SO YOU WANT TO BE A PHARMACIST? (Printable PDF version. Web version will not have tables.)

Pharmacy is the branch of health sciences that deals with the preparation, dispensing, and proper utilization of drugs. A pharmacist is a health care professional who is licensed to prepare and sell or dispose of drugs and compounds and can make up prescriptions. The following is a brief guide to courses you will take at the University of Dubuque to fulfill the requirements for admission to the University of Iowa’s Doctor of Pharmacy Program (PharmD).

**PREREQUISITES:** NOTE: THESE ARE GENERAL PREREQUISITE COURSES THAT MOST PHARMACY SCHOOLS REQUIRE FOR ADMISSION; HOWEVER, THERE ARE SEVERAL OTHER COURSES THAT ARE NOT REQUIRED BY PHARMACY SCHOOLS, BUT ARE HIGHLY RECOMMENDED. PLEASE CHECK THE WEBSITES OF THE SCHOOLS THAT YOU ARE MOST INTERESTED TO OBTAIN A CURRENT LIST OF UNDERGRADUATE REQUIREMENTS.

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<tr>
<th>Subject</th>
<th>Courses</th>
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| **Physics** (Full Year/3 Quarters) | PHYSICS 6A (3 units)/6AL (1 units): Introductory Physics w/Lab  
PHYSICS 6B (3 units)/6BL (1 units): Introductory Physics w/Lab  
PHYSICS 6C (3 units)/6CL (1 units): Introductory Physics w/Lab |
| **Math** | Please review the “Mathematics and Statistics Recommendations for Pre-Health Students” visual online. |
| **Chemistry** (Full Year/3 Quarters) | CHEM 1A (3 units)/1BL (2 units): General Chem. And Gen. Chem. Lab  
CHEM 1B (3 units)/1BL (2 units): General Chem. And Gen. Chem. Lab  
CHEM 1C (3 units)/1CL (2 units): General Chem. And Gen. Chem. Lab |
| **Organic Chemistry** (Full Year/3 Quarters) | CHM 109A (4 units): Organic Chemistry  
CHEM 109B (4 units): Organic Chemistry  
CHEM 109C (4 units): Organic Chemistry  
CHEM 6AL (3 units): Organic Chemistry Lab (May be taken with 109A.)  
CHEM 6BL (3 units): Organic Chemistry Lab (May be taken with 109B.) |
| **Biochemistry (1 Quarter)** | MCDB 108A (4 units). General Biochemistry (Check prereqs.) or 110 or CHEM 142A |
| **Biological Sciences** (Full Year/3 Quarters) | MCDB 1A (4 units): Intro. To Biology I  
MCDB 1B (3 units): Intro. To Biology II—Physiology  
MCDB 1LL (1.5 units): Intro. To Biology I Lab (May be taken with MCDB 1A.)  
EEMB 2 (2 units): Intro. To Biology II—Ecology and Evolution  
EEMB 3 (3 units): Intro. To Biology III  
EEMB 2LL (1.5 units): Intro. To Biology Lab II |
| **Microbiology** | MCDB 131/131L (Many but not all schools require a microbio lab, and MCDB 131L can be a very difficult course for non-Microbiology majors to enroll in at UCSB. Students will often take the course and the lab at a community college. See an advisor to discuss this option.) |
| **Human Anatomy** | BIOMD 107 at SBCC (not offered at UCSB) |
| **English/Writing (2 Courses)** | *Typically any courses in the Writing, English, and possibly Comparative Lit. depts. |
| **Social/Behavioral Sciences & Humanities (2 Courses)** | Economics 1 or 2 and Anthropology 2, or Psychology 1, or Sociology 1 |

If you choose not to major in one of the natural sciences, you may wish to include one or two additional science electives in your program of study if your schedule permits.  
*Math requirements may vary by school so be sure to research individual prerequisites.

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<th>Sample Pre-Pharmacy Required Course Schedule, Years 1 &amp; 2</th>
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<tr>
<td><strong>Fall Quarter</strong></td>
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| Year 1 | ● Chem 1A + 1AL  
● Mathematics or Statistics (See above)  
● GE or Elective |
| Year 2 | ● MCDB 1A + 1AL*  
● Chem 109A  
● GE or Elective  
● GE or Elective? |
| **Winter Quarter**                                         |
| Year 1 | ● Chem 1B + 1BL  
● Math or Stats (See above)  
● GE or Elective  
● GE or Elective (if you feel you can handle another course) |
| Year 2 | ● MCDB 1B  
● EEMB 2  
● MCDB 1LL  
● Chem 109B  
● Chem 6AL (May be done later) |
| **Spring Quarter**                                         |
| Year 1 | ● Chem 1C + 1CL  
● Math or Stats (See above)  
● GE or Elective  
● GE or Elective |
| Year 2 | ● EEMB 3 + EEMB 2L  
● Chem 109C  
● Chem 6BL (May be done later) |

*New Biology Labs: Beginning in Fall 2019, the Biology Program will restructure its introductory labs, changing from three, 1 unit labs—MCDB 1AL, MCDB 1BL/EEMB 2L, and EEMB 3L—to two, 1.5 unit labs—MCDB 1LL and EEMB 2LL. Most students will do MCDB 1LL in winter quarter and EEMB 2LL in spring quarter. Although taken over two quarters rather than three, these will count as a full year of introductory biology labs.

Note that many programs require a year of physics with lab (Physics 6A & 6AL, 6B & 6BL, 6C & 6CL), and although most students complete physics by the end of the 3rd year, just when to take physics depends on how well students are meeting the demands of their other courses.
EXAM AND GPA: *Note: Many California PharmD programs do not require the PCAT; however, many other states do require it.

The Pharmacy College Admission Test (PCAT) is a standardized examination that consists of 240 multiple choice items and two writing topics that measures general academic ability and scientific knowledge necessary for entrance into a Pharmacy program. It is required by all of the American Pharmacy schools. Typically, students take the PCAT about one calendar year prior to their intended date of matriculation to professional school. A PCAT score is good for three years at most schools, so taking the test in the spring of junior year does not necessarily mean that you must enter Pharmacy school right after college graduation. For purposes of admission, most Pharmacy schools will look at your percentile rank.

Grade Point Average (GPA): Minimum GPA requirements vary from program to program, but MOST programs have a minimum 3.0 GPA requirement but competitive GPA’s are closer to a 3.3. In addition, most programs require that all prerequisite courses must be passed with a “C” or better.

TIMELINE:

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<th>Freshman Year</th>
<th>Sophomore Year</th>
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<tr>
<td>● Connect with a Pre-Health Staff or Peer Advisor</td>
<td>● Continue with next sequence of science courses (Fall: MCDB 1A; Winter: MCDB 1B, EEMB 2, MCDB 1LL; Spring: EEMB 3, EEMB 2LL)</td>
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<tr>
<td>● Start taking intro sciences (Chem 1A+1AL).</td>
<td>● Stay involved in extracurricular activities (Medical, volunteer, etc).</td>
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<td>● Think about possible majors (Study what you love).</td>
<td>● Begin to think about becoming an officer in your organizations or explore other leadership opportunities.</td>
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<td>● Begin getting involved with volunteer opportunities (campus and community).</td>
<td>● Begin research on professional schools, their requirements, and assess your competitiveness.</td>
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<td>● Start clinical experience (Pharmacy Tech, EMT, Scribe, Shadowing, etc.).</td>
<td>● Investigate PCAT preparation options.</td>
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<tr>
<td>● Look into getting involved in undergraduate research and talk to professors (Can wait a year or so).</td>
<td>● BOTTOM LINE: Keep working on the things you established your first year!!</td>
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<tr>
<td>● Go to your professors’ office hours.</td>
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<td>● Explore some student organizations.</td>
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Junior Year (If not taking a Gap Year.) **If taking a Gap Year, then taking the GRE and completing the application can wait until senior year):

- Talk to your staff pre-health advisor member to narrow program options and assess competitiveness.
- Identify at least 3 individuals to write letters of recommendation.
- Keep working on the things you have established thus far.
- Schedule a mock interview with Career Services.
- **Register for the PCAT.
- **Study for PCAT and take it (Spring/Summer).
- **Complete Application (PharmCAS).

Senior Year (If no Gap Year):

- Submit Application(s) if you haven’t already.
- Wait to be contacted for interview from pharmacy schools.
- Continue with activities and professional experiences/shadowing.
- Talk with an advisor about Plan B if necessary.
- Finish degree requirements and GRADUATE!

If Taking 1 or more Gap Years:

- Schedule a mock interview with Career Services.
- **Register for the PCAT.
- **Study for PCAT and take it.
- **Complete Application (PharmCAS).

ADDITIONAL RESOURCES:

The American Association of Colleges of Pharmacy (AACP) [Click Here](#)
AACP Admissions Guide [Click Here](#)
PCAT Information/Dates [Click Here](#)