



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

New Course Request

<u>USD</u>	<u>School of Health Sciences/Medical Laboratory Science</u>
Institution	Division/Department
<u>Elizabeth M. Freeburg</u>	<u>10/15/18</u>
Institutional Approval Signature	Date

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
MLS 325	Medical Laboratory Molecular Diagnostics and Genetics	3

Course Description
This course introduces the concepts of human and pathogen cellular biology and genetics specific to the medical laboratory. DNA chemistry, nucleic acid extraction and modification, polymerase chain reaction, blotting, and probes will be explored and their role in the molecular techniques utilized by the Medical Laboratory will be examined.

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

Prefix & No.	Course Title	Pre-Req/Co-Req?
BIOL 151/L	General Biology I with Lab	Pre-Req
BIOL 153/L	General Biology II with Lab	Pre-Req

Registration Restrictions

Pre-requisite: BIOL 151/L and 153/L must be taken with a grade of 'C' or higher.
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Section 2. Review of Course

2.1. Was the course first offered as an experimental?

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

2.2. Will this be a unique or common course (place an "X" in the appropriate box)?

If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system [Course Inventory Report](#) to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

Unique Course

Prefix & No.	Course Title	Credits
BIOL 475	Introduction to Molecular Biology	3
BIOL 471	Genetics	3

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

The description for BIOL 475 discusses modern molecular genetics, including mechanisms. MLS 325 will be an application of human molecular biology and genetics concepts in the medical laboratory. MLS 325 will cover techniques and testing methods commonly utilized in a medical facility to aid in patient diagnosis, monitoring of treatment, and disease progression.

BIOL 471 covers the genetics in not only humans, but also plants, animal, and microorganisms. The genetics component of MLS 325 will focus on humans and potential pathogens such as microorganisms, viruses, and potentially parasites.

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

- No.** Schedule Management, explain below: The course will be assigned to a current faculty member as a component of their usual course load.

3.2. Existing program(s) in which course will be offered: B.S. Medical Laboratory Science

3.3. Proposed instructional method by university: R- Lecture

3.4. Proposed delivery method by university: 001: face-to-face term-based, 015- internet asynchronous term-based, 018- internet synchronous

3.5. Term change will be effective: Spring 2020

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: 25 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: UMLS

4.2. Proposed [CIP Code](#): 51.1005

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