Master of Science in Biology

- Rolling admission
- Full-time program with a fall start
- Courses taught during the day
- Small to medium class sizes
- No GRE required
- Two tracks available
  - **HUMAN BIOLOGY TRACK:** ideal for students interested in the health professions including medicine, dentistry, pharmacy, optometry, etc. Health professions committee staff assist with application preparation, shadowing, and mock interviews
  - **ENVIRONMENTAL BIOLOGY TRACK:** designed for students with an interest in ecology and conservation biology
- **NON-THESIS OPTION:** one-year, accelerated program designed for students who wish to improve their credentials and/or complete requirements prior to entering another advanced degree program, including those in the health professions
- **THESIS OPTION:** traditional, two-year program provides research experience especially useful for students who wish to apply to Ph.D. programs. Requires successful defense of research proposal
- No final comprehensive examination
- A limited number of paid positions are available to students as Supplemental Instructors (SI) to assist with undergraduate courses (does include tuition remission)
- Students may transfer a maximum of two graduate-level courses (6 credits)
- Cross registration for courses at neighboring institutions available
ADMISSION REQUIREMENTS
• A baccalaureate degree from an accredited college or university
• Overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale (Conditional admission may be granted for applicants with a GPA of less than a 3.0 who show promise through their other achievements. Additional letter required.)
• Completed application form
• Official transcripts from all colleges and universities attended
• Resumé and/or additional supporting information on professional or volunteer activities
• Two letters of recommendation, at least one from a science faculty member
• Personal essay on career plans
• Payment of non-refundable $45 application fee. Online application without fee:
  http://www.chatham.edu/admissions/apply.cfm
• Successful completion – with a GPA of 3.0 or above on a 4.0 scale – of courses equivalent to those needed to obtain a baccalaureate degree in biology, including:
  – One year introductory biology (with lab)
  – One year introductory chemistry (with lab)
  – One semester organic chemistry (with lab); two semesters preferred
  – One course in statistics
  – One additional college-level mathematics course
  – Three or four upper level courses in biology or biochemistry

MS IN BIOLOGY
The human biology track is designed primarily for students who wish to improve their credentials and/or complete requirements for advanced programs in medicine, dentistry, pharmacy, optometry etc. The environmental biology track includes classroom, laboratory, and field work experiences suitable for students wishing to pursue careers in environmental services, research, education, or advocacy. The thesis and non-thesis options are available for both tracks: thesis courses are substituted for two electives. Entry into the thesis track requires departmental approval.

HUMAN BIOLOGY TRACK REQUIRED COURSES (33-35 credits)
• BIO 502 Human Gross Anatomy (4) and BIO 502L Human Gross Anatomy Lab (2)
• BIO 504 Human Physiology (3)
• BIO 506 Principles of Neuroscience (3) and BIO 506L Principles of Neuroscience Lab (1)
• BIO 532 Biostatistics (3)
• BIO 623 Methods of Biological Research (2)
• Five electives from the list below (or Thesis I and II and three electives)

ENVIRONMENTAL BIOLOGY TRACK REQUIRED COURSES (32-33 credits)
• BIO 511 Seminar in Environmental Biology (3)
• BIO 525 Plant Development (3) or BIO 584 Plant Physiology (3)
• BIO 532 Biostatistics (3)
• BIO 623 Methods of Biological Research (2)
• BIO 639 Internship (3)
• LNS 510 Introduction to GIS (3)
• LAR 534 Soil Science (3)
• LAR 575 Field Ecology or LAR 578 Wetlands Ecology (3)
• Three electives from the list below (or Thesis I and II and one elective)

ELECTIVES (EXAMPLES)
• BIO 508 Developmental Biology (3)
• BIO 517 Genetics (3)
• BIO 518 Chemical Analysis Lab (3)
• BIO 519 Immunology (3)
• BIO 540 Bio-Techniques Lab (2)
• BIO 551 Bioinformatics (3)
• CHM 538 Biochemistry I (3)
• CHM 539 Biochemistry II (3)
• CHM 543 Advanced Environmental Chemistry (3)
• ENV 525 Environmental Policy (3)
• FST 512 Practical Nutrition (3)
• FST 520 Growing Sustainably (with lab) (4)
• FST 605 Food and Climate Change (3)
• LAR 514 Landscape Ecology (3)
• LAR 516 Plant Identification (3)
• LAR 518 Native Plants (3)
• LAR 535 Diseases and Pests (3)
• LAR 575 Field Ecology (3) (if not taken for requirement)
• LAR 578 Wetlands Ecology (3) (if not taken for requirement)
• LAR 543 Ornamental Horticulture (3)
• PSY 503 Applied Biological Psychology (3)
• PSY 530 Intro to Sport and Exercise Psychology (3)
• PSY 629 Human Development Across the Lifespan (3)
• PSY 663 Foundations of Health Psychology (3)
• PWR 616 Technical Writing and Editing (online) (3)
• PWR 632 Science Writing (online) (3)

*Students may substitute two undergraduate courses for one graduate elective upon recommendation to the dean of the College for Graduate Studies from the program director.