Chemistry and Biochemistry

Chairperson: Saliya Desilva

The Chemistry and Biochemistry Department offers two majors leading to the degree of Bachelor of Science, Chemistry and Biochemistry and a combined BS/MS program in Chemistry. A student who chooses the chemistry major can prepare for graduate study in chemistry or biochemistry, professional employment in the chemical and related industry including the pharmaceutical industry, professional education in fields related to science, or teacher certification. The courses meet the undergraduate criteria established by the American Chemical Society (ACS) (https://www.acs.org), and the chemistry major is included in the ACS list of approved programs. The student can complete ACS requirements and be certified to the Society upon graduation.

The student who chooses the biochemistry major will emerge with a strong background in the basic sciences and mathematics as well as biochemistry and will qualify for graduate study in biochemistry or professional employment in the biochemistry and related industry including the pharmaceutical industry. With appropriate elective course selections, students in either major can satisfy the requirements for pre-health professional programs (pre-medical (https://www.montclair.edu/chemistry-biochemistry/articulation-programs/bs-md-medical-rutgers), pre-dental, (https://www.montclair.edu/chemistry-biochemistry/articulation-programs/bs-dmd-dental-rutgers) and pre-PharmD (https://www.montclair.edu/chemistry-biochemistry/articulation-programs/bs-pharmd-doctor-pharmacy-rutgers)).

The curriculum is designed for students who have had high school chemistry, biology and physics, as well as four years of high school mathematics. The department sponsors a challenging honors program for chemistry majors with outstanding academic records (at least 3.70 grade point average), and offers ample undergraduate research opportunities (https://www.montclair.edu/chemistry-biochemistry/research). Those interested should see the department chairperson for information.

Undergraduate

- Biochemistry Major (B.S.) (http://catalog.montclair.edu/programs/biochemistry-bs)
- Chemistry Major (B.S.) (http://catalog.montclair.edu/programs/chemistry-bs)
- Chemistry Major (B.S.) (Combined B.S./M.A.T. with Teacher Certification in Chemistry (Preschool-Grade 12) and Teacher of Students with Disabilities) (http://catalog.montclair.edu/programs/teacher-certification-chemistry-preschool-grade-12-students-disabilities-combined-bs-mat)
- Chemistry Major (B.S.) (Combined B.S./M.A.T. with Teacher Certification in Physical Science (Preschool-Grade 12) and Teacher of Students with Disabilities) (http://catalog.montclair.edu/programs/teacher-certification-physical-science-preschool-grade-12-students-disabilities-combined-bs-mat)
- Chemistry Major (B.S.) (Combined B.S./M.S.) (http://catalog.montclair.edu/programs/chemistry-bs-ms)
- Chemistry Major with Teacher Certification in Chemistry (Preschool-Grade 12) (B.S.) (http://catalog.montclair.edu/programs/teacher-certification-chemistry-preschool-grade-12-bs)
- Chemistry Major with Teacher Certification in Physical Science (Preschool-Grade 12) (B.S.) (http://catalog.montclair.edu/programs/teacher-certification-physical-science-preschool-grade-12-bs)
- Chemistry Minor (http://catalog.montclair.edu/programs/chemistry-minor)

Graduate

- Chemistry (M.S.) (http://catalog.montclair.edu/programs/chemistry-ms)
- Chemistry (M.S.) (Combined B.S./M.S.) (http://catalog.montclair.edu/programs/chemistry-combined-bs-ms)
- Chemistry, Biochemistry Concentration (M.S.) (http://catalog.montclair.edu/programs/biochemistry-concentration-chemistry-ms)
- Chemistry, Instructional Certification: Teacher Certification in Chemistry (Preschool-Grade 12) (http://catalog.montclair.edu/programs/teacher-certification-chemistry-preschool-grade-12-graduate)
- Pharmaceutical Biochemistry (M.S.) (http://catalog.montclair.edu/programs/pharmaceutical-biochemistry-ms)