



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

New Course Request

SDSU	College of Natural Sciences / Chemistry & Biochemistry
Institution	Division/Department
Dennis D. Hedge	4/28/2023
Institutional Approval Signature	Date

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
CHEM 180	Introduction to Laboratory Safety	1

Course Description

This course will prepare students for safely working in chemistry or biochemistry instructional and research laboratories. Students will explore the American Chemical Society RAMP process and gain understanding of Safety Data Sheets and proper use of personal protective equipment.

CHEM 468 Pre-requisites or Co-requisites

Prefix & No.	Course Title	Pre-Req/Co-Req?
None		

Registration Restrictions

None

Section 2. Review of Course

2.1. Will this be a unique or common course?

☒ **Unique Course**

Prefix & No.	Course Title	Credits
CHEM 462-562	Green Chemistry and Processes	2-3
BIOL 404	Environmental Health and Safety	3

Provide explanation of differences between proposed course and existing system catalog courses below:

CHEM 462-562 Green Chemistry and Processes, offered by SDSMT, presents safety in the context of one of the twelve principles of green chemistry. BIOL 404 Environmental Health and Safety, offered by Northern, focuses on environmental safety and health regulations and practices within a laboratory environment geared towards laboratory instructors. The proposed course is a more broad-based discussion of laboratory safety with the target audience of first-semester chemistry and biochemistry majors before they enter the research laboratory.

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

☒ No. Schedule Management, explain below: This course is only one workload unit and can be absorbed with existing departmental faculty. Taught in FA 22 as special topics course.

3.2. Existing program(s) in which course will be offered: Biochemistry (B.S.), Chemistry (B.S.), Chemistry Education (B.S.)

3.3. Proposed instructional method by university (as defined by [AAC Guideline 5.4](#)): R - Lecture

3.4. Proposed delivery method by university (as defined by [AAC Guideline 5.5](#)): 001- Face to Face
Term Based Instruction

3.5. Term change will be effective: fall 2023

3.6. Can students repeat the course for additional credit? ☐ Yes, total credit limit: ☒ No

3.7. Will grade for this course be limited to S/U (pass/fail)? ☐ Yes ☒ No

3.8. Will section enrollment be capped? ☐ Yes, max per section: ☒ No

3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report? ☐ Yes ☒ No

3.10. Is this prefix approved for your university? ☒ Yes ☐ No

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. University Department: Department of Chemistry & Biochemistry

4.2. Banner Department Code: SCHB

4.3. Proposed CIP Code: 40.0501

Is this a new CIP code for the university? ☐ Yes ☒ No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Douglas Raynie	Douglas Raynie	3/23/2023
Request Originator	Signature	Date
Douglas Raynie	Douglas Raynie	3/23/2023
Department Chair	Signature	Date
Greg Heiberger	Greg Heiberger	3/28/2023
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

Safety is of prime consideration in the chemistry laboratory. Recent serious accidents in academic research laboratories nationwide have renewed the emphasis on creating a culture of safety. This course will be required of departmental majors in their first semester in order to instill safety principles at the onset of their education, shifting part of the burden of safety education from individual research laboratories students typically engage during their junior and senior years.

2. Note whether this course is: ☒ Required ☐ Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

No other majors will be directly impacted by this course, though students in other STEM disciplines may benefit from the information presented in this course.

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 50

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Matt Miller, Professor, Ph.D.

7. Note whether adequate facilities are available and list any special equipment needed for the course.
Adequate facilities exist. Course instruction will be in a standard classroom. Laboratory walk-throughs and familiarization with conventional safety equipment will supplement the course.

8. Note whether adequate library and media support are available for the course.
Yes, no additional library or media support is needed. Chemistry safety information is freely available from the American Chemical Society and vendors and safety organizations online.

9. Will the new course duplicate courses currently being offered on this campus? ☐ Yes ☒ 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