



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

Authority to Offer an Existing Course

SDSU _____ **College of Natural Sciences / Biology & Microbiology**
Institution _____ **Division/Department**

Dennis D. Hedge _____ 5/3/2021
Institutional Approval Signature _____ **Date**

1. Is this a request to offer an existing common course or an existing unique course (approval will change course status from unique to common)?

Common Course

Unique Course

2. Provide the complete description as it appears in the system database including pre-requisites and co-requisites.

Prefix & No.	Course Title	Credits
BIOL 326	Biomedical Physiology	3
BIOL 326L	Biomedical Physiology Lab	1

BIOL 326 Course Description

Human physiology integral to the fields of biomedical sciences, bioengineering, and health professions. Topics include the scientific principles of cell transport; cell signaling; and major organ systems including nerve, muscle, cardiovascular, respiratory, renal, digestive endocrine, metabolic, and reproductive systems. An emphasis is placed on the integrative nature of physiology and the ability to think critically as students apply physiology to real-world situations and processes.

BIOL 326L Course Description

Lab to accompany BIOL 326 Biomedical Physiology. Lab designed to provide students with hands-on experience that reinforces information presented in lecture. Lab will familiarize students with various lab techniques and equipment used in physiological experimentation and clinical settings.

BIOL 326 Pre-requisites or Co-requisites

Prefix & No.	Course Title	Pre-req	Co-req
BIOL 326L	Biomedical Physiology		X
BIOL 153 OR BIOL 221	General Biology II Human Anatomy	X	
CHEM 114-114L	General Chemistry II & Lab	X	

3. Universities currently offering this course, or any equated courses:

BHSU DSU NSU SDSMT SDSU USD

4. Does Offering the Course Create FTE Implications? No

5. Does Offering the Course Create Schedule Management Implications? No

Explain: The current instructor of BIOL 325 at SDSU will offer this course in combination with the new course BIOL 326 and will adjust the content to address the need of two different audiences: nursing students and human biology majors. The new course is requested to address the specific needs of a

growing population of Human Biology majors in our program that require a higher-level training in Biomedical Physiology to be optimally prepared for Medical School. The currently offered course in Physiology BIOL 325 will be redesigned to cover more applied aspects of Physiology that are more appropriate for the high number of Nursing students in the course.

- 6. Existing program(s) in which course will be offered:** Biology (B.S.), Biology (B.S.) – Secondary Education Specialization, Biotechnology (B.S.), Human Biology (B.S.), Microbiology (B.S.), Biology Minor, and Microbiology Minor
- 7. CIP Code for the course:** 26.0101
- 8. Proposed instructional method by this university:** BIOL 326: R – Lecture; BIOL 326L: L - Laboratory
- 9. Proposed delivery method by this university:** 001 - Face to Face Term Based Instruction; 015 - Internet Asynchronous–Term Based Instruction; 018 - Internet Synchronous
- 10. University Dept.:** Biology & Microbiology
Banner Department Code: SBIM
- 11. Authority to offer effective beginning in what term?** Fall 2021
- 12. Section Restriction:** None

SDSMT Approval:

From: Zhu, Zhengtao
Sent: Monday, June 21, 2021 11:26 AM
To: Hoffelt, Janell; Heiberger, Greg; Kaushik, Radhey; diana.eastman@sdsmt.edu
Cc: Zalud, Trudy K; Marshall, Donald
Subject: RE: [EXT] BIOL 326-326L Biomedical Physiology & Lab

I suggest that Chem 114/114L (General Chemistry II/L, 3/1) as the “4 credits of Chemistry” prerequisites for the course. Thanks.

From: Zhu, Zhengtao
Sent: Tuesday, September 29, 2020 2:45 PM
To: Bucking, Heike
Cc: Hedge, Dennis; Heiberger, Greg; Hoffelt, Janell; Miller, Matthew; Wolf-Hall, Charlene; Racz, Sara (Elizabeth) E.; Roberts, Lance A.
Subject: RE: [EXT] FW: Physiology permission email

Dear Dr. Bucking,

We support your plan to offer Biol 326. Related to the prerequisite, we would prefer the following for our biology program

- a. BIOL 221/L Human Anatomy and Lab or Biol 153 General Biology
and
- b. Four credit hours of CHEM

From my discussion with our biologists, the students need some background knowledge of Chemistry, so four credit hours of Chem can be Chem 112/112L. The students need to have some knowledge about human anatomy and body structure prior to Biol 326. Either Biol 221/L or Biol 153 in our biology program could provide the knowledge. In general, for our biology students, they will have taken both biol 153 and biol 221/L when they enroll in Biol 326.

Dr. Racz is our biology program coordinator. She may have more insights of the prerequisite needs for the course.

Thanks.

Zhengtao

Zhengtao Zhu, Interim Department Head and Associate Professor

Chemistry, Biology & Health Sciences
South Dakota Mines