

THIRD YEAR STUDENT COURSES AT CUUB:

By the time a student reaches their third summer with CUUB, their courses approximate college level work. Students are enrolled in chemistry or physics, American Indian Research Seminar, and an added College Workshop. They also attend day-long field trips to other educational institutions or areas of career interest. Students will also continue their math and counseling component.

- **MATHEMATICS - See 1ST AND 2ND YEARS**

- **PHYSICS** - This course focuses on the conceptual and investigative processes fundamental to the physical sciences. Topics include operational definitions, scalar quantities, derived quantities, properties of matter and energy, and basic laws of motion and thermodynamics. The use of mathematics as a tool to understanding nature will be touched upon in the laws of motions and forces. A lab will be done to help supplement a students grasp Physics concepts.

- **COLLEGE PREP** - This course continues the college preparation course offered during the second year. Students will learn how to complete college applications, receive help on application essays, financial aid applications, and understand the idea of personal budgeting and financing necessary for success in college. Students will continue to research colleges that they have interest in and be able to visit many schools in the state of Colorado during field trips. Students will work closely with CU staff from many departments in order to familiarize themselves with the university environment.

- **RESEARCH AND WRITING** - Each third-year student prepares a series of analytical and interpretive essays on works of scholarly material on American Indian topics or delves into the art of scientific research and technical writing. Each student also prepares one term paper based on library research selected with the guidance of the writing instructor. This course also functions as the third year English component focusing on college level writing. Students will increase their writing skills by developing from start to finish a proper research paper complete with bibliography and footnotes/endnotes. A writing lab is also attached to this course for supplemental help.

- **ACT PREP** - This course is designed to help prepare our 3 rd year students for the ACT Test that is so important for admission into a college or university. Sample tests will be taken; a pre-test as well as a post test will be issued so that students can see their progress. Math and English will be targeted for the duration of the course. Tips on how to take standardized tests as well as tips on how to approach specific types of problems will make up much of the content for this course.

- **YEARBOOK** – Third year students not in Engineering will be involved in the creation of the CU Upward Bound yearbook. Layout, photography, articles and the UB student experience will be captured in this edition. The finished product will be given to each student who completes the summer program.

- **ELECTIVES** – Each third year student will take an elective. They will have the opportunity to choose from four areas (listed below) depending on their interests.
- **JOURNALISM-PRINT** - Third-year students who choose this elective will participate in the writing and development of an UB published newspaper called “Cultural Currents.” They are allowed to express themselves in various forms from the various styles learned throughout their CUUB career. These projects are edited and published along with pictures in a 9 1/2 X 12 newspaper that is distributed to all participants.
- **ENGINEERING** – Engineering is about taking ideas that will solve problems and making them reality. This course offers a chance for students to see and be an active participant in this process. The process uses important ideas needed in engineering. These ideas include applying: deductive and inductive reasoning skills, mathematical concepts, logic as well as designing and producing. In this class students will design and build speakers. The process will include a basic understanding of circuits and electricity.
- **FINE ARTS** – Artistic concepts will be covered in this course. These topics include but are not limited to perspective drawing, scale drawing, art history, and critiquing art and a look at the idea of space. Students are allowed to express themselves in their respective art projects and in different types of media.

The Summer Academic Institute stresses learning outside the classroom. Career speakers and educational field trips of Boulder's many scientific research facilities are an important part of the curriculum. On weekends, recreational and sightseeing activities provide a welcome break from the challenging academic portion of the program. The following is a typical schedule of activities conducted throughout each summer: