



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
New Course Request

USD/SDSM&T	Biomedical Engineering/Nanoscience & Nanoengineering
Institution	Division/Department
USD 9/10/2018 <i>Elizabeth M. Freeburg</i>	SDSM&T Senate 10/11/18
Institutional Approval Signature	Date

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
BME 307	Experimental Design	2
BME 307 L	Experimental Design Lab	1

Course Description
Students will learn engineering skills in a hands-on, project-based format. The technical learning objectives of the course include introducing students to collection, analysis and interpretation of data; and the formation of meaningful conclusions from experimental results. Additionally, students learn teamwork skills and oral and written communications by working in teams throughout the semester, preparing frequent technical progress reports, and delivering oral presentations based on the project.

Pre-requisites or Co-requisites (add lines as needed)

Prefix & No.	Course Title	Pre-Req/Co-Req?
CSC 170/L	Programming	Pre-Req

Registration Restrictions

Junior Level Standing

Section 2. Review of Course

2.1. Was the course first offered as an experimental course?

- Yes (if yes, provide the course information below) No

2.2. Will this be a unique or common course?

- Common Course** *Indicate universities that are proposing this common course:*
 BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

- No. Schedule Management, explain: Use available FTE.

3.2. Existing program(s) in which course will be offered: Biomedical Engineering, B.S.

3.3. Proposed instructional method by university: R: Lecture, L: Laboratory

3.4. Proposed delivery method by university: 025/020 DDN Host/Send Site

3.5. Term change will be effective: Fall 2019

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 Code: UBME/MNANO

4.2. Proposed [CIP Code](#): 14.0501

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

NEW COURSE REQUEST

Supporting Justification for On-Campus Review

		Click here to enter a date.
Request Originator	Signature	Date
		Click here to enter a date.
Department Chair	Signature	Date
		Click here to enter a date.
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.
 The purpose of this course is to introduce quantitative skills required to conduct experimental research and analyze resulting data. Students will learn the strengths and limitations of experimental design techniques and the applicability of common designs in biomedical engineering. Students will also learn to identify which experimental designs are appropriate or inappropriate for particular situations.
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? None.
4. If this will be a dual listed course, indicate how the distinction between the two levels will be made. Not Applicable.
5. Desired section size 25
6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
 Etienne Gnimpieba, Research Professor, PhD
 Ying Deng, Associate Professor, PhD
7. Note whether adequate facilities are available and list any special equipment needed for the course. Adequate Facilities are available.
8. Note whether adequate library and media support are available for the course.
 Adequate library and media support are available.
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
11. Add any additional comments that will aid in the evaluation of this request.