Given the small class size at the University and the varied research interests of the chemistry faculty, experiential learning opportunities are available and encouraged. Students working with faculty members have completed projects in environmental analysis, atmospheric chemistry, marine nutrient analysis, protein chemistry, organic reaction mechanisms, electroanalysis and biosensor development.

Each member of the faculty is an expert in at least one of the aforementioned areas of chemistry. Each chemistry major is assigned a faculty member who serves as an advisor and whose specialty coincides with the student’s area of interest. Advisors and students work together to select courses, review academic and professional progress, and discuss career and graduate opportunities.

Pre-Professional Concentration

Students interested in medicine, dentistry or veterinary science may wish to consider the B.A. in chemistry. This degree program has been specifically designed for pre-professional students whose interests lie in the chemical sciences. While any of the degree programs offered by the Department of Chemistry provides the opportunity for professional school admission, the B.A. degree, with fewer credit hours than the B.S. degrees, allows the student to explore other academic disciplines through electives, providing the well-rounded educational experience professional schools actively seek in their applicants.

In addition to the chemistry majors, students also may choose biology or other majors, provided the entrance requirements for professional schools are completed. Students should design their academic programs in consultation with their advisors.

Students requesting letters of recommendation to professional schools must do so through the Pre-Professional Committee.

The Army ROTC Department can assist pre-professional students with their professional program finances through the Health Science Professional Scholarship Program. For more information, contact the Army ROTC Department at (813) 258-7200 or UT ext. 3044.
College of Natural and Health Sciences

Chemistry

Requirements for a B.A. major in chemistry:
lower – Level Chemistry Core...........32
(can take PHY 200/PHY 201 or
PHY 205/PHY 206)
Upper – Level Chemistry Core...........18
CHE 245 Intermediate Inorganic
Chemistry (with lab)............4

Total Semester Hours: 54

Requirements for a B.S. major in chemistry:
lower – Level Chemistry Core...........32
(must take PHY 205 / PHY 206
sequence)
Upper – Level Chemistry Core...........18
CHE 245 Intermediate Inorganic
Chemistry (with lab)............4
CHE 355L Physical Chemistry II-Lab...1
CHE 425 Advanced Inorganic
Chemistry...........................3
CHE 430 Advanced Instrumental
Chemistry (with lab)............4
CHE 410 Senior Seminar
or
CHE 451 Introduction to Research
or
CHE 453 Chemistry Internship......2
CHE 426 Advanced Organic
Chemistry

or
CHE 445 Advanced Spectroscopy
or
CHE 499 Special Topics
in Chemistry.......................4

Total Semester Hours: 68

MAT 262 is strongly recommended for
the B.S. chemistry major. BIO 203 is not
required for chemistry majors.

Requirements for a B.S.-professional
major in chemistry:
The B.S.-professional major in chemistry
has the same requirements as the B.S. major
in chemistry above, except that 4 credit hours
of CHE 451 Introduction to Research must
be taken.
lower – Level Chemistry Core...........32
(must take PHY 205 / PHY 206
sequence)
Upper – Level Chemistry Core...........18

Core Requirements

Lower-Level Chemistry Core
All lower-level CHE core courses must
be completed during the freshman and
sophomore years. Students must pass these
courses with a minimum GPA of 2.0 for
the core course group. In addition, certain
course-specific “C” minimums also apply for
individual coursework.
CHE 152 General Chemistry I ........3
CHE 153L General Chemistry I-Lab...1
CHE 154 General Chemistry II .......3
CHE 155L General Chemistry II-Lab...1
CHE 232 Organic Chemistry I .......3
CHE 233L Organic Chemistry I-Lab...1
CHE 234 Organic Chemistry II .......3
CHE 235L Organic Chemistry II-Lab...1
BIO 204 Biological Unity (with lab)...4
PHY 205 General Physics I
(Calculus-based)...............4
or, depending upon major selected,
PHY 200 General Physics
(Algebra-based)...............4
PHY 206 General Physics II
(Calculus-based)...............4
or, depending upon major selected,
PHY 201 General Physics II
(Algebra-based)...............4
MAT 260 Calculus I.................4

Semester Hours: 32

Upper-Level Chemistry Core
Completion with minimum core average
GPA of 2.0 on top of current course-specific
“C” minimums required before progression
into upper-division chemistry courses (see
course descriptions).
CHE 310 Analytical Chemistry
(with lab).........................4
CHE 320 Biochemistry ..............3
CHE 352 Physical Chemistry I .....3
CHE 353L Physical Chemistry I-Lab...1
CHE 354 Physical Chemistry II .....3
MAT 261 Calculus II...............4

Semester Hours: 18
CHE 245 Intermediate Inorganic Chemistry (with lab)........4
CHE 355L Physical Chemistry II-Lab...1
CHE 425 Advanced Inorganic Chemistry.......................3
CHE 430 Advanced Instrumental Chemistry (with lab).........4
CHE 451 Introduction to Research........................4
CHE 420 Advanced Biochemistry
or
CHE 426 Advanced Organic Chemistry
or
CHE 445 Advanced Spectroscopy.....4

Semester Hours: 70
MAT 262 is strongly recommended for the B.S. chemistry-professional major. BIO 203 is not required for chemistry majors.

