• The flowchart below shows suggested paths and each major. The arrows indicate prerequisites (course that must be completed before the course pointed to). Note a grade of C or better is required in prerequisite courses for CHEM courses.

• **General biology majors** must complete two semesters of general chemistry (CHEM 115/215) and one semester course in organic chemistry (CHEM 130). Students may take one semester of biochemistry (CHEM 349) for the cell biology requirement.

• **Pre-health majors** (i.e., students intending to apply to medical, pharmacy, dental programs) should generally follow the cell and molecular biology path. Although specific requirements depend on the program(s) you’re applying to, most require a year of general chemistry and lab (CHEM 115, 215/216), a year of organic chemistry and labs (CHEM 333-336), and general biochemistry or biochemistry (CHEM 349 or 340).

• **Cell and molecular biology majors** must complete a year of general chemistry and lab (CHEM 115, 215/216), a year of organic chemistry (CHEM 333 and 335), and a year of biochemistry (CHEM 340 and 341).

• **Clinical Science majors** must complete one year of general chemistry and lab (CHEM 115, 215/216), a one semester course in organic chemistry (CHEM 130), and several other chemistry courses (CHEM 320, 334, 343, 349)

• **Physiology majors** must complete a year of general chemistry and lab (CHEM 115, 215/216), a one semester course in organic chemistry (CHEM 130) and one semester of biochemistry (CHEM 349 or 340).

• **Microbiology majors** must complete a year of general chemistry and lab (CHEM 115, 215/216), a year of organic chemistry (CHEM 333 and 335), and one semester of biochemistry (CHEM 349 or 340).

• **Botany, Ecology, Marine Biology, and Zoology majors** must complete one semester of general chemistry (CHEM 115) and a one semester course in organic chemistry (CHEM 130). They may take one additional semester (CHEM 215/216)

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**General Biology, Botany, Clinical Science, Ecology, Marine Biology, Physiology, and Zoology majors**

- **CHEM 115** _______ General Chemistry I
- **CHEM 130** _______ General Organic Chem

**Botany, Ecology, Marine Biology, Clinical Science, & Zoology Majors**

- **CHEM 215/216** _______ General Chemistry II & Lab
- **CHEM 349** _______ General Biochemistry

**Clinical Science Majors (Cell Bio OPTION)**

- **CHEM 343** _______ Biochemistry I Lab

**Pre-Health, Cell and Mol. Biology, & Microbiology Majors**

- **CHEM 115** _______ General Chemistry I
- **CHEM 333** _______ Organic Chemistry I
- **CHEM 335** _______ Organic Chemistry II
- **CHEM 340** _______ Biochemistry I
- **CHEM 341** _______ Biochemistry II

**ADDITIONAL PREREQS** include any 2 of the following:

- MATH 226, 227
- PHYS 111, 121, 220, 230, 240

**Physiology majors** can choose either **CHEM 340 or 349**

**Microbio majors** can choose either **CHEM 340 or 349**

**upper division elective for Cell and Mol. Biology and Physiology Majors**

P.T. Palmer, 31-Oct 07; mod SGP 1/26/08