

# HONORS SPECIALIZATION IN SYNTHETIC BIOLOGY (20.0 courses)

Year 1 ( 5.0 Courses)	Graduation Requirements											
Biology 1001A/B and 1002A/B Minimum of 60% in each credit.	<p><b>Breadth Requirement:</b></p> <ul style="list-style-type: none"> <li>1.0 course from each of the three categories A, B and C. Please see Academic Calendar for appropriate selections</li> </ul> <p><b>Essay Requirement:</b></p> <ul style="list-style-type: none"> <li>2.0 essays at UWO</li> <li>(1.0 must be senior level course)</li> </ul> <p><b>Senior Courses:</b></p> <ul style="list-style-type: none"> <li>13.0 senior courses (numbered 2000-4999)</li> <li><b>Maximum of 7.0 first year courses.</b></li> </ul> <p><b>Average Requirements:</b></p> <ul style="list-style-type: none"> <li>minimum overall average of 65% on the 20.0 courses</li> <li>Cumulative average of at least 70% on module, certain courses must meet the stated marks and no course in the module under 60%. Note some courses (bolded on left) have different average requirements.</li> </ul> <p><b>Residency Requirement:</b></p> <ul style="list-style-type: none"> <li>Majority of courses in module must be completed through UWO</li> </ul> <p><i>*Note:</i> To graduate with a <b>BSc</b>, you must have a total of at least 11.0 <b>SCIENCE</b> courses</p> <p><i>**Note:</i> If you select a course that has prerequisites that are not part of the module they must be taken as options.</p> <p>This form is only a guide, please consult the Academic Calendar for any updates.</p>											
1.0 course: <b>Chemistry 1301A</b> and <b>1302B</b> Minimum of 60% in each credit												
1.0 course from: <b>Calculus 1000A/B</b> or <b>Calculus 1500A/B</b> , <b>Calculus 1301A/B</b> or <b>Calculus 1501A/B</b> , <b>Mathematics 1225A/B</b> , <b>Mathematics 1228A/B</b> , <b>Mathematics 1229A/B</b> or <b>Mathematics 1600A/B</b> , <b>Applied Mathematics 1201A/B</b> , <b>Numerical and Mathematical Methods 1411A/B</b> , <b>Numerical and Mathematical Methods 1412A/B</b> , <b>Numerical and Mathematical Methods 1414A/B</b> . Minimum mark of 60% in each credit												
0.5 course from: <b>Physics 1201A/B</b> , <b>Physics 1401A/B</b> , <b>Physics 1501A/B</b> ; Note: If not completed in Year 1, the Physics requirement must be completed by the end of Year 2. Note: <b>Physics 1101A/B</b> with a minimum mark of 65% can be used to replace <b>Physics 1201A/B</b> .												
1.5 options												
<b>NOTE:</b> 1.0 option in first year must be chosen from either the Faculty of Arts or one other Faculty												
<b>Admission to Honors Specialization Module:</b> Complete first year (5.0 courses) including: <ul style="list-style-type: none"> <li>Minimum average of 70% on 4.0 principal courses with no mark less than 60% in each of: <ul style="list-style-type: none"> <li>Biology 1001A and 1002B</li> <li>Chemistry 1301A/B and 1302A/B.</li> <li>1.0 Math (<b>both half math credits must be over 60%</b>)</li> <li>0.5 Physics 120A/B, 1301A/B or 1501A/B 60%</li> </ul> </li> </ul>												
<b>MODULE (10.5 Courses)</b>												
1.5 courses: <b>Biochemistry 2280A</b> minimum 65%; <b>Biology 2581B</b> and <b>2290F/G</b> with a minimum of 70% in each course.												
0.5 course from: <b>Biology 2382A/B</b> .												
1.0 course from: <b>Chemistry 2213A/B</b> or <b>2273A</b> and <b>2223B</b> or <b>2283G</b> .												
0.5 course from: <b>Biology 2244A/B</b> , <b>Statistical Sciences 2244A/B</b> .												
1.5 courses from <b>Biochemistry 3381A</b> , <b>3382A</b> and <b>3392F/G</b> .												
1.0 course from: <b>Biology 3593A/B</b> and <b>3596F/G</b> .												
0.5 course from: <b>Biochemistry 3380G</b> or <b>3390B</b> .												
0.5 course from: <b>Science 3377A/B</b> .												
0.5 course from: <b>Business Administration 2295F/G</b> , or one of <b>Business Administration 1220E</b> or <b>2257</b> (see note).	<b>Department Recommendation for the order in which certain courses should be taken:</b>											
0.5 courses from: <b>Philosophy 2035F/G</b> , <b>2300F/G</b> , <b>2320F/G</b> , <b>2370F/G</b> , <b>2350F/G</b> or <b>3341F/G</b> .												
0.5 course from <b>Biology 4260A/B</b> .		<b>Second Year</b>										
0.5 course from: <b>Biochemistry 4415A/B</b> .		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Biochem 2280A</td> <td style="width: 50%;">Bio 2581B</td> </tr> <tr> <td>Chem 2213A</td> <td>Bio 2382A/B</td> </tr> <tr> <td>Philosophy ?</td> <td>Bio 2290F/G</td> </tr> <tr> <td>Bio 2244A/B</td> <td>Chem 2223B</td> </tr> <tr> <td colspan="2">Plus 1.0 option</td> </tr> </table>	Biochem 2280A	Bio 2581B	Chem 2213A	Bio 2382A/B	Philosophy ?	Bio 2290F/G	Bio 2244A/B	Chem 2223B	Plus 1.0 option	
Biochem 2280A		Bio 2581B										
Chem 2213A		Bio 2382A/B										
Philosophy ?		Bio 2290F/G										
Bio 2244A/B		Chem 2223B										
Plus 1.0 option												
1.5 course from <b>Biology 4998E</b> (research project 1.5 credits).												
<b>NOTES:</b> The module will be comprised of 11.0 credits if <b>Business 1220E</b> or <b>2257</b> is taken. <b>Business Administration 1220E</b> can not be used towards <b>both First year Requirements and modular requirements.</b>	<b>Third Year:</b> Biochem and Biology 3000 levels courses, <b>Business 2295F</b> or											
<b>Progression Requirements</b>	<b>Fourth Year:</b> Bio 4998 requires completion of Bio 3596F/G, biochemistry 3392F/G and Science 3377A/B can be a corequisite.											
<ul style="list-style-type: none"> <li>Minimum cumulative modular average of 70%</li> <li>Minimum mark of 60% in each course of module</li> <li>Passing grade in each option</li> </ul>	<b>Other module requirements and electives to bring the number of courses up to 20.0 for the 4 year degree.</b>											