Program Type:

Program Type: 

Degree Type: 

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

Molecular diagnostic tests are increasingly used in many major areas of laboratory medicine including genetic disorders, infectious diseases, cancer, pharmacogenetics and DNA-based identity testing. Laboratories doing molecular testing report that they have difficulty finding adequate personnel to fill current employment positions. As more is learned about the human genome and disease the number of molecular-based laboratory tests is expected to increase exponentially. It is predicted that the future will bring an even greater need for laboratory scientists in this rapidly evolving field. The current preparation in molecular diagnostics is limited in most clincal laboratory science programs, which have a traditional emphasis on the areas of immunohematology (blood banking), clinical chemistry, hematology, immunology, microbiology, and urinalysis/other body fluids. The knowledge gap is even greater for laboratory professionals who received their training more than five years ago.

 The intent and goal of this graduate certificate is to combine three currently offered graduate courses into a Graduate Certificate in Molecular Diagnostics.  The Graduate Certificate in Molecular Diagnostics will provide professional education and hands-on training at the graduate level focusing on the molecular identification of inherited and acquired genetic conditions, infectious disease and identity testing. Graduates of the program will be eligible to sit for the national certification examination in molecular biology from the American Society for Clinical Pathology - MB(ASCP).

 No new courses are required for this new certificate program.

Resolutions:

WHEREAS, the Department of Medical Laboratory Sciences (MLS) in the College of Health Sciences has offered successful programs for the BS in Medical Laboratory Sciences, Medical Diagnostics, and Applied Molecular Biology and Biotechnology, offering students skills and knowledge necessary for careers in the biomedical, clinical laboratory sciences and health professions, and

WHEREAS, molecular diagnostic tests are increasingly used in many major areas of laboratory medicine including genetic disorders, infectious diseases, cancer, pharmacogenetics and DNA-based identity testing, and

WHEREAS, laboratories doing molecular testing report that they have difficulty finding adequate personnel to fill current employment positions, and

WHEREAS, MLS has received many inquiries over the last several years from individuals who are interested in pursuing a graduate certificate in Molecular Diagnostics, and

WHEREAS, the Graduate Certificate in Molecular Diagnostics will provide professional education and hands-on training at the graduate level focusing on the molecular identification of inherited and acquired genetic conditions, infectious disease, and identity testing, and

WHEREAS, graduates of the program will be eligible to sit for the national certification examination in molecular biology from the American Society for Clinical Pathology - MB(ASCP), be it therefore

RESOLVED, that the Faculty Senate recommends the approval of the establishment of a new Graduate Certificate in Molecular Diagnostics.

**Required courses for the Certificate in Molecular Diagnostics**

Description

The Certificate in Molecular Diagnostics requires satisfactory completion of three (3) graduate level courses (9  credits) as detailed below. Each certificate program course must be completed with a grade no lower than a B-; the overall GPA of the Certificate in Molecular Diagnostic courses must be no lower than 3.0.

Courses

MEDT 690 Genetics and Molecular Diagnostics for the Clinical Laboratory (3cr.)

MEDT 691 Molecular Diagnostics (3cr.)

MEDT 692 Application of Molecular Diagnostics Techniques (3cr.)

MEDT - 690 - Genetics and Molecular Diagnostics for the Clinical Laboratory (3cr.)

MEDT - 691 - Molecular Diagnostics (3cr.)

MEDT - 692 - Application of Molecular Diagnostics Techniques (3cr.)

Preview Curriculum View Curriculum Schema View Curriculum Courses

**Expected Outcomes** 

Students will receive preparation to sit for the ASCP certification exam in Molecular Biology

​