## B.S. in Bioinformatics—sample course sequence

First Semester (Fall)	Credit	Second Semester (Spring)	Credit
CHEM 06.100 Chemistry I	4	CHEM 06.101 Chemistry II	4
(Scientific Literacy)		•	
MCB 01.101 Foundations in Biology for	4	MCB 01.102 Foundations in Biology for	4
Biomedical Sciences I		Biomedical Sciences II	
MATH 01.130 Calculus I	4	MATH 01.131 Calculus II	4
(Quantitative Literacy)		00147 04 440 0 11 0 11	
COMP 01.111 College Comp. I-RS	3	COMP 01.112 College Comp. II	3
Term Total Credit	15	Term Total Credit	15
Third Semester (Fall)	Credit	Fourth Semester (Spring)	Credit
CHEM 07.200 Organic Chemistry I	4	CHEM 07.201 Organic Chemistry II	4
PHYS 00.220 Introductory Mechanics	4	PHYS 00.221 Intro Electricity/Magnetism	4
		or	
		PHYS 00.222 Introductory TFWO	
CS 04.103 Computer Science and	4	CS 01.205 Computer Laboratory	3
Programming		Techniques	
BINF 07.250 Intro to Bioinformatics*	3	STAT 02.284 Statistics For Biomed	3
		Science*	
Term Total Credit	15	Term Total Credit	14
Fifth Semester (Fall)	Credit	Sixth Semester (Spring)	Credit
		Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*	
Fifth Semester (Fall)	Credit	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*	Credit
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science	Credit 4 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular	Credit 4 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)	Credit 4 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology	Credit 4 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking	Credit 4 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular	Credit 4 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking General Education Elective	3 3 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I	4 3 3 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking General Education Elective (Artistic Literacy)	3 3 3 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective	3 3 3 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking General Education Elective (Artistic Literacy) Term Total Credit	3 3 3 3 16	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit	3 3 3 3 16
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking General Education Elective (Artistic Literacy)  Term Total Credit Seventh Semester (Fall)	3 3 3 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester	3 3 3 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CS 04.225 Principles of Data Structures PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy) CMS 04.205 Public Speaking General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall) BINF 07.399 Bioinformatics —	3 3 3 16 Credit	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective	3 3 3 3 16 Credit
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics — Biochemical Applications*	3 3 3 3 16	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester	3 3 3 3 16
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics — Biochemical Applications*  CS 04.301 Bioinformatics —	3 3 3 16 Credit 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective  (Global Literacy)	3 3 3 16 Credit 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics – Biochemical Applications*  CS 04.301 Bioinformatics – Computational Aspects*	3 3 3 16 Credit 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective  (Global Literacy)  Restricted Elective	3 3 3 16 Credit 3 4
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics — Biochemical Applications*  CS 04.301 Bioinformatics — Computational Aspects*  Restricted Elective	3 3 3 16 Credit 3 4	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective  (Global Literacy)  Restricted Elective	3 3 3 16 Credit 3 4 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics — Biochemical Applications*  CS 04.301 Bioinformatics — Computational Aspects*  Restricted Elective  Restricted Elective	3 3 3 16 Credit 3	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective  (Global Literacy)  Restricted Elective  Restricted Elective  General Education Elective	3 3 3 16 Credit 3 4 3 3 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry  CS 04.225 Principles of Data Structures  PHIL 09.369 Philosophy of Science (WI & Humanistic Literacy)  CMS 04.205 Public Speaking  General Education Elective (Artistic Literacy)  Term Total Credit  Seventh Semester (Fall)  BINF 07.399 Bioinformatics — Biochemical Applications*  CS 04.301 Bioinformatics — Computational Aspects*  Restricted Elective	3 3 3 16 Credit 3 4	Sixth Semester (Spring)  MCB 22.450 Molecular Genetics*  BINF 05.355 Bioinformatics – Biological Applications*  BINF 05.360 Programming for Molecular Biology  TBS 01.220 Trans Biomed Res I  Restricted Elective  Term Total Credit  Eighth Semester  General Education Elective  (Global Literacy)  Restricted Elective	3 3 3 16 Credit 3 4 3

<sup>\*</sup> indicates a course that is typically only offered in the indicated Fall or Spring term

This document is intended as a guide only. Please consult with your academic advisors to fully plan your course sequence.