To be adopted:

Proposed changes in course requirements for the Bachelor of Science (B.S.) degree in Biomedical Sciences.

Present

Degree Requirements

University Requirements
See the Undergraduate Students section for the requirements that all students must satisfy.

College Requirements
See Degree requirements, College of Natural and Agricultural Sciences in the Undergraduate Studies Section, for requirements that students in the B.S. program must satisfy.

B.S. Degree Requirements (effective Fall 2003):
The requirements for the B.S. degree in Biomedical Sciences for students who matriculated as Biomedical Sciences majors before Fall 2003 are listed in the 2003-2004 UCR General Catalog. These students are allowed to complete the degree requirements but must graduate by Summer 2006.

The following major requirements apply only to those very exceptional students who may matriculate into the Haider Program without a baccalaureate degree. These students are eligible to receive a B.S. degree in Biomedical Sciences upon satisfactory completion of the first year of the curriculum leading to the M.D. degree granted by the Geffen School of Medicine at UCLA.

Major requirements
1. Biological Sciences Core Curriculum (62-65 units)
   a. BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C or equivalent
   b. CHEM 001A, CHEM 001B, CHEM 001C, CHEM 112A, CHEM 112B, CHEM 112C or equivalent

Proposed

Degree Requirements

University Requirements (no change)
See the Undergraduate Studies section for requirements that all students must satisfy.

College Requirements (no change)
See Degree Requirements, College of Natural and Agricultural Sciences, in the Undergraduate Studies Section, for requirements that students in the B.S. program must satisfy.

B.S. Degree Requirements

The following major requirements apply to students who matriculate into the Haider Program without a baccalaureate degree. These students are eligible to receive a B.S. degree in Biomedical Sciences upon satisfactory completion of the first year of the curriculum leading to the M.D. degree granted by the Geffen School of Medicine at UCLA.

Major Requirements
1. Biological Sciences Core Curriculum (62-65 units):
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C or equivalent
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 112A, CHEM 112B, CHEM 112C or equivalent
c. PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC or equivalent
d. MATH 009A, MATH 009B or equivalent
e. STAT 100A or STAT 105 or STAT 120A or equivalent
f. BCH 100 or BCH 110A or equivalent

2. BCH 110B if BCH 110A is taken instead of BCH 100 (0-4 units)

3. Courses taken during the first year of medical school (54 units)

b. BIOL 115

c. PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC or equivalent
d. MATH 009A, MATH 009B or equivalent
e. STAT 100A or equivalent
f. BCH 100 or BCH 110A or equivalent

2. Courses taken during the first year of medical school (54 units)
The Biomedical Sciences Program is in the process of implementing two major changes. The first change is being implemented this fall with the fact that no freshmen are being matriculated into the Biomedical Science major. This change will lead to the opening of the medical degree program to all qualified UCR students starting in 2007. The second major change will be implemented next year as we follow UCLA Medical School (with which we are affiliated) in a reorganization that moves us away from a course-based curriculum to an integrated human biology and disease-based medical curriculum. Our current medical curriculum was designed to exclusively serve students that matriculated into the program as freshmen and allowed us to have our BMSC majors to take some of the medical school courses before they were admitted into the official medical school phase of the program. Our new medical curriculum will mirror UCLA’s new curriculum that started this past August for their incoming freshman medical school class and, consequently, will force us to present all our required medical courses that previously satisfied the Biomedical Sciences B.S. degree requirements in one year.

This proposal will replace the existing required courses (BMSC 120, BMSC 200A, BMSC 200B, BMSC 205, BMSC 210A, BMSC 210B BMSC 220, BMSC 224, BMSC 225A, BMSC 225B, BMSC 240, BMSC 255A, BMSC 255B, BMSC 255C, BIOL 115, CBNS 169, BCH 100 or BCH 110A-B) with an integrated series of four courses (BMSC 211 (Human Biology and Disease: Foundations), BMSC 212 (Human Biology and Disease: Cardiovascular, Renal, and Respiratory Sciences), BMCS 213 (Human Biology and Disease: Gastrointestinal, Endocrine, and Reproductive Sciences), and BMSC 214A (Human Biology and Disease: Nervous and Musculoskeletal Systems). (Note: Microbiology, the equivalent of BMSC 225A and BMSC 225B will be covered in the second year of medical school. Also note that after this fall STAT 105 will no longer be taught and STAT 120A will not be suitable for premed students.)

These curricular changes are absolutely necessary, because the medical accreditation board (Liaison Committee for Medical Education) requires comparable educational experiences (learning objectives, instructional hours, methods of evaluation, criteria, etc.) at each site of instruction for programs like ours with multiple instructional sites. In addition to being required for accreditation, these changes will make it easier for students who matriculate into the medical school phase of the program and who have not yet completed a B.S. or B.A. degree with only three years of college to receive a baccalaureate degree before they graduate from medical school. Also, by making these changes applicable for all our remaining undergraduate majors, our students will have greater flexibility in choosing their courses, which among other things will be advantageous to our disadvantaged students.

Finally, the proposed Biomedical Sciences B.S degree requirements represents essentially the same requirements for a B.S. degree in Medical Sciences that the UCSF Medical School uses for students entering their medical school without a baccalaureate degree. Please keep in mind that although medical school involves professional education, the first year of medical school covers the systematic study of humans at molecular, cellular, and organ system levels in both normal and diseased states. It thus represents broad training in biological sciences and, consequently, is suitable for a B.S. degree in conjunction with the University and the CNAS breadth requirements.

Approved by the Biomedical Sciences Faculty on 9/29/2003
Reviewed and Approved by the CNAS Executive Committee October 22, 2003
Approved by the Committee on Educational Policy October 29, 2003