

This information is subject to change. See the on-line class schedule for the most accurate information.

		Courses do not count towards the Biology Major			Core courses for the Biology Major	
		Elective lab courses with laboratory credit				
BIOL	TITLE	CR	NOTES	LAB	PRE-REQUISITES and Recommended background knowledge. (C- or better needed for Biology Major Credit)	SEM
1010	<i>Biology in the 21st Century</i>	3	DV, LS		Not counted toward BIOL Degree.	F
1040	<i>Plants, GMOs, and Future of Food & Med</i>	3	LS		Not counted toward BIOL Degree.	S
1050	<i>Pandemics</i>	3	LS		Not counted toward BIOL Degree.	F
1120	<i>Intro to Earth System Science</i>	3	LS		Not counted toward BIOL Degree.	F
1610	Fundamental Principles of Biology I	4	LS		MATH 1010 or higher is highly recommended.	ALL
1615	Fundamental Principles of Biology Lab I	1		[L1]	Prerequisites: 'C-' or better in BIOL 1210 OR AP Biology score of 4+ or IB Biology score of 5 OR Corequisites: 'C-' or better in BIOL 1610.	ALL
1620	Fundamental Principles of Biology II	4	LS		MATH 1010 or higher is highly recommended.	F/S
1625	Fundamental Principles of Biology Lab II	1		[L1]	Prerequisites: "C-" or better in BIOL 2010 OR Corequisites: "C-" or better in BIOL 1620.	F/S
2020	Principles of Cell Biology	3	F online option		Prerequisites: 'C-' or better in ((BIOL 1210 OR BIOL 1610 OR BME 1020 OR AP Biology score of 4+ OR IB Biology score of 5+) AND (CHEM 1210 OR CHEM 1211 OR AP Chemistry score of 4+)).	F/S
2021	Principles of Cell Science	4	Honors Hybrid		Prerequisites: 'C-' or better in ((BIOL 1210 OR BIOL 1610 OR BME 1020 OR AP Biology score of 4+ OR IB Biology score of 5+) AND (CHEM 1210 OR CHEM 1211 OR AP Chemistry score of 4+)) AND Member of the Honors College OR Instructor Consent.	F
2030	Principles of Genetics	3			Prerequisites: 'C-' or better in BIOL 2020 OR BIOL 2021.	F/S
2325	Human Anatomy	4		[L1]	Recommended background knowledge: BIOL 1610.	ALL
2420	Human Physiology	4	LS		Prerequisites: 'C-' or better in ((BIOL 1210 OR BIOL 1610 OR AP Biology score of 4+ OR IB Biology score of 5+) AND (CHEM 1110 OR CHEM 1130 OR CHEM 1210 OR CHEM 1211 OR AP Chemistry score of 4+)).	ALL
2425	Human Physiology Lab	1		[L1]	Corequisites: "C-" or better in BIOL 2420.	ALL
2870	Faculty Research Seminar	1				F
3150	Genomics and Bioinformatics	3		[L1]	"Prerequisites: 'C-' or better in BIOL 1210 OR BIOL 1610. Corequisites: BIOL 2020."	S
3205	General Microbiology Lab	1		[L1]	Corequisites: "C-" or better in (BIOL 3200 OR BIOL 3370 OR PATH 3100).	F/S
3200 (Old 3210)	General & Pathogenic Microbiology	3			BIOL 2020 -or- 2021 -and- CHEM 1110 -or-1130 -or-1210 -or- 1211 -or- AP4+	F/S
3230	Developmental Biology	3			Prerequisites: "C-" or better in BIOL 2020.	F
3240	Intro to Cellular Neurobiology	3			Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021).	F
3320	Comparative Physiology	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010).	F
3325	Comparative Physiology Lab	3		[L2]	Prerequisites: 'C-' or better in BIOL 1210 OR BIOL 1610 OR AP Biology score of 4+ OR IB Biology score of 5+. Recommended background knowledge: BIOL 2420 OR BIOL 3320.	S
