South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION
This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: South Dakota State University

2. CURRENT PROGRAM NAME: Biochemistry

3. THIS PROPOSAL DEALS WITH A CHANGE IN:
   Distribution of Credits
   _____ total credits required within the discipline
   _____ total credits of supportive course work
   _____ total credits of elective course work
   _____ total credits required for program
   _____ Program name
   _____ Existing specialization
   _____ Addition of specialization
   _____ Other (explain)

4. LEVEL:
   _____ Certificate
   _____ Associate Degree
   X _____ Bachelor’s Degree
   _____ Master’s Degree
   _____ Doctoral Degree

5. CATEGORY:
   _____ Minor
   X _____ Major
   _____ Specialization

6. EFFECTIVE DATE OF CHANGE: Summer 2012

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:
   _____ on the effective date for all students
   _____ on the effective date for students new to the program
   (enrolled students will graduate from existing program)
8. PRIMARY ASPECTS OF THE MODIFICATION:

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<th>Current Program Name: B.S., Biochemistry</th>
<th>Proposed Program Name: B.S., Biochemistry</th>
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Total number of hours required for major, minor, or specialization **55**

Total number of hours required for degree **128**

9. EXPLANATION OF THE CHANGE:

A change is proposed in the Institutional Graduation Requirements (IGRs) to reflect the decrease in credits from 8-9 to 5.

In spring 2011, the BOR approved major changes to the undergraduate biochemistry major at SDSU. In that request the number of credit hours required for the major were reduced from 72 to 55. To accommodate the BOR mandate of 120 credit hours for graduation, the biochemistry major will restrict the number of "free electives" a student takes from 23-24 to 19.

Laurie Stenberg Nichols
Institutional Authorization (President or Designee) 12/13/11
**Existing Curriculum Requirements for Biochemistry Major**

**Bachelor of Science in Arts and Sciences:**

**System General Education Requirements: 30**
- Goal #1 Written Communication: ENGL 101: Credits: 6
- Goal #2 Oral Communication: SPCM 101: Credits: 3
- Goal #3 Social Sciences/Diversity: Credits: 6
- Goal #4 Arts and Humanities/Diversity: Credits: 6
- Goal #5 Mathematics: MATH 123 - MATH 123L: Credits: 3
- Goal #6 Natural Sciences: CHEM 115-115L, and CHEM 127-127L: Credits: 6

**Institutional Graduation Requirements: 8-9**
- Goal #1 Land and Natural Resource Stewardship: Credits: 3
- Goal #2 Personal Wellness: Credits: 2-3
- Goal #3 Social Responsibility/Cultural and Aesthetic Awareness: Credits: 3

**College Requirements: 11**
- Social Sciences Credits: 3
- Arts & Humanities Credits: 2
- BIOL 151-151L - General Biology I and Lab (COM) Credits: 4
- BIOL 153-153L - General Biology II and Lab Credits: 4

**Major Requirements: 55**
- MATH 125 - Calculus II (COM) Credits: 4
- STAT 381 - Introduction to Probability and Statistics (COM) Credits: 3
- PHYS 211-211L - University Physics I and Lab (COM) Credits: 4
- PHYS 213-213L - University Physics II and Lab (COM) Credits: 4
- CHEM 229-229L - Transformations of Organic Molecules and Lab Credits: (3, 1)
- CHEM 237 - Intermediate Laboratory Investigations Credits: 2
- CHEM 348-348L - Biophysical Chemistry and Lab Credits: (3, 1)
- CHEM 464 - Biochemistry I (COM) Credits: 3
- CHEM 466 - Laboratory Methods-Biochemistry Credits: 1
- CHEM 465 - Biochemistry II (COM) Credits: 3
- CHEM 498 - Undergraduate Research/Scholarship (COM) (AW) Credits: (3-6)
- Advanced Biology Electives (300- and 400-level) Credits:10
- Advanced Chemistry Electives (300- and 400-level) Credits:10

**Electives: 19**
- General Elective Credits: 19

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**Proposed Curriculum Requirements for Biochemistry Major**

**Bachelor of Science in Arts and Sciences:**

**System General Education Requirements: 30**
- Goal #1 Written Communication: ENGL 101: Credits: 6
- Goal #2 Oral Communication: SPCM 101: Credits: 3
- Goal #3 Social Sciences/Diversity: Credits: 6
- Goal #4 Arts and Humanities/Diversity: Credits: 6
- Goal #5 Mathematics: MATH 123 - MATH 123L: Credits: 3
- Goal #6 Natural Sciences: CHEM 115-115L, and CHEM 127-127L: Credits: 6

**Institutional Graduation Requirements: 5**
- CHEM 109 – First Year Seminar: Credits: 2
- Goal #2 Cultural Awareness and Social and Environmental Responsibility: Credits: 3

**College Requirements: 11**
- Social Sciences Credits: 3
- Arts & Humanities Credits: 2
- BIOL 151-151L - General Biology I and Lab (COM) Credits: 4
- BIOL 153-153L - General Biology II and Lab Credits: 4

**Major Requirements: 55**
- Advanced Biology Electives (300- and 400-level) Credits:10
- Advanced Chemistry Electives (300- and 400-level) Credits:10
- MATH 125 - Calculus II (COM) Credits: 4
- STAT 381 - Introduction to Probability and Statistics (COM) Credits: 3
- PHYS 211-211L - University Physics I and Lab (COM) Credits: 4
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- CHEM 498 - Undergraduate Research/Scholarship (COM) (AW) Credits: (3)

**Electives: 19**
- General Elective Credits: 19

*updated AAC Feb09*