MAJOR REQUIREMENTS WITH BIOLOGY EMPHASIS

LOWER DIVISION (56-57 units):
Biochemistry 95
Biology 5A, 5LA, 5B, 5C
Chemistry 1A, 1LA, 1B, 1LB, 1C, 1LC
Math 8B or 9A, 9B, 46
Physics 2A, 2LA, 2B, 2LB, 2C, 2LC

STATISTICS (5 units):
Statistics 100A or 100B (STAT 48 credit → STAT 100B)

UPPER DIVISION (43 units):
Biochemistry 101 Lab
Biochemistry 162 Lab
Biology 102
Biochemistry 110A, 110B, 110C
Chemistry 109 or 110A
Chemistry 112A, 112B, 112C

BIOCHEMISTRY ELECTIVES (7 units):
At least 7 units from:
120, 153, 180E – Z, 183, 186, 187, 210, 211, 212

• Graduate courses BCH 210-212 require Science GPA > 3.00. You must obtain a BCH Petition from your Professional Academic Advisor for approval by your faculty advisor and the instructor.

Upper-Division requirements (9-15 units). Choose three Biological Science Electives Required From:

BCH 120, 153, 180E – Z, 183, 186, 187, 210, 211, 212

Biol 105, 108, 121, 121L, 123, 124, 128, 151

BPSC 104, 132, 134, 143, 148, 155

ENTM 100, 173

CBNS 101, 106, 116, 120, 120L, 124, 125, 150, 169

ENSC 100

ENTX 101, 150

MAJOR REQUIREMENTS WITH CHEMISTRY EMPHASIS

LOWER DIVISION (61 - 62 units):
Biochemistry 95
Biology 5A, 5LA, 5B, 5C
Chemistry 1A, 1LA, 1B, 1LB, 1C, 1LC
Chemistry 5
Math 8B or 9A, 9B, 46
Physics 2A, 2LA, 2B, 2LB, 2C, 2LC

STATISTICS (5 units):
Statistics 100A or 100B (STAT 48 credit → STAT 100B)

UPPER DIVISION (43 units):
Biochemistry 101 Lab
Biochemistry 162 Lab
Biology 102
Biochemistry 110A, 110B, 110C
Chemistry 109 or 110A
Chemistry 112A, 112B, 112C

BIOCHEMISTRY ELECTIVES (7 units):
At least 7 units from:
BCH 120, 153, 180E – Z, 183, 186, 187, 210, 211, 212

• Graduate courses BCH 210-212 require Science GPA > 3.00. You must obtain a BCH Petition from your Professional Academic Advisor for approval by your faculty advisor and the instructor.

ELECTIVES (8 units):
At least 8 units from:
BIOL 121, BIOL 161A, BIOL 161B, BIOL 171, CBNS 106, CBNS 150

Students should be aware that CHEM 005 is often a requirement for admission to professional schools.

*Requires 30-40 hours of volunteer work

MAJOR REQUIREMENTS WITH MEDICAL SCIENCES EMPHASIS

LOWER DIVISION (54-55 units):
Biochemistry 95
Biochemistry 96
Biochemistry 98*
Biology 5A, 5LA, 5B, 5C
Chemistry 1A, 1LA, 1B, 1LB, 1C, 1LC
Math 8B or 9A, 9B (46 recommended)
Physics 2A, 2LA, 2B, 2LB, 2C, 2LC

STATISTICS (5 units):
Statistics 100A or 100B (STAT 48 credit → STAT 100B)

UPPER DIVISION (61 units):
Biology 102
Biochemistry Lab 101
Biochemistry Lab 162
Biochemistry 110A, 110B, 110C
Biochemistry 120
Biochemistry 184
Cell Biology 101
Chemistry 109 or 110A
Chemistry 112A, 112B, 112C

ELECTIVES (8 units):
At least 8 units from:
BIOL 121, BIOL 161A, BIOL 161B, BIOL 171, CBNS 106, CBNS 150

Students should be aware that CHEM 005 is often a requirement for admission to professional schools.

