Approval of the minutes of the December 7, 2009 meeting

**Faculty Representative to the Board of Trustees**
Professor Michael Carter, Faculty Representative to the Board of Trustees, discussed
the role and duties of the Faculty Representative to the Board of Trustee

**Academic Resources:** Change to Bylaws regarding election of Faculty Representative to the Board of Trustees

**Graduate Policy and Affairs:**
**Resolution:** PSM in Clinical Lab Sciences **Approved**

**Research and Development:** No Resolutions

**Undergraduate Policy Committee:** No Resolutions

Meeting adjourned at 4:00 pm.
Master of Science in Clinical Laboratory Sciences

Professional Sciences Option

34 Credits

(Approved by the Department of Clinical Laboratory and Nutritional Sciences: 12/2/09)

Program Proposal Overview

This is a proposal to request approval for a Professional Sciences Masters (PSM) option in Clinical Laboratory Sciences within the existing MS program in Clinical Laboratory Sciences. The PSM option combines rigorous science education with training in fundamental business skills to graduate students who are qualified for a variety of career options in an industrial or clinical setting.

MS Program in Clinical Laboratory Sciences PSM Option

The proposed option contains approximately 2/3 science (24 credits) and 1/3 business/communication (9 credits) courses and a 1 credit internship experience with reflective seminar (34 credits program total). All STEM (graduate science) and PLUS (Communication and Business) courses are currently in place and offered in the Department of Clinical Laboratory and Nutritional Sciences and the College of Management. Admission requirements for this option remain the same as those for the existing MS program in Clinical Laboratory Sciences. Most STEM courses are offered at night or online providing convenience to the working professional. Similar to the existing MS Program in Clinical Laboratory Sciences, students may pursue this option on either a full time or part-time basis. The accelerated MS program option for undergraduate Medical Technology and Clinical Laboratory Sciences students will also be available for this PSM program. No additional faculty are initially requested to implement this program, however, if enrollment is high, additional faculty will be needed.

Individuals interested in this program include graduates of B.S. programs in Medical Technology, Clinical Laboratory Sciences, Chemistry, Biology, Biotechnology, Pharmacy and other Life Sciences. Other interested clientele include professionals that are currently employed in medical and research laboratories or the pharmaceutical, biotechnology or medical device industry who are interested in expanding and updating their knowledge in Clinical Laboratory Science and pathology while concurrently obtaining communication and business skills required for greater job opportunities. The combination of science and business training provided by this program meets the workforce needs of the Massachusetts economy where healthcare as well as biomedical and medical device companies are leading industries. In particular, the demand for medical laboratory professionals is growing at a significant rate. (Massachusetts Executive Office of Labor and Workforce Development (2009) Massachusetts

Admission Requirements

1. Baccalaureate degree from an accredited university or college with a recommended GPA of 3.0 or better.
2. Sound preparation in the biological or clinical sciences.
3. Acceptable official score report for the Graduate Record Examination Aptitude Test (GRE).
4. Successful completion of a course in biochemistry or equivalent.
5. Three letters of recommendation pertaining to academic ability and professional performance.

Curriculum

STEM Courses (24 credits)

STEM Required Courses (15 Cr):

- 30.550 Human Development and Pathophysiology (3 credits)
- 36.553 Advanced Clinical Chemistry (3)
- 36.575 Topics in Clinical Laboratory Sciences (3)
- 36.580 Clinical Applications of Molecular Genetics (3)
- 36.640 Quality Assurance, Control and Improvement in the Clinical and Public Health Laboratory (3)

Note: These are also the core required courses in MS Program in Clinical Laboratory Sciences.

STEM Elective Courses (9 cr), choose any three

- 36.734 MS Project in Clinical Laboratory Sciences (3)
- 36.551 Advanced Pathophysiology (3)
- 36.531 Clinical Immunohematology (3)
- 36.615 Medical Mycology and Parasitology (3)
- 36.506 Biochemistry of Lipids (3)
- 36.572 Nutrition and Gene Expression (3)
- 36.582 Seminar in Advanced Nutrition (3)
- 36.563 Vitamins and Minerals (3)
- 36.565 Lab Methods in Nutrition Assessment (3)
- 36.541 Introduction to Public Health and the Public Health Laboratory (3)

(Other Graduate level courses outside of the Department of Clinical Laboratory
& Nutritional Sciences will be considered to be included on an individual basis.

**PLUS courses (Business and Communication 9 credits)**

**PLUS Required Courses (3 credits)**

66.688 Advanced Professional Communication  
(or equivalent)

**PLUS Elective Courses (choose minimum of 6 total credits)**

62.501 Marketing Fundamentals  
66.501 Organizational Behavior  
64.650 Innovation and Emerging Technology  
66.630 New Product Development  
62.630 Market Research for Entrepreneurs  
66.635 Project Management  
61.640 Financing Innovation and Technical Ventures

(Additional PLUS course choices will be available from a list of approved courses provided by the “PSM Coordinating Committee” to include additional qualified courses from the College of Management).

**Professional Experience (1 credit)**

36.770 Professional Internship and Seminar

A Professional Internship is required for students in this program and is expected to be a minimum of 350 hours and have 3-6 month duration. The internship is designed to provide students with an opportunity to obtain real-world experience in business, government agencies, non-profit organizations or research laboratories. Internships or research project experiences will typically take place in Clinical, Pharmaceutical, Diagnostic, Biotechnological or Medical Device Companies or Institutions. Research experience can also be obtained at the University or other Research Centers. The University will assist the Department of Clinical Laboratory and Nutritional Sciences and the students with arranging corporate internships. To be eligible for the Professional Internship, students will be required to have 1) completed a minimum of 12.0 credits of STEM courses, 2) completed a minimum of 6.0 credits of PLUS courses, 3) attained an overall minimum GPA of 3.0 and 4) Permission of the Graduate Coordinator. Consideration will be given for students that have previous or current professional employment experience, however, in these cases, a new project experience will be required that adds to the student’s current set of skills. All students will be required to submit a final written report and give oral presentation on their work at a Seminar. All post-internship students will participate in this seminar. All Professional Internships
require department faculty supervision. Students should register for 36.770 during the final semester of internship participation.

**Advisory Committee**

An external group of experienced professionals from the scientific, government and business industries involved in the health sciences will be assembled to act in advisory board capacity to help guide and oversee program development and progress.

**Department Faculty**

The Department of Clinical Laboratory and Nutritional Sciences has 11 full time faculty with a broad range of academic and research expertise. All department faculty will be available to participate in the new Professional Sciences Masters Program in mentoring and monitoring of students during their internship experience. A new PSM MS CLS faculty committee has also been created to work with the university in securing and maintaining internship placements. Department Graduate faculty will continue to review graduate applications for admission to this program. The Graduate Coordinator of the Department (or designee) will act as program coordinator, advise matriculating students, and work with the Planning Committee to improve PSM programs.