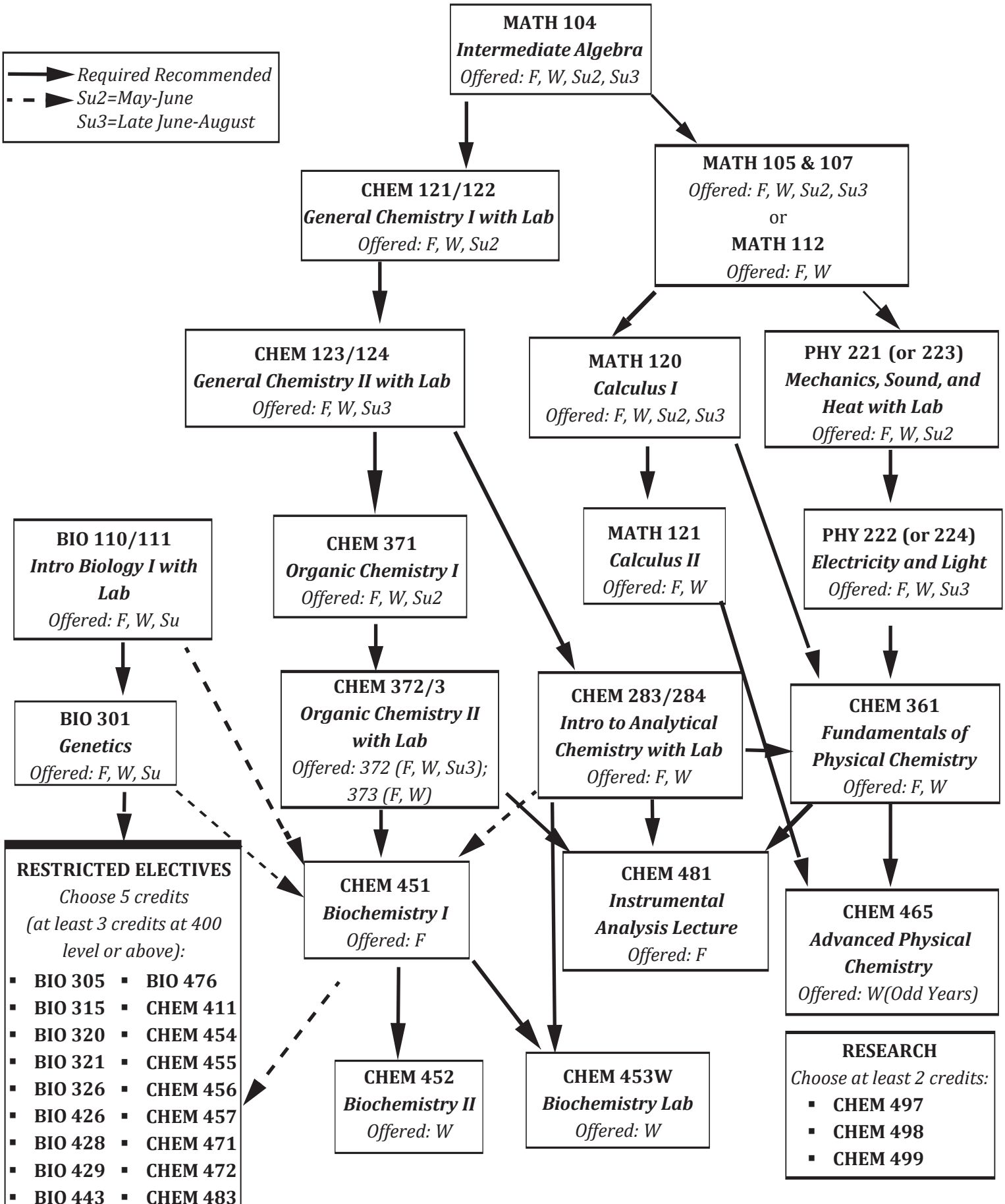
Biochemistry Major

Concentration: Research

Sequence of Courses



See second page for more information on elective options.

Possible Elective Paths for a Biochemistry Major

Effective Fall 2022 — *Concentration: Research* — *Updated: Feb. 2022*

A total of five (5) credits of electives are required, of which at least two (2) credits must be at the 400-level or above. As shown below, most 400-level Biology classes require either BIO 320 or BIO 305 as a prerequisite. Some possible paths for fulfilling this requirement are listed below.

(F) = Offered every fall | (F-E)= Offered fall of even years | (F-O)= Offered fall of odd years
(W) = Offered every winter | (W-E) = Offered winter of even years | (W-O) = Offered winter of odd years

Path 1 - 5 credits

Any 300-level BIO on the list

OR

NSCI 301 ***Introduction to Neuroscience*** *(F)*

OR

Any CHEM course included on the list

AND

CHEM 411 ***Toxicology*** *(F-E)*

OR

CHEM 483 ***Instrumental Analysis Lab*** *(F,W)*

Path 2 - 6 credits

Any 300-level BIO on the list

OR

NSCI 301 ***Introduction to Neuroscience*** *(F)*

OR

Any CHEM course included on the list

AND

CHEM 454 ***Protein Structure & Function**** *(W-O)*

OR

CHEM 455 ***Neurochemistry**** *(F)*

OR

CHEM 456 ***Cell Signaling**** *(W-E)*

OR

CHEM 471 ***Advanced Organic Chemistry*** *(F-E)*

OR

CHEM 472 ***Spectrometric Organic Structure Determination*** *(F-O)*

Path 3 - 6 credits

BIO 320 ***General Microbiology*** *(F, W)*

↓

BIO 426 ***Immunobiology*** *(W)*

OR

BIO 428 General Virology *(F)*

OR

BIO 429 Bacterial Pathogenesis *(F-O)*

Path 4 - 6-7 credits

BIO 305 ***Cell & Molecular Biology*** *(F, W, Su)*

↓

BIO 443 ***Devlopmental Biology*** *(W)*

OR

BIO 473 ***Concepts in Animal Physiology*** *(F)*

OR

BIO 476 ***Mammalian Histology*** *(F)*

*** Plan accordingly as CHEM 454, CHEM 455, and CHEM 456 all require CHEM451 as a prerequisite.**

***While CHEM 457 and CHEM 551 are eligible electives, offerings occur too infrequently to include in the list.*