

MASTER OF SCIENCE IN BIOMEDICAL SCIENCES

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INTRODUCTION

The Master of Science in Biomedical Sciences Program in Regis College is designed for students who have completed an undergraduate degree and basic undergraduate science coursework and seek to enter a graduate program in the health sciences or health research (e.g., medicine, dentistry, pharmacy, physical therapy, biomedical research). This program provides a rigorous overview of basic sciences similar to that experienced in a first year graduate health program along with a direct externship experience in an area of interest to the student and a focus on helping students identify the best future career path for themselves in the Health Sciences. Students integrate their externship experience with their coursework in the production of their final project. The Program's mission is to prepare students academically for the next steps and their lives, particularly refining and achieving their health-related or biomedical science career goals.

LEARNING FORMAT

This 9-month intensive Program includes both day (afternoon) and evening courses. Courses are scheduled to allow students larger blocks of time for studying, completing an externship, or volunteering. Given the time demands of this program and its required externship (10-15 hours per week), it is highly recommended that students not be employed for more than 10 hours per week. Dedicated graduate courses are classroom or laboratory based and no larger than 24 students. Courses are closely coordinated and include cross-course team-based learning. The externship course during spring semester is a guided academic externship in a health, biotechnology-research, or biomedical-research setting that, along with the final Biomedical Seminar, requires completion of a written final research project and short presentation. The final program seminar includes a program-cumulative examination.

FACULTY

The Biomedical Sciences Program is distinguished by a faculty with doctoral degrees in scientific disciplines and expertise in biomedical sciences.

ADMISSION

1. Any baccalaureate degree earned from a US based regionally accredited college or university.
2. Recommended undergraduate cumulative grade point average of 3.00 or above from the baccalaureate degree-granting institution. Earned graduate credits may be considered in the GPA requirement as approved by the program director. A minimum 2.7 grade point average is required.
3. Completion of the following pre-requisite collegiate coursework with a grade of C or higher from a regionally accredited college or university:
 - A year of general or introductory biology for science students with laboratories
 - A year of general and/or inorganic chemistry for science students with laboratories
 - A semester of collegiate mathematics (statistics recommended).
 - A course in English composition.
 - A year of humanities courses (Art History, Classics, Ethics, History, Literature, Music History, Music Theory, Philosophy, Religious Studies, Theater History, Theology)
 - A year of organic chemistry, a year of physics, a second semester of collegiate mathematics, and a semester of genetics also are recommended. It is strongly recommended that students have all the course prerequisites for their health-program of interest completed before entering the Biomedical Master's program.

Note: The natural science and mathematics coursework must have been completed within the last 6 years.

The program director may allow substitution of other coursework for specifically identified prerequisite courses or may waive the within-6-years requirement for science courses on a case-by-case basis. Probationary admission may be granted to students with deficiencies in one or two of the above criteria.

Application Requirements

1. An online application form with application fee that will require prospective students to upload
2. An essay or personal statement submitted with the application

3. Official score notification from one of the following standardized graduate admissions exams:
 - a. Graduate Record Exam (GRE) (GRE results also should be sent directly to Regis from the testing service.)
 - b. Medical College Admissions Test (MCAT)
 - c. Dental Admissions Test (DAT)
 - d. Pharmacy College Admissions Test (PCAT)
 - e. Optometry Admission Test (OAT)
 - f. Veterinary College Admissions Test (VCAT)
4. Official transcripts for all college/university coursework.
5. Three letters of recommendation submitted with the application. One letter must be written by a college or university instructor in the natural sciences or mathematics.

All documents submitted during the application process become the property of Regis University.

Application Cycle

Applications for admission opens January 15th and will begin to be considered on February 1st. Admission will continue on a rolling basis until the class is full. Additional applications may be considered through August 1st. The full consideration deadline is May 31st.

Probationary Admission

Students who show promise for the program but do not meet all admission criteria, may be admitted on a probationary basis. Successful completion of the full coursework of the first semester with a 3.000 grade point average removes the probationary status and entitles students to good academic standing in the second semester.

International Students

All international students seeking admission should check directly with the Program Office for specific information. All international students must complete the general admission requirements for the program of interest and also the following requirements.

