SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSU
Arts & Sciences/ Chemistry & Biochemistry

Laurie Stenberg Nichols
Institution Approval Signature

1/28/14

Section 1. Course Title and Description

Prefix & No.    Course Title    Credits
CHEM 105  Foundations of Chemistry  2

Course Description: A foundational course designed to prepare students for Chemistry 112 and 114. Basic concepts in chemistry including matter, measurement, nomenclature, and stoichiometry will be addressed and mathematical concepts basic to these courses will be practiced.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

X This course will be a unique course. (Go to Section 3.)

Section 3. Other Course Information

1. Are there instructional staffing impacts?
   X No, schedule management. Explain: Enrollment for this course will come from other large-section courses. There will only be one section offered per term.

2. Existing program in which course will be offered: B.S. in Chemistry/Biochemistry

3. Proposed instructional method: R –Lecture
   (may be found at http://www.sdbor.edu/services/academics/AAC/guidelines.htm)
   Provide a brief justification: Students who enroll in CHEM 105 will be taught the basic fundamentals of chemistry to provide a background in chemistry as preparation for the Chemistry 112 and 114 course sequence. To achieve this outcome, lecture methods will be employed with significant hands-on practice with mathematical manipulation and problem solving.

4. Proposed primary delivery: 001 Face-to-Face
   (may be found at http://www.sdbor.edu/services/academics/AAC/guidelines.htm)

5. Term in which change will be effective: Fall 2014
6. Can this course be repeated for additional credit? No

7. Will the grade for this course be limited to S/U (pass/fail)? Yes X No

8. Will section enrollments be capped? Yes, 120* Maximum per section
   * Student enrollment in the proposed course is voluntary and in part, based on student performance on
     the locally developed, chemistry placement quiz using the following guidelines:
     Students who score a 5 or below (out of 12) will be presented with the option of enrolling in CHEM 105.

9. Will this course be equated (i.e. considered the same course for degree completion) with any
   other unique or common course in the course database? Yes X No

10. Is this prefix already approved for your university? X Yes No

Section 4. To be completed by Academic Affairs

1. University department code: SCHEM

2. Proposed CIP code: 400501
   Is this a new CIP code for this university? Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

James A. Rice  James A. Rice  12/23/2013
Request Originator  Signature  Date

James A. Rice  James A. Rice  12/23/2013
Department Chair  Signature  Date

Kathleen Donovan  Kathleen Donovan  12/23/13
School/College Dean  Signature  Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the
   curriculum.
   The Department of Chemistry & Biochemistry, in alignment with SDSU’s goals of greater student
   success and retention, proposes a chemistry course to prepare students with inadequate chemistry
   preparation for completing degree requirements in their respective majors. Incoming freshman students
   who perform poorly on a voluntary placement quiz (given during NSO sessions during the summer) will
   have the option to enroll in CHEM 105 to maximize their chances of success in CHEM 112 and CHEM
   114.

2. Note whether this course is: Required X Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be
   affected by this course?
   Programs/Majors on campus that require CHEM 112/114 in their respective curricula will benefit from
increased student understanding and performance once their students have completed CHEM 105, should that be necessary. Students who enroll in CHEM 105 will not be delayed in graduation because CHEM 112 and 114 are offered by the department every semester (F, S, and Sum). Students may count the two credits earned toward general elective coursework.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.
   N/A

5. Desired section size  Maximum enrollment of 90 students

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
   All chemistry departmental faculty are qualified to teach the proposed course.

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.
   Adequate facilities exist for the proposed course, and no special equipment is required.

8. Note whether adequate library and media support are available for the course.
   Yes, adequate library/media support are in place for offering the proposed course.

9. Will the new course duplicate courses currently being offered on this campus? No

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.
    N/A