

Bioinformatics Tentative Plan of Study

Year 1

Fall		
Course #	Course Title	Credits
ENGL 1150	English Composition I	3
BIOI 1000	Intro to Bioinformatics	3
CIST 1400	Intro to Computer Science I	3
MATH 1950	Calculus I	5
Elective	CIST 1010 College & Career Success	1
Semester Total:		15
Cumulative Total:		15

Spring		
Course #	Course Title	Credits
BIOL 1450	Biology I	5
CSCI 2030	Math Foundations of Computer Science	3
CSCI 1620	Intro to Computer Science II	3
BIOI 2000	Foundations of Bioinformatics	3
Semester Total:		14
Cumulative Total:		29

Year 2

Fall		
Course #	Course Title	Credits
ENGL 1160	English Composition II	3
BIOI 3000	Applied Bioinformatics	3
CSCI 3320	Data Structures	3
CHEM 1140	Fundamentals of College Chemistry	4
CHEM 1144	Fundamentals of College Chemistry Lab	1
Semester Total:		14
Cumulative Total:		43

Spring		
Course #	Course Title	Credits
CMST 1110	Public Speaking Foundations	3
BIOI 3500	Advanced Bioinformatics	3
BIOL 2140	Genetics	4
CHEM 2210	Fundamentals of Organic Chemistry	4
CHEM 2214	Fundamentals of Organic Chemistry Lab	1
Semester Total:		15
Cumulative Total:		58

Year 3

Fall		
Course #	Course Title	Credits
BIOL 3020	Molecular Biology of the Cell	3
CSCI 4850	Database Management	3
CIST 2500	Intro to Applied Statistics for IS&T	3
GenEd	Humanities & Fine Arts Course	3
GenEd	Social Science Course	3
Semester Total:		15
Cumulative Total:		73

Spring		
Course #	Course Title	Credits
CHEM 3650	Fundamentals of Biochemistry	3
CHEM 3654	Fundamentals of Biochemistry Lab	1
BIOI 4890	Computerized Genetic Sequence Analysis	3
CSCI 4830	Intro to Software Engineering	3
CIST 3110	IT Ethics	3
Elective	Free Elective	3
Semester Total:		16
Cumulative Total:		89

Year 4

Fall		
Course #	Course Title	Credits
BIOI 4860	Bioinformatics Algorithms	3
BIOI 4970	Senior Project in Bioinformatics I	1
ISQA 4150	Advanced Statistical Methods for IS&T	3
CIST 3000	Advanced Composition for IS&T	3
CSCI 4150	Graph Theory & Applications	3
or		
CSCI 4890	Data Warehousing and Data Minig	
GenEd	Social Science Course	3
Semester Total:		16
Cumulative Total:		105

Spring		
Course #	Course Title	Credits
BIOB 4870	Public Speaking Foundations	3
BIOI 4980	Advanced Bioinformatics	2
GenEd	Social Science/Global Diversity Course	3
GenEd	Humanities & Fine Arts/US Diversity Course	3
BIOL 4130	Molecular Genetics	4
or		
BIOL 4140	Cellular Biology	
Semester Total:		15
Cumulative Total:		120