1. Submit an official score report of Test of English as a Foreign Language (TOEFL) with a score of 95 points or higher and at least 22 points or higher on each individual skill section (or the equivalent for other formats). The Program Director will waive this requirement for students who are from a primarily English-speaking country and who speak English fluently as assessed by a phone conversation (e.g., Australia, Bahamas, Barbados, Belize, Canada, Dominica, Ghana, Ireland, Jamaica, Malta, New Zealand, South Africa, Trinidad & Tobago, United Kingdom).

2. For accepted student, submit to the program office documentation of financial ability to pay one year's expenses, including tuition, living expenses, etc., for issuance of an I-20 by the Office of Academic Records and Registration. An I-20 cannot be issued until the student has been admitted by the University and an academic program. Additional English instruction may be required upon or after admission to the program to ensure success in completing coursework.
3. For accepted student, Visa information must be received by the program one month prior to the program start date.

To ensure enough time for the processing of international student applications, it is recommended that international students apply no later than April 1. Applications received later may not be processed in time and may have to be held for the following academic period. International students are accepted conditionally until 2 and 3 above are completed, after which full acceptance will be granted.

BIOMEDICAL SCIENCES PROGRAM CHARGES FOR THE 2013 – 2014 ACADEMIC YEAR

Tuition (per semester hour)	\$743
Application Fee (nonrefundable)	\$75
Graduation Application Fee	\$50

The tuition, fees, and other charges previously described are good faith projections for the academic year. They are, however, subject to change from one academic term to the next as deemed necessary by the University in order to meet its financial commitments and to fulfill its role and mission.

Information regarding tuition payment options and refunds of tuition is available in the General Information section of this *Catalog*. Additionally, students are also urged to call Enrollment Services at 303-458-4126 or 1-800-388-2366 Ext. 4126, to request a copy of the brochure, "Paying Your Tuition at Regis University."

Application Fee

A nonrefundable application fee of \$75 is required. This fee must be paid in full before the application is processed.

Deposit

Applicants must reply and send non-refundable \$350 deposit within 14 days of receipt of the offer of admission. Extension of this deadline may be granted by the program director on a case-by-case basis.

ACADEMIC INFORMATION

This Master of Science in Biomedical Sciences follows the same fall and spring semester academic schedule as the Regis College undergraduate program, including add/drop and withdrawal deadlines. Likewise the same policies regarding appeals of disputed grades, academic integrity, academic student conduct, and academic dismissal that apply in the Regis College undergraduate program also apply to the Master of Science in Biomedical Sciences program.

TRANSFER CREDIT

Transfer credit is not awarded for graduate-level coursework in the biomedical sciences graduate program given the closely coordinated nature of the curriculum in this one year program.

ACADEMIC STANDING AND PENALTY

Students whose cumulative grade point average falls below 3.000 in the Fall are placed on academic probation. Students placed on probation must raise their cumulative program grade point average to 3.000 in the spring semester to be eligible for graduation.

In addition, students who receive a grade of "C" or lower in two courses at the 600-level in the same semester are subject to academic review by the Program Director and may be suspended from the program. Suspension appeals are submitted to the program director. The review committee will be constructed in the same way as the review committee for appeal of disputed grades except that the program director will serve as the instructor does in that process. The student may be asked to attend part or all of the appeal review meeting.

GRADUATION

Application

The filing of a formal Application for Graduation with the Master of Science in Biomedical Sciences Office is required at the beginning of the fall semester.

Degree Award

Students graduate after all requirements are met and documentation is on file. Incomplete grades or late application may result in later award of degree. A program cumulative grade point average of 3.000 is required for graduation. Diplomas and transcripts are not released if any financial indebtedness to Regis University exists.

Attendance at Commencement Exercises

Attendance at commencement exercises is encouraged. The Office of Academic Records and Registration is notified through the Application for Graduation form of students' intent to participate in commencement.