Requirements for a minor in chemistry:
CHE 152 General Chemistry I ..........3
CHE 153L General Chemistry I-Lab...1
CHE 154 General Chemistry II ..........3
CHE 155L General Chemistry II-Lab...1
CHE 232 Organic Chemistry I ..........3
CHE 233L Organic Chemistry I-Lab...1
CHE 234 Organic Chemistry II ..........3
CHE 235L Organic Chemistry II-Lab...1
CHE 310 Analytical Chemistry
(with lab)............................4

or
CHE 320 Biochemistry*......................3

or
CHE 420 Advanced Biochemistry.....4

Semester Hours: 19-20
* CHE 320 cannot be used to satisfy this requirement if it is used as a biology elective.

Biochemistry

Requirements for a B.S. major in biochemistry:
Lower – Level Chemistry Core...........32
(must take PHY 205 / PHY 206 sequence)
Upper – Level Chemistry Core ..........18
CHE 245 Intermediate Inorganic Chemistry (with lab)......4
CHE 355L Physical Chemistry II-Lab...1
CHE 420 Advanced Biochemistry.....4

CHE 430 Advanced Instrumental Chemistry (with lab).......4
CHE 470 Techniques in Tissue Culture..........................4
CHE 410 Senior Seminar
or
CHE 451 Introduction to Research
or
CHE 453 Chemistry Internship........2
Choose one of the following courses:
BIO 300 General Genetics OR
BIO 330 General Physiology OR
BIO 320 Molecular Genetics........4

Total Semester Hours: 70
MAT 262, BIO 360 and BIO 350 are strongly recommended for the biochemistry major. The BIO 203 prerequisite is waived for biochemistry majors.

Bachelor of Science in Forensic Science

The B.S. program in forensic science prepares students for careers in forensic chemistry or forensic toxicology. Graduates typically are employed in local, state or federal crime laboratories or law enforcement agencies such as the FDA, EPA and OSHA. Forensic chemistry also is an option for pre-professional majors and for those interested in pursuing master’s or doctoral degrees.

Lower – Level Chemistry Core...........32
(can take PHY 200 / PHY 201 or PHY 205 / PHY 206)
CHE 310 Analytical Chemistry...........4
CHE 320 Biochemistry....................3
CHE 305 Applied Physical Chemistry..................3
CHE 440 Quality Assurance................3
CHE 460 Introduction to Forensic Research..................2
CHE 480 Forensic Toxicology...........3
BIO 320 Molecular Genetics...........4
MAT 201 Introduction to Statistics...4
MAT 261 Calculus II.......................4
WRI 281 Technical Writing................4
CRM 101 Introduction to Criminology..................2
CRM 102 Introduction to Criminal Justice............4
CRM 200 Introduction to Law Enforcement............4
Bachelor of Science in Chemistry (Biochemistry)/MBA Joint Degree Program

This program is designed to develop scientists who can serve as managers, group leaders and analysts in chemical, pharmaceutical, biotechnology, medical diagnostic and investment companies. Students completing this program will be able to understand and appreciate the nature of the scientific hurdles facing scientists, the financial and stakeholder pressures experienced by management, and the influence of this research on day-to-day corporate operations. The graduate is awarded a B.S. degree in either chemistry or biochemistry, and an MBA.

The program consists of courses required for a major in either chemistry or biochemistry, courses that fulfill all of the undergraduate business foundation requirements, and courses required to complete the MBA program at The University of Tampa. Provisional acceptance into the program will be granted upon completion of the application requirements and the course requirements for years one and two, with final acceptance granted upon completion of the application requirements and the course requirements for years one through three. Participants in this program are required to successfully complete three internships in chemistry and business.

Application and Acceptance into the B.S. Biochemistry/MBA Program

Provisional Acceptance

- An overall grade point average equal to that required by the Honors Program. (Note: Participation in the Honors Program is NOT required.)
- A grade of “B” or better in every business course.
- Recommendations of the Department of Chemistry and the College of Business.

Final Acceptance

Final acceptance into the program is granted by the Graduate Studies Program depending upon:

- Performance in both chemistry and business courses during years one through three. A grade of “B” or better in every business course is required.
- An overall grade point average equal to that required by the Honors Program. (NOTE: Participation in the Honors Program is NOT required.)
- GMAT scores of 500 or better
- A written recommendation from the Department of Chemistry.

The curriculum for the joint BS/MBA programs are available at www.ut.edu/chemistryandphysics/.

Department of Exercise Science and Sport Studies

Faculty: Professor Vlahov; Associate Professors Birrenkott, Clancy, Jisha; Assistant Professors Andersen, Chair, Morris, Olsen, O'Sullivan, Reid, Smucker, Wortham; Instructor Bartow; Medical Director Athletic Training Program: Gasser.

Students pursuing majors within the Department of Exercise Science and Sport Studies are preparing for careers in teaching, adult fitness, sport management, allied health, athletic training, public health and related fields. The department offers majors in athletic training, exercise science, public health and sport management. Within the exercise science major, students may select programs of study in one of the following: teaching physical education, adult fitness or pre-professional allied health. Students may incur additional expenses in the following areas: laboratory fees; immunizations and health screenings as required by the program or the clinical site; health insurance; liability insurance; membership in professional or-