B.S. in Bioinformatics

Department of Ecology & Evolutionary Biology, University of Arizona

Check-Sheet for 2021 Catalog and Prior

Name: SID: Date:

GENERAL EDUCATION

Composition

ENGL 101 **&** 102	3, 3
or ENGL 106, 107 **&** 108	3, 3, 3
or ENGL 109	3

Second Language

Second semester proficiency by credit or exam

Tier One Courses

Individuals and Societies (150)	
	3
	3
Traditions and Cultures (160)	
	3
	3

Tier Two Courses

Arts	3
Humanities	3
Individuals and Societies	3

Diversity Emphasis

Foundation Mathematics

*Prerequisites: Placement **or** MATH 100, 112, 120*

MATH 122A **&** 122B *Calculus I*	1, 4
or MATH 125 *Accelerated Calculus I*	3

SCIENCE FOUNDATION

Biostatistics

MATH 263	3

General Chemistry I & II

CHEM 151 **or** 141 **&** 143 **or** 161 **&** 163	4
CHEM 152 **or** 142 **&** 144 **or** 162 **&** 164	4

Organic Chemistry I & II

CHEM 241A **&** 243A	4
CHEM 241B **&** 243B	4

Biology

ECOL 182R **&** 182L *Intro Bio II*	3, 1
MCB 181R **&** 181L *Intro Bio I*	3, 1

Information Science

ISTA 130 *Computational Thinking & Doing*	4
ISTA 131 *Dealing with Data*	4

CORE COURSES

ECOL 296B *Seminar in Bioinformatics (Fall)*	1
ECOL 320 *Genetics (Fall & Summer)*	4
ECOL 335 *Evolutionary Biology (Spring)*	4
ECOL 346 *Bioinformatics (Spring)*	4
ISTA 116 *Statistic Foundations*	3
ISTA 331 *Principles of Data Science*	3
ISTA 350 *Prog for Informatics*	4

BIOINFOMATICS ELECTIVES: 22 Units

A minimum of 22 Major Elective units must be completed. Major Electives must be upper division (300- or 400-level). Up to six units of graded upper division research credit may count towards Major Electives. View Major Elective options in your Advisement Report or on the EEB website:

eeb.arizona.edu/undergraduate/majors-minors/core-elective-courses

GRADUATION REQUIREMENTS

MCWA: B or Higher in ENGL 102, 108 or 109H
C or Higher in Second Language
120 Units
42 Upper Division Units (300/400 Level)
56 University Units
30 Units at UA
18 Upper Division Units at UA
General Education Complete
2.00 Cumulative GPA
2.00 Major GPA
Major Complete

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Example Four-Year Plans

The B.S. in Bioinformatics can be completed in four years regardless of initial math placement. The following example Four-Year Plans illustrate typical course-loads by semester with various math placement levels.

	Four-Year Plan with MATH 100 Placement				Four-Year Plan with Algebra Placement			
Year One	**Fall**	**12**	**Spring**	**17**	**Fall**	**14**	**Spring**	**14**
	MATH 100	3	MATH 112	3	MATH 112	3	MATH 120	4
	SAS 100AX	2	ECOL 182R	3	ENGL 101	3	ISTA 131	4
	ENGL 101	3	ECOL 182L	1	ISTA 130	4	ENGL 102	3
	ECOL 296B	1	ENGL 102	3	ECOL 296B	1	Gen Ed	3
	Gen Ed	3	ISTA 130	4	Gen Ed	3		
			Gen Ed	3				
Year Two	**Fall**	**17**	**Spring**	**16**	**Fall**	**15**	**Spring**	**16**
	MATH 120	4	MATH 122A	1	MATH 122A	1	MATH 263	3
	ISTA 116	3	MATH 122B	4	MATH 122B	4	MCB 181R	3
	MCB 181R	3	ISTA 131	4	ECOL 182R	3	MCB 181L	1
	MCB 181L	1	ECOL 346	4	ECOL 182L	1	ISTA 331	3
	Gen Ed	3	Gen Ed	3	ISTA 116	3	Gen Ed	3
	Gen Ed	3			Gen Ed	3	Major Elective	3
Year Three	**Fall**	**17**	**Spring**	**17**	**Fall**	**18**	**Spring**	**17**
	MATH 263	3	CHEM 152	4	ECOL 320	4	ECOL 346	4
	ECOL 320	4	ISTA 350	4	CHEM 151	4	CHEM 152	4
	CHEM 151	4	Gen Ed	3	ISTA 350	4	Gen Ed	3
	Major Elective	3	Major Elective	3	Gen Ed	3	Major Elective	3
	Major Elective	3	Major Elective	3	Major Elective	3	Major Elective	3
Year Four	**Fall**	**18**	**Spring**	**18**	**Fall**	**17**	**Spring**	**16**
	Language	4	Language	4	Language	4	Language	4
	CHEM 241A	3	ECOL 335	4	CHEM 241A	3	ECOL 335	4
	CHEM 243A	1	CHEM 241B	3	CHEM 243A	1	CHEM 241B	3
	ISTA 331	3	CHEM 243B	1	Major Elective	3	CHEM 243B	1
	Major Elective	4	Major Elective	3	Major Elective	3	Major Elective	4
	Major Elective	3	Gen Ed	3	Gen Ed	3		
	Total Units	**132**			Total Units	**127**		

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Four-Year Plan with Pre-Calculus Placement

Year One

Fall	15	Spring	15
MATH 120	4	MATH 122A	1
ENGL 101	3	MATH 122B	4
ISTA 130	4	ENGL 102	3
ECOL 296B	1	ECOL 182R	3
Gen Ed	3	ECOL 182L	1
		ISTA 116	3

Year Two

Fall	17	Spring	16
MATH 263	3	ECOL 346	4
MCB 181R	3	ISTA 331	3
MCB 181L	1	Gen Ed	3
ISTA 131	4	Gen Ed	3
Gen Ed	3	Major Elective	3
Gen Ed	3		

Year Three

Fall	15	Spring	17
ECOL 320	4	ECOL 335	4
CHEM 151	4	CHEM 152	4
ISTA 350	4	Gen Ed	3
Major Elective	3	Major Elective	3
		Major Elective	3

Year Four

Fall	15	Spring	14
Language	4	Language	4
CHEM 241A	3	CHEM 241B	3
CHEM 243A	1	CHEM 243B	1
Gen Ed	3	Major Elective	3
Major Elective	4	Major Elective	3

Total Units 124

Four-Year Plan with Calculus Placement

Year One

Fall	16	Spring	16
MATH 122A	1	MATH 263	3
MATH 122B	4	ENGL 102	3
ENGL 101	3	ECOL 182R	3
ISTA 130	4	ECOL 182L	1
ECOL 296B	1	Gen Ed	3
Gen Ed	3	Gen Ed	3

Year Two

Fall	14	Spring	16
MCB 181R	3	ECOL 346	4
MCB 181L	1	ISTA 331	3
ISTA 131	4	Gen Ed	3
ISTA 116	3	Gen Ed	3
Gen Ed	3	Major Elective	3

Year Three

Fall	15	Spring	15
ECOL 320	4	ECOL 335	4
CHEM 151	4	CHEM 152	4
ISTA 350	4	Major Elective	4
Major Elective	3	Major Elective	3

Year Four

Fall	14	Spring	14
Language	4	Language	4
CHEM 241A	3	CHEM 241B	3
CHEM 243A	1	CHEM 243B	1
Gen Ed	3	Major Elective	3
Major Elective	3	Major Elective	3

Total Units 120