*Requires 30-40 hours of volunteer work
Medical Science Emphasis
(B.S.) SAMPLE PROGRAM
with Math 8B or 9A Placement.

FRESHMAN YEAR –

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>95♀</td>
<td>---</td>
<td>96*</td>
</tr>
<tr>
<td>Biology</td>
<td>5A,5LA</td>
<td>5B</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>1A</td>
<td>1B</td>
<td>1C</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1LA</td>
<td>1LB</td>
<td>1LC</td>
</tr>
<tr>
<td>English</td>
<td>1A</td>
<td>1B</td>
<td>---</td>
</tr>
<tr>
<td>Hum/Soc. Elective</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Math</td>
<td>8B or 9A</td>
<td>9B</td>
<td></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR –

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry**</td>
<td>---</td>
<td>---</td>
<td>100</td>
</tr>
<tr>
<td>Biology</td>
<td>5C</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Chemistry</td>
<td>112A</td>
<td>112B</td>
<td>112C</td>
</tr>
<tr>
<td>Hum/Soc. Elective</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Physics</td>
<td>2A</td>
<td>2B</td>
<td>2C</td>
</tr>
<tr>
<td>Physics Lab</td>
<td>2LA</td>
<td>2LB</td>
<td>2LC</td>
</tr>
<tr>
<td>Statistics</td>
<td>---</td>
<td>100A</td>
<td>---</td>
</tr>
</tbody>
</table>

JUNIOR YEAR –

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry****</td>
<td>110A</td>
<td>110B</td>
<td>110C</td>
</tr>
<tr>
<td>Biochemistry Lab***</td>
<td>101 or 101</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Biochemistry Electives</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Biology (Genetics)</td>
<td>102</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Cell Biology</td>
<td>---</td>
<td>101</td>
<td>---</td>
</tr>
<tr>
<td>Hum/Soc Elective</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

SENIOR YEAR –

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry (Lab)</td>
<td>---</td>
<td>162</td>
<td>or 162</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>---</td>
<td>184</td>
<td>120</td>
</tr>
<tr>
<td>Biochemistry Electives</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Chemistry</td>
<td>109</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>English</td>
<td>1C</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

一度matriculated, all Biochemistry Major Requirements must be completed at UCR or with prior written approval if taken at a community college or at another UC Campus.

English 1A, 1B, 1C must be completed at UCR.
The only requirements allowed to be taken at a community college would be your breadth requirements. (i.e., Humanities and Social Science Electives).

Once matriculated, all Biochemistry Major Requirements must be completed at UCR or with prior written approval if taken at a community college or at another UC Campus.

English 1A, 1B, 1C must be completed at UCR.
The only requirements allowed to be taken at a community college would be your breadth requirements. (i.e., Humanities and Social Science Electives).

Faculty Advisor:
Paul Larsen paul.larsen@ucr.edu

Professional Academic Advisors:
Please see our website at http://cnasstudent.ucr.edu
For a list of your academic advisor

Please refer to our advising website for availability at http://myadvising.ucr.edu.

Current Biochemistry Majors log onto iLearn (Biochemistry Advising Community) to view your faculty advisor's contact information to set up appointment(s) directly with him/her.

BREADTH REQUIREMENTS

English Composition:
English 1A, 1B, 1C (One year sequence) (12)

Humanities -- B.S. Degree: 12 units
World History 10, 15, or 20 (4)
One course in an area of Fine Arts, Literature, Philosophy or Religious Studies (4)
One additional Humanities course (4)

Social Sciences -- B.S. Degree: 12 units
One course from:
Economics or Political Science (4)
One course from:
Anthropology, Psychology, or Sociology (4)
One additional Social Science course (4)

Ethnic Studies (4):
One course in comparative Ethnic Studies is also counted toward either the Humanities or the Social Sciences requirement, but not both, depending upon content.

http://www.biochemistry.ucr.edu

[Cannot use one course to meet two requirements]