

Requirements for a Bachelor of Arts in Chemistry with a Biochemistry emphasis: This degree is intended to provide students whose interest in chemistry is focused on the synthetic and biochemical aspects with a more attractive degree path, to provide a B.A. degree for students with these chemistry interests who are also interested in developing their foreign language skills and to provide students with a pre-professional focus (pre-medical, pre-dental, pre-pharmacy, etc.) with an attractive chemistry degree option in which the calculus, physics and physical chemistry requirements are more appropriate for their needs and interests.

Candidates must complete the following chemistry courses:

B.A. in Chemistry with a Biochemistry Emphasis:

1111 - Introductory Chemistry I (5)

1121 - Introductory Chemistry II (5)

2223 - Quantitative Analysis (3)

3022 - Introduction to Chemical Literature (1)

3302 - Physical Chemistry for the Life Sciences (3)

3412 - Basic Inorganic Chemistry (3)

2612 - Organic Chemistry I (3)

2622 - Organic Chemistry II (3)

2633 - Organic Chemistry Laboratory (2)

3643 – Advanced Organic Chemistry Lab (2)

4712 – Biochemistry (3)

4722 – Advanced Biochemistry (3)

4733 – Biochemistry Lab (2)

4897 – Seminar (2)

Bachelor of Arts with a Biochemistry Emphasis: Candidates for these degrees must also complete:

Mathematics 1100 – Basic Calculus (3) or

Mathematics 1800, Analytic Geometry and Calculus I (5)

Physics 1011 – Basic Physics I (3)

Physics 1011L – Basic Physics Laboratory (1)

Physics 1012 – Basic Physics II (3)

Physics 1012L – Basic Physics Laboratory (1)

No more than 45 hours in chemistry may be applied toward the degree. Each chemistry major must present a seminar and pass a comprehensive examination during the senior year.

At least 12 credits of chemistry at the 3xxx level or higher must be completed at UMSL.