DEGREE REQUIREMENTS

M.S. in Biomedical Sciences Degree Requirements

32 SH

BL 610A--Biomedical Sciences Seminar I	1 SH
BL 610B--Biomedical Sciences Seminar II	2 SH
BL 610C--Biomedical Sciences Seminar III	1 SH
BL 610D--Biomedical Sciences Seminar IV	1 SH
BL 613A--Biomedical Human Anatomy Laboratory and Seminar I	2 SH
BL 613B--Biomedical Human Anatomy Laboratory and Seminar II	2 SH
BL 614--Biomedical Genetics	3 SH
BL 616--Biomedical Biochemistry	3 SH
BL 618--Biomedical Human Physiology	4 SH
BL 619--Biomedical Physiology Laboratory	1 SH
BL 620--Biomedical Microbiology	3 SH
BL 621--Biomedical Microbiology and Immunology Laboratory	1 SH
BL 622--Biomedical Epidemiology Seminar	1 SH
BL 624--Biomedical Immunology	3 SH
BL 626--Biomedical Ethics Seminar	2 SH
BL 628--Biomedical Academic Externship	2 SH

MASTER OF SCIENCE IN BIOMEDICAL SCIENCES COURSE DESCRIPTIONS (BL)

BL 610A. BIOMEDICAL SCIENCES SEMINAR I (1). Explores the range of biomedical careers and develops student skills to facilitate success in their biomedical education. Pass/No Pass Grading only.

BL 610B. BIOMEDICAL SCIENCES SEMINAR II (1). Develops student analytical skills in using contemporary biomedical literature and introduces the range of contemporary biological and biomedical research. Guides and coordinates initial externship and Master's project work. NOTE: Requires public seminar attendance outside of class time.

BL 610C. BIOMEDICAL SCIENCES SEMINAR III (1). Reinforces and develops student understanding of the interconnections between the material covered in the first semester's courses. Introduces biostatistics in the context of biomedical studies and continues work on the program-cumulative project.

BL 610D. BIOMEDICAL SCIENCES SEMINAR IV (1). Involves construction and completion of a draft and final written Biomedical Master's Project conforming to program requirements. NOTE: Requires public seminar attendance outside of class time.

BL 613A. BIOMEDICAL HUMAN ANATOMY LABORATORY AND SEMINAR I (2). Develops student knowledge of normal human gross anatomy via anatomical models, human skeletal materials, and cadaver examination.

BL 613B. BIOMEDICAL HUMAN ANATOMY LABORATORY AND SEMINAR II (2). Develops student knowledge of normal human gross anatomy via anatomical models, human skeletal materials, and histological slides.

BL 614. BIOMEDICAL GENETICS (3). Develops student knowledge of molecular genetics and human genetics. Introduces biomedical ethical controversies with roots in genetics and molecular biology.

BL 616. BIOMEDICAL BIOCHEMISTRY (3). Develops student understanding of biochemical principles particularly as related to human metabolic processes. Focuses on protein structure and function and includes basic cell biology.

BL 618. BIOMEDICAL HUMAN PHYSIOLOGY (4). Develops student knowledge of normal human physiology at the cellular, tissue, organ, and system levels. Includes some pathophysiology.

BL 619. BIOMEDICAL HUMAN PHYSIOLOGY LABORATORY (1). Develops student knowledge of normal human physiology via electrophysiological measurement.

BL 620. BIOMEDICAL MICROBIOLOGY (3). Develops student knowledge of microbiological principles, pathogenic microorganisms, infectious diseases, microbial metabolism, and classes and actions of antimicrobial drugs.

BL 621. BIOMEDICAL MICROBIOLOGY AND IMMUNOLOGY LABORATORY (1). Develops student knowledge of microbiological laboratory techniques commonly used in biomedical research and laboratory diagnosis.

BL 622. BIOMEDICAL EPIDEMIOLOGY SEMINAR (1). Develops student knowledge of the basic principles of epidemiology and focuses on epidemiologic literature coordinating with other concurrent-course content.

BL 624. BIOMEDICAL IMMUNOLOGY (3). Develops student knowledge of immunological principles, immunopathology, immunization and classes and actions of immunologically active drugs.

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BL 626. BIOMEDICAL ETHICS SEMINAR (2). Develops student knowledge of biomedical ethical issues and student ability to respond to those issues. Will include discussion of ethical issues relevant to the enrolled student's academic externship experiences and Master's Projects.

BL 628. BIOMEDICAL ACADEMIC EXTERNSHIP (.). (2). Faculty-directed academic experience in a biomedical research, biotechnology research, or clinical environment. Focuses on linking the experience to biomedical academic content and the student's Master's Project, highlighting any ethical issues raised by the experience.
