Integrated Science Courses at Pitzer for Incoming First-Year Students
Application Website: http://apply.kecksci.claremont.edu/
Application Deadline is Friday, June 20th, 2014.

As faculty who have had the pleasure of teaching at the Keck Science Department of Claremont McKenna, Pitzer, and Scripps Colleges for a number of years, we can write with confidence that you’ve made a great college choice and that you will be surrounded by other students who share your love of learning! We are writing now to make you aware of two unique educational opportunities available to you at Pitzer College.

Pitzer, in conjunction with Claremont McKenna and Scripps Colleges, offers a number of first-year students the option to enroll in one of two interdisciplinary introductory courses in the natural sciences: Accelerated Integrated Science Sequence (AISS) and Introduction to Biological Chemistry (IBC). These two courses have emerged from our realization that resolving the major issues we face as a society will require interdisciplinary approaches and perspectives.

Science faculty members, with support from the National Science Foundation and the S.D. Bechtel Jr. Foundation, have developed AISS (pronounced “ace”) to integrate biology, chemistry, physics, and some computer modeling in a year-long double-credit course. Students who complete both semesters of AISS meet introductory course requirements in each of the three disciplines and are well prepared to go on to complete almost all of our science majors, save for Engineering-related programs—engineering schools have specific course requirements, which AISS does not satisfy. If you are interested in engineering, you should contact our engineering advisor Professor James Higdon at jhigdon@kecksci.claremont.edu to discuss course selection (most likely Physics 33 in the fall followed by Physics 34 in the spring would be the appropriate choice for you).

Because of its accelerated nature, AISS, which is team-taught by a biologist, physicist, and chemist, is appropriate for students with strong backgrounds in science and math, who plan to major in one of the natural sciences. However, it can also be a great course for students who are undecided in their major and have a deep interest in science, especially presented in a new and highly interconnected way. If you think this year-long sequence is appropriate for you, please read more about it at http://www.kecksci.claremont.edu/aiss/.

Chemistry and Biology faculty members, with support of the S.D. Bechtel Jr. Foundation, have developed IBC as an exciting interdisciplinary course option and provides an integrative learning experience centered on chemistry and biology. IBC replaces the first semester each of General Chemistry (Chem 14) and Introductory Biology (Biol 43), and the topics covered are very similar. IBC is offered because comprehension of basic chemistry concepts is critical to an in-depth understanding of most biological processes. Furthermore, having biological topics to which chemistry can be applied creates a unique mode of reinforcement and enhanced learning experience for students. An example of this overlap would be discussion of laws of thermodynamics as applied to cellular metabolism and the harvesting of energy to create the biomolecules. We explore common themes relevant to both chemistry and biology throughout the semester and highlight modern applications where these two fields are of critical
consideration, such as drug design. IBC is team-taught by a chemist and a biologist, and is
designed for students who seek an interconnected and comprehensive understanding of the
natural world. If you think this fall-semester double-credit course is appropriate for you, please
read more about it at http://www.kecksci.claremont.edu/aiss/Biological-Chemistry.asp.

AISS and IBC will prepare students to think and work in an interdisciplinary manner, a
characteristic sought in the most rapidly advancing areas of science. If you are interested in being
considered for enrollment in either of these courses, we ask that you submit an electronic
application through our Keck Science Application website: http://apply.kecksci.claremont.edu/
Applications are due by Friday, June 20th. We hope to notify you of our decision during the
second week of July. (Note that the application for admission to the department’s Summer
Science Immersion Program may also be submitted through this website.)

We hope you will consider this unique opportunity. Please contact one of us if you have
any questions. We look forward to seeing you in the fall.

Sincerely,

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