ISP—Integrative Studies in Physical Science

203A Understanding Earth: Global Change
Fall, Spring. Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Science as a way of knowing about natural and anthropogenic global change. Implications for societies.

203L Geology of the Human Environment Laboratory
Fall, Spring. Summer. 2(1-2) P: ISP 203A or concurrently or (ISP 203B or concurrently)
Exercises in the scientific method applied to earth materials and their impact on society.

205 Visions of the Universe
Fall, Spring. Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 200 or concurrently) designated score on Mathematics Placement test

207 World of Chemistry
Fall, Spring. Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
The language, concepts, models and techniques of chemical science, including atomic theory; nuclear energy; acids; chemicals in air, water, food and biological systems.

207L World of Chemistry Laboratory
Fall, Spring. Summer. 2(1-2) P: ISP 207 or concurrently
Chemical combinations and reactivity with respect to such materials as acids, bases, dyes, foods, and detergents.

209 The Mystery of the Physical World
Fall, Spring. Summer. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Laws of physics through demonstrations and analyses of every day phenomena. Optics, mechanical systems and electromagnetic phenomena.

209L The Mystery of the Physical World Laboratory
Fall, Spring. Summer. 2(1-2) P: ISP 209 or concurrently
Physical phenomena: optics, mechanical systems and electromagnetics.

215 The Science of Sound
Fall, Spring. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
The science of speech, communication, musical instruments, room acoustics, and analogue and digital audio. Integrating the physical, physiological, and psychological principles involved.

217 Water and the Environment
Fall, Spring. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Application of the scientific method to identification and solution of environmental problems related to water.

220 Quarks, Spacetime, and the Big Bang
Spring of odd years. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Elementary particle physics and the Big Bang for non-scientists. A survey of particles and forces in the early universe as it is recreated at high energy particle colliders in laboratories around the world.

221 Earth Environment and Energy
Fall, Spring. 2(1-2) P: ISP 217 or concurrently
Flow of energy into, through, and out of the earth’s lithosphere, hydrosphere, atmosphere, and biosphere. Energy, entropy, and life processes. Global warming, greenhouse effect, and contemporary issues.