There are nearly 130 Pharmacy Schools in the US, and eight of those schools are in California. This table is a compilation of prerequisites for all eight of these schools. For more information on Pharmacy schools, please see [www.aacp.org](http://www.aacp.org).

Dr. Terri Richardson is CSUN’s Health Professions Advisor. Her office is located in the CSUN Biology Department Advisement Center in CR 5104. Students can make an appointment to see Dr. Richardson using our new online appointment system. You can access the online appointment system through the CSUN Biology Department website. (Click on the “Students” tab.) It is advisable to see a health professions advisor as soon as you begin considering a career in pharmacy.

Terri S. Richardson, M.D., M.S.
(818) 677-7305
terri.richardson@csun.edu

---

**Pre-Pharmacy Curriculum**

ALL PREREQUISITES MUST BE COMPLETED WITH A “C” OR HIGHER!

<table>
<thead>
<tr>
<th>PREREQUISITES</th>
<th>Western</th>
<th>Touro</th>
<th>Loma Linda</th>
<th>UOP</th>
<th>UCSF</th>
<th>UCSD</th>
<th>USC</th>
<th>Cal Northstate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td></td>
<td></td>
<td></td>
<td>106/L, 107/L</td>
<td>106/L, 107/L (less than 7 yrs old unless higher level bio is recent)</td>
<td>2 semesters (only 1 lab req’d) 106 Lect &amp; 107/L</td>
<td>106/L, 107/L (only 1 lab req’d)</td>
<td>106/L, 107/L</td>
</tr>
<tr>
<td>General Chemistry with Lab</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
<td>101/L, 102/L</td>
</tr>
<tr>
<td>Organic Chemistry with Lab</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
<td>333/L, 334/L</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>1 yr Biochem (461 &amp; 462) OR 1 sem Biochem (Chem 365 or 464 – 3 units) AND 1 sem Cell Bio (Bio 380, 561 or 564) No lab required</td>
<td>Recommended</td>
<td>3u No lab required (464)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>100A/L, 100B/L</td>
<td>1 semester with lab 100A/L</td>
<td></td>
<td>2 semesters (only 1 lab required) 100A, 100B/L (but recommend calc-based physics)</td>
<td>2 semesters (only 1 lab required) 100A, 100B/L</td>
<td>1 semester with lab 100A/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Physiology (281 and 282 may be taken separately)</td>
<td>281 (1 semester-no lab required) 281/282 (1 course with lab)</td>
<td>281 or 482 (no lab req’d-but 482L is a coreq)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 units (281/282)</td>
</tr>
<tr>
<td>Western</td>
<td>Touro</td>
<td>Loma Linda</td>
<td>UOP</td>
<td>UCSF</td>
<td>UCSD</td>
<td>USC</td>
<td>Cal Northstate</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>----------------</td>
<td></td>
</tr>
</tbody>
</table>
| Human Anatomy  
(211/212 MUST be taken together, 310 and 310L can be taken separately) | 211/212 or 310  
(1 semester – no lab required) | 310/L  
(may accept 211/212, check with school) | 310  
(3 units-one course for “science majors” – no lab required) | 215, 315 or 410  
(1 semester-no lab required but labs are coreqs) | 215 or 315  
(no lab req’d-but labs are coreqs) | 215 or 315  
(no lab req’d-but labs are coreqs) | 4 units  
(310/L) |
| Microbiology  
(labs are corequisites for all CSUN Micro courses) | 315/L OR 410/L  
(1 semester with lab-no “intro” course) | 215/L or 315/L  
(4 units with lab) | 315  
One course for “science majors”  
(No lab required, but 315L is coreq) | Cell Bio  
Recommended: Cell/Molec Bio Histo, Immuno, Physio | Molecular Bio  
(380) | 3 units |
| Additional Science Courses | Recommended:  
Human Anatomy taken separately  
and 310L can be  
Public Communication  
Microbiology  
CSUN Micro Economics to  
Statistics  
Writing* |  |  |  |  |  |  |
| Calculus I | 1 semester  
(Math 150A, 150B or 250 ONLY) | 3u  
(Math 150A or 255A)  
(must include integration and differentiation) | 1 semester  
(Math 150A or 255A) | 2 courses  
(Math 150A/B or 255 A/B) | 6 units total | 1 semester  
(Math 150A or 255A) | 3 units |
| Statistics |  |  |  |  | MATH 140, 341 or  
HSCI 390/L | 3 units  
Math 140 |
| Oral Communication  
(Public Speaking) | AAS, CAS, CHS, COMS OR PAS 151 or 151/L | AAS, CAS, CHS, COMS OR PAS 151 or 151/L | AAS, CAS, CHS, COMS OR PAS 151 or 151/L | AAS, CAS, CHS, COMS OR PAS 151 or 151/L | AAS, CAS, CHS,  
COMS OR PAS 151 or 151/L | AAS, CAS, CHS, COMS OR PAS 151 or 151/L |  
AAS, CAS, CHS,  
COMS OR PAS 151 or 151/L |
| Writing* | AAS, CAS, CHS, ENGL, PAS, or QS 113B, 114B OR 115 AND 3 units from: ENGL 208, 305, 306, CHS 219, PHIL 200 | AAS, CAS, CHS, ENGL, PAS, or QS 113B, 114B, or 115 AND one additional writing course (Waived if you have degree at time of entrance) | AAS, CAS, CHS, ENGL, PAS or QS 113B, 114B OR 115 AND 3 units from: ENGL 255, 305, 306, 308, 355, 406, 407, 408 | AAS, CAS, CHS, ENGL, PAS or QS 113B, 114B OR 115  
AND ENGL 255  
(will consider ENGL 300, 305, 311, 355, 364) | AAS, CAS, CHS, ENGL, PAS or QS 113B, 114B OR 115  
AND ENGL 255  
(may consider ENGL 300, 305, 311, 355, 364) | Only for international applicants (see website) |  
AAS, CAS, CHS,  
COMS OR PAS 151 or 151/L |
| Social & Behavioral Sciences | Take courses from 2 of the 3 subject areas:  
1.) Oral Communication (see above)  
2.) Social Science (Psy 150 or Soc 150)  
3.) Econ (no specification) | Psy 150  
or 310 | Psy 150, Soc 150, or Anth 152 | Psy 150, Soc 150, or Anth 152 | Psy 150, Soc 150, or Anth 152 | Psy 150 |  
Psy 150 |
| Economics | 160 or 161 macro or micro | 161 or 300  
(micro ok with Bach Degree or completion of Soc 150 or US History) | 160 or 161 macro or micro | 160 or 161 macro or micro | 160 micro | 160 or 161  
micro or macro |
| Minimum GPA/units required to apply? | 2.75  
60 units to apply | 2.75  
2.75 AT TIME OF APPLICATION | 64 units to apply  
3.3 to be competitive | 2.8  
62 units to apply | 3.0  
3 to be considered for interview | 2.8  
(3.0 is recommended) |
| AP units accepted? | Yes | Yes | AP (3, 4, 5) ok for 1st sem of Bio/Physics/Chem/Calc/Psych | AP (4, 5) ok in Calc/Physics/English/Econ  
(Psych) | AP units ok in Chem/Bio/Calc/Physics/English/Econ  
(Psych) | AP 4 or 5 ok for 1st semester Bio, Physics, or Chem and also for Calc, English, Psych, Stats & Econ | AP score of 4 or above OK for any prerequisite |
# Pre-Health Curriculum

<table>
<thead>
<tr>
<th>Western</th>
<th>Touro</th>
<th>Loma Linda</th>
<th>UOP</th>
<th>UCSF</th>
<th>UCSD</th>
<th>USC</th>
<th>Cal Northstate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree required at time of entrance?</td>
<td>Preference given to those with a Bachelors Degree</td>
<td>Yes</td>
<td>No, but extra 18 units of GE required if no degree at time of entrance</td>
<td>No, but 9 more units of GE required if no degree</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Interviews</td>
<td>Dec-March</td>
<td>Sept-April</td>
<td>Nov-March</td>
<td>Oct-March</td>
<td>Jan-Feb</td>
<td>Jan-Feb</td>
<td>Oct-April</td>
</tr>
<tr>
<td>Time limits on prereqs?</td>
<td>10 years (includes AP scores)</td>
<td>2/1 of matriculation year</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
</tr>
<tr>
<td>Application Deadline (Pharmcas)</td>
<td>11/1</td>
<td>2/1</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
<td>11/1</td>
</tr>
<tr>
<td>Supplemental Application</td>
<td>Complete supplemental after Pharmcas</td>
<td>Wait for invitation before submitting supplemental application</td>
<td>Complete supplemental after Pharmcas</td>
<td>Complete supplemental after Pharmcas</td>
<td>Complete supplemental after Pharmcas</td>
<td>Complete supplemental after Pharmcas</td>
<td>Complete supplemental after Pharmcas</td>
</tr>
<tr>
<td>Prereqs taken outside US?</td>
<td>Case by case basis TOEFL if any foreign coursework unless Engl and speech taken in US</td>
<td>NO</td>
<td>OK except for English and Speech</td>
<td>May be accepted. Must submit course descriptions/syllabi with supplemental app</td>
<td>Must have 1 year full time at US school if foreign bachelor’s degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online courses accepted?</td>
<td>Psych, Calc, Econ ONLY</td>
<td>Engl, Econ or Psych ONLY</td>
<td>OK, but NO science courses online.</td>
<td>Check with admissions. May accept non-science courses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship Requirements?</td>
<td>US Citizen or perm resident at time of application</td>
<td>US Citizen or perm resident at time of application</td>
<td>US Citizen or perm resident at time of application</td>
<td>US Citizen or perm resident at time of application</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Information</td>
<td>Prereqs done by spring before matriculation CR/NC classes not accepted</td>
<td>Prereqs done by last week of July before matriculation</td>
<td>Prereqs done by spring before matriculation</td>
<td>Prereqs done by Sept 1 of matriculation year.</td>
<td>Must be CPR certified before starting pharmacy program.</td>
<td>Prefer that MOST prerequisites be taken at 4-year school.</td>
<td>Encouraged to carry FULL LOADS as an undergraduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Proficiency in foreign language desirable.</td>
<td>English, speech, econ and psych taken in US if holder of foreign degree.</td>
<td></td>
</tr>
</tbody>
</table>

*: Freshman writing courses are offered at CSUN in six different departments: Asian American Studies, Central American Studies, Chicano Studies, English, Pan African Studies, and Queer Studies. Freshmen are advised to choose freshmen writing course(s) based on their personal interests and course availability. Historically, many health professions schools have required two semesters of writing courses, and some may prefer that those courses be from the English department. Students who take freshmen writing course(s) from departments other than English can still meet this professional school requirement by taking additional writing courses at CSUN. English 255, 300, 305, 306, 311, 364 and 371 are usually accepted by most health professions schools for meeting the two semester writing requirement. See the Health Professions Advisor if you have questions about the specific writing requirements of the health professions school(s) you are planning to apply to.