the scientific method in various scientific settings. Using the case study method, students will cover a diverse range of topics which may include such topics as: the effects of radiation on biological systems, cancer and waste water treatment.

Attributes: Core Science & Tech w/o lab (CST)

CCST 103 Quarks to Quasars 3 cr

Develops the student's understanding of the physical universe, from the smallest constituents of matter to the most distant, energetic structures known. The student will come to know how the scientific method guides us as we seek new knowledge. Conservation laws, the relationship between energy and matter, the need for mathematics and the inexorable links between the various branches of science will be considered.

Attributes: Core Science & Tech w/o lab (CST)

CCST 105 The Chemistry of CSI 3 cr

Illustrates the intricate role that chemistry plays in solving crimes through the introduction and understanding of basic chemical principles. Forensic techniques such as fingerprint analysis, fiber identification, drug identification and DNA profiling will be introduced. Case studies and "CSI" episodes will be used to explore the scientific foundation for the examination of physical, chemical and biological evidence. This course is intended for non-science majors.

Attributes: Core Science & Tech w/o lab (CST)

CCST 105H Honors: The Chemistry of CSI 3 cr

Illustrates the intricate role that chemistry plays in solving crimes through the introduction and understanding of basic chemical principles. Forensic techniques such as fingerprint analysis, fiber identification, drug identification and DNA profiling will be introduced. Case studies and "CSI" episodes will be used to explore the scientific foundations for the examination of physical, chemical, and biological evidence. This course is intended for non-science majors.

Attributes: Core Science & Tech w/o lab (CST), Honors Program (HONR)

CCST 106 The Physics of Superheroes 3 cr

Examines superheroes through the lens of modern physics. The student will use basic physics principles such as mechanics, energy, and quantum mechanics to model and explain the powers and events in literature, which consists of comic books, sci-fi novels, and fantasy novels. This course will develop problem solving skills that are useful in a variety of real world applications. This course assumes no previous knowledge of physics and will be useful for science and non-science majors alike.

Attributes: Core Science & Tech w/o lab (CST)

CCST 110 Topics in Physical Science with Laboratory 4 cr

Designed for non-STEM majors, this course will examine fundamental concepts in physical science. Scientific reasoning, discovery, and invention provide a context for understanding reality-based applications of science. Topics will vary by semester and be identified by subtitle.

Required laboratory

Attributes: Core Science & Tech w/lab (CSTL)

Repeatable: Unlimited Credits

CCST 111 Topics in Life Science 3 cr

Designed for non-STEM majors, this course will examine fundamental concepts in the life sciences. Scientific reasoning and discovery provide a context for understanding reality-based applications of science. Topics will vary by semester and be identified by subtitle.

Attributes: Core Science & Tech w/o lab (CST)

Repeatable: Unlimited Credits

CCST 112 Topics in Life Science with Lab 4 cr

Designed for non-STEM majors, this course will examine fundamental concepts in life science. Scientific reasoning, discovery, and invention provide a context for understanding reality-based applications of science. Topics will vary by semester and be identified by subtitle. Required laboratory.

Attributes: Core Science & Tech w/lab (CSTL)

Repeatable: Unlimited Credits

CCST 230 Energy and the Environment 4 cr

Looks at the impact of current energy usage on our environment from technical, social and political viewpoints. Investigates the present and projected usage of nonrenewable fuel sources and how modifications due to alternate energy techniques will affect current energy policy. Discusses possible large-scale alternate energy methods. Investigates the scientific aspects of such topics as global warming and ozone depletion. Required laboratory.

Attributes: Core Science & Tech w/lab (CSTL), Environmental Studies (ENVI)