×Department of Medical Laboratory Sciences

Program Type:\* 

Degree Type:\* 

Medical Sciences (PhD)

Provide a brief summary of the proposed program changes and describe the rationale for the change(s):

Currently, the Medical Sciences doctoral program requires students to take BISC671 Cellular and Molecular Immunology as a core science. The course, however, has not been available since fall 2016 when the faculty member retired and no one was assigned to the course. Biological Sciences Chair Robin Morgan confirms that there is no possibility of offering the course in the near future. She agrees that is "a good idea to remove BISC671 as a required course for your PhD students".

List new courses required for the revised curriculum. How do they support the overall program objectives of the major/ minor/ concentrations)?

We will move BISC671 Cellular and Molecular Immunology (4cr) to the listing of "science electives" in the event the Biological Sciences Department offers this course again. We will increase the number of science core electives from two (2) to three (3), thus increasing the flexibility of our students based on their interdisciplinary research focus. One reality of this change is that available science courses to use as electives are all 3 credit. This will decrease the total number of credits required for the PhD to go from 44 to 43. This number is comparable to that required in our college by Kinesiology and Applied Physiology (45).

Identify other units affected by the proposed changes and provide letters of support from those units. :

I have attached the 9-28-17 email from Biological Sciences Chair Dr. Robin Morgan, agreeing to dropping BISC671 from our required courses. No other units will be affected by this change.

Admission Requirements:

Description

BS, MS or equivalent degree from an accredited college or university,

GRE scores of at least 148 on quantitative reasoning and at least 150 on verbal reasoning

An undergraduate GPA of 3.0 or higher

Written statement of goals and objectives (the personal statement) that clearly identifies the applicant's research and curriculum interests and explains how admission to the program will facilitate his/her professional objectives

Current résumé and three letters of recommendation

All students will be expected to be sufficiently conversant in English and knowledgeable in the written word to convey clear, logical and complex written expressions.  
  
Admission is selective and competitive, based on the number of well-qualified applicants and the limits of available faculty and facilities. Those who meet stated minimum academic requirements are not guaranteed admission, nor are those who fail to meet those requirements necessarily precluded from admission if they offer other appropriate strengths. See Graduate Admissions for additional information.

Requirements for the Degree

The Doctor of Philosophy in Medical Sciences requires a minimum of 44 credits including 9 credits of dissertation. The program is designed to be completed in 4 years. The required credits are specified in the student's plan of study and normally include:

Courses

MEDT 800 Preparing Research Proposals (2cr.)

KAAP 615 Advanced Mammalian Physiology (4cr.)

MEDT 868 Research (3cr.)

12 credits

KAAP 602 Data Analysis and Interpretation in Health Sciences (3cr.)

or

BISC 643 Biological data analysis (3cr.)

MEDT 969 Doctoral Dissertation (1 to 9cr.)

MEDT 803 Graduate Research Seminar (1cr.)

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MEDT 804 Graduate Research Seminar (0cr.)

Science Core Elective Courses 9 credits

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Required courses (43 credits)

\*Seminar taken 8 semesters, including 4 semesters for 1 credit (MEDT 803) and 4 semesters for 0 credit (MEDT 804).

Description

Students who have had substantially similar courses to one or more of those required prior to entering the Medical Sciences Program may substitute other appropriate courses with the approval of the advisor and the Program Committee.

Only those courses in the 600, 800, 900 levels will apply towards the doctoral degree. Independent study courses will be accepted based on approval of the advisor and the Department Chair. A maximum of 9 independent study credits may be included in the program of study.

BISC - 643 - Biological data analysis (3cr.)

KAAP - 602 - Data Analysis and Interpretation in Health Sciences (3cr.)

KAAP - 615 - Advanced Mammalian Physiology (4cr.)

MEDT - 800 - Preparing Research Proposals (2cr.)

MEDT - 803 - Graduate Research Seminar (1cr.)

MEDT - 804 - Graduate Research Seminar (0cr.)

MEDT - 868 - Research (3cr.)

MEDT - 969 - Doctoral Dissertation (1 to 9cr.)

Expected Outcomes

Three Learning Outcomes have been identified for the program. Upon completion of the program, all students will:  
1. Employ research methods to assess a problem in the field of medical science in an ethical manner.   
Course Assessed: MEDT989 Dissertation  
2. Communicate research findings in an effective manner.   
Course Assessed: MEDT800 Preparing Research Proposals   
3. Demonstrate the ability to quantitatively analyze data using several different statistical procedures.   
Course Assessed: KAAP602 or BISC643