

## **Suggested Course of Study for a Premedical Student Obtaining a Major in Chemistry**

### First Year

#### Fall

Principles of Structural Chemistry  
Calculus I  
Cell and Molecular Biology  
General Biology laboratory  
1 elective

#### Spring

Principles of Chemical Reactivity  
Calculus II  
Organ. & Ecol. Biology  
1 elective

### Second Year

#### Fall

Organic Chemistry I  
General Physics I  
2 electives

#### Spring

Organic Chemistry II  
Organic Laboratory  
General Physics II  
Genetics

### Third Year

#### Fall

Analytical Chemistry and lab  
Biochemistry  
2 electives

#### Spring

Seminar in Chemistry I  
Cell Physiology  
Experimental Human Physiology  
2 electives

### Fourth Year

#### Fall

Physical Chemistry I  
Seminar in Chemistry II  
3 electives

#### Spring

4 electives(!)

### Notes:

Independent Study/Research is very helpful for those planning to apply to medical school, both because a strong research background helps in getting admitted to medical school and also because it may help you decide if you wish to pursue medical research after obtaining your degree.

MCATs are usually taken in April or August of the third year. As a result, it is best to have taken biology courses and physics by that point.

### **Checklist – Chemistry/pre-med major**

- \_\_\_ CHM-155: Principles of Structural Chemistry
- \_\_\_ CHM-165: Principles of Chemical Reactivity
- \_\_\_ CHM-185: Organic Chemistry I
- \_\_\_ CHM-215: Analytical Chemistry
- \_\_\_ CHM-210: Analytical Chemistry Lab
- \_\_\_ CHM-225: Organic Chemistry II
- \_\_\_ CHM-235: Organic Laboratory
- \_\_\_ CHM-405: Biochemistry
- \_\_\_ CHM-415: Physical Chemistry I
  
- \_\_\_ MTH-135: Calculus I
- \_\_\_ MTH-145: Calculus II
  
- \_\_\_ PHY-216: General Physics I
- \_\_\_ PHY-226: General Physics II
  
- \_\_\_ CHM-705: Seminar in Chemistry I
- and-
- \_\_\_ CHM-715: Seminar in Chemistry II
- or-**
- \_\_\_ OR-715,- 725: Study and Research at Oak Ridge Laboratory
- and-
- \_\_\_ CHM-715: Seminar in Chemistry II
  
- \_\_\_ BIO 140 and 145: Cellular and Molecular Biology and laboratory
- \_\_\_ BIO 150 and 155: Organismal and Ecological Biology and laboratory
- \_\_\_ BIO 230 and 235: Genetics and laboratory
- \_\_\_ BIO 250 and 255: Experimental Human Physiology and laboratory
- \_\_\_ BIO 520 and 525: Cell Physiology and laboratory (strongly recommended)