

**Computer Science Curriculum – Bioinformatics/Cheminformatics Option
(For students entering in Fall 2014)**

Freshman Year/Fall Semester	Cr.	Freshman Year/Spring Semester	Cr.
___91.101 Computing I	3	___91.102 Computing II	3
___91.103 Computing I Lab	1	___91.104 Computing II Lab	1
___92.131 Calculus I	4	___92.132 Calculus II	4
___42.101 College Writing I	3	___42.102 College Writing II	3
___81.111 Principles of Biology I	3	___Slot 1 Gen. Ed. Course ⁽²⁾	<u>3</u>
___81.117 Experimental Biology I	<u>1</u>		14
	15		
Sophomore Year/Fall Semester	Cr.	Sophomore Year/Spring Semester	Cr.
___91.201 Computing III	4	___91.204 Computing IV	3
___91.203 Computer Org. & Assem. Language	4	___16.265 Logic Design	3
___92.321 Discrete Structures I	3	___92.322 Discrete Structures II	3
___84.121 Chemistry I	3	___84.122 Chemistry II	3
___84.123 Chemistry Lab I	<u>1</u>	___84.124 Chemistry Lab II	1
	15	___42.220 Gen. Ed.: Oral & Writ. Comm. CS	<u>3</u>
			16
Junior Year/Fall Semester	Cr.	Junior Year/Spring Semester	Cr.
___91.304 Foundations of Computer Science	3	___91.301 Org. of Programming Lang.	3
___91.305 Computer Architecture	3	___91.308 Intro. to Operating Systems	3
___92.386 Probability & Statistics I	3	___91.____ Bio/Cheminform. Elective	3
___Slot 2 Gen. Ed.: CS Ethics ⁽²⁾	3	___Slot 3 Gen. Ed. Course ⁽²⁾	3
___81.235 Genetics ⁽⁴⁾	3	___Slot 4 Free Elective	<u>3</u>
___81.237 Genetics Lab ⁽⁴⁾	<u>1</u>		15
	16		
Senior Year/Fall Semester	Cr.	Senior Year/Spring Semester	Cr.
___91.____ Project Course ⁽¹⁾	3	___91.____ Project Course ⁽¹⁾	3
___91.404 Analysis of Algorithms	3	___91.____ Bio/Cheminform CS Elective ⁽³⁾	3
___91.____ Bio/Cheminform CS Elective ⁽³⁾	3	___Slot 7 Free Elective	3
___Slot 5 Gen. Ed. Course ⁽²⁾	3	___Slot 8 Gen. Ed. Course ⁽²⁾	3
___Slot 6 Free Elective	<u>3</u>	___Slot 9 Free Elective	<u>3</u>
	15		15

Minimum Total Credits = 121

- ⁽¹⁾ Students will need to consult with their advisor to select the appropriate Project Course Sequence.
- ⁽²⁾ Consult the Schedule of Classes booklet regarding General Education (Gen. Ed.) requirements. Courses satisfying the CS Department Ethics Requirement are listed at the CS website.
- ⁽³⁾ These are generally advanced courses in the respective area (CS or Biology or Chemistry) that have applicability in Bio/Cheminformatics. If in doubt whether a course is applicable, see the undergraduate coordinator, your advisor or the bioinformatics program coordinator.
- ⁽⁴⁾ Students may replace this requirement with Cheminformatics, if offered.