Pre-Pharmacy

The recommended curriculum below is suggested to meet both the required and recommended pre-requisites of most of the schools. Additional courses are required to meet requirements for the biology degree and for graduation. Students may choose any major as long as they fulfill the prerequisite classes, some choose to major in Chemistry and minor in Biology, and others choose to major in Biology and minor in Chemistry.

*Note - Most pharmacy schools WILL take AP test credit, as long as it is noted and credited on your college transcript.

**Biology** requirements include
Biology 150 or 160 (General Biology)
Biology 240 (Cell and Molecular Biology)
Biology 324 (Microbiology), some, such as NDSU, want medical microbiology
Biology 341 and 342 (Anatomy and Physiology I and II)

**Keep in mind that additional biology courses are required for the Biology major or minor**

**Chemistry**
Chemistry 111 and 116, 112 and 117, (General Chemistry 1 and 2)
Chem 231, 232 236, 237 (Organic Chemistry 1 and 2)
OR
Chemistry 130 and 233 (Introduction to and Foundations of Organic Chemistry)
Chemistry 240 and 250 (Foundations of Inorganic and Analytical Chemistry)
Chemistry 360 (Biochemistry, 4 credits) OR
Chemistry 361 and 362 (Biochemistry I and II, 6 credits)

**Math**
Math 166 (Calculus 1); Econ 156 is not acceptable; Some require Calculus 2 (Math 167), because the requirement is content based
Math 231 or (Biostatistics)

**Physics**
Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab) OR
Physics 131 and 132, (2 semesters Calculus-Based Physics and Lab)
** Some schools (including UM) require Physics 131 and 132 (Calculus-based physics)

**General Education/Liberal Arts Requirements**
Psychology 101 (General Psychology)
Sociology 100 (Anthropology 100)
Economics 201 (Principals of Microeconomics)
English 100 and English 200
COMS 100 (Speech)
Philosophy 220 (Bioethics)

Cultural Diversity Course that focuses on the multicultural aspects of life in US Society, some want Intercultural Communication (COMS 213)

The departments of Chemistry and Biology have an Early Provisional Acceptance Agreement with Lake Erie College of Osteopathic Medicine, School of Pharmacy. See Dr Gerbec in Biology for additional information, and for an example course sequence.