3330	Behavioral Neurobiology	3			Prerequisites: "C-" or better in BIOL 1620 OR BIOL 2010 OR BIOL 2420.	S
3340	Intro to Plant Biology	3			Prerequisites: 'C-' or better in BIOL 1210 OR BIOL 1610 OR BIOL 1620 OR AP Biology score of 4+	S
3350	Physiology of Plants	3			Prerequisites: 'C-' or better in (BIOL 1620 OR BIOL 2010) AND (BIOL 2020 OR BIOL 2021).	F
3370	Microbial Biology	3			Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021). Recommended background knowledge: BIOL 3510 OR CHEM 3510.	S
3380	Evol & Physiol Basis of Health	3			Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021 OR BIOL 2420). Recommended background knowledge: BIOL 2020 OR 2021.	F
3390	Functional Musculoskeletal Anatomy	3			Prerequisites: 'C-' or better in BIOL 2325	F
3410	Ecology & Evolution	3			Prerequisites: 'C-' or better in (BIOL 1620 OR BIOL 2010) AND (MATH 1170 OR MATH 1310 OR MATH 1210 OR MATH 1250 OR AP Calc AB score of 4+ OR AP Calc BC score of 3+ OR IB Math Score of 5+).	F/S
3430	Animal Behavior	3			Prerequisites: 'C-' or better in (BIOL 1620 OR BIOL 2010).	S (odd year?)
3460	Global Environmental Issues	3	IR			F
3461	Social Dimensions of Environmental Challenge	1			Corequisites: BIOL 3460	F
3470	Conservation Biology	3				S
3485	Conservation Biology Field Lab	1		[L1]	Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010). Corequisites: "C-" or better in BIOL 3470. Recommended background knowledge: BIOL 3410.	S
3510	Biological Chemistry I	3			Prerequisites: "C-" or better in (CHEM 2310 OR CHEM 2311). Recommended background knowledge: CHEM 2320 and BIOL 2020.	ALL (Su in Chem)
3515	Biological Chemistry Lab	3		[L1]	Corequisites: (BIOL 3510 OR CHEM 3510). Prerequisites: "C-" or better in (CHEM 2315 OR BIOL 1615 OR BIOL 1625).	S (+Su in CHEM)
3520	Biological Chemistry II	3			Prerequisites: "C-" or better in (BIOL 3510 OR CHEM 3510).	S
3525	Molecular Biology of DNA Lab	3		[L2]	Recommended background knowledge: BIOL 2020 AND BIOL 2030 AND (BIOL 3510 OR CHEM 3510).	F
3535	Gene Expression Lab	3		[L2]	Prerequisites: "C-" or better in (BIOL 1615 OR BIOL 1625) AND (BIOL 2020 OR BIOL 2021).	S
3665	Form, Function & Adaptation In Animals	3	Online	[L2]		S
3715	Analysis & Visualization Biological Data	3		[L1]	Prerequisites: (BIOL 1610 OR BIOL 1620 OR BIOL 1120 OR GEO 1120 OR ATMOS 1120) AND (MATH 1170 OR MATH 1210 OR MATH 1215 OR MATH 1250 OR MATH 1310 OR MATH 1311).	S
3960	Special Topics in Biology	1-5			Prerequisites: Instructor Consent. Topics vary	check schedule
3960	Gene Expression Lab	3		[L2]	BIOL 1615 -or- 1625 -and- BIOL 2020	S27 Maybe
4312	Human Dissection	1			Prerequisites: C- or better in (BIOL 4313 or BIOL 5313) OR BIOL 5315.	F/S

4313	Teaching Anatomy	1-2			Instructor Consent, AOCE Contract Course - see Jon Groot. Prerequisites: C- or better in (BIOL 4313 or BIOL 5313) OR BIOL 5315.	F/S
4314	Anatomy Colloquium	1			Prerequisites: Instructor Consent.	F/S
4950	Directed Reading	1-3			Prerequisites: Instructor Consent.	ALL
4955	Individual Research	1-3		[L1-L2]	Prerequisites: Instructor Consent.	ALL
4965	Independent Professional Internship	1-3			Prerequisites: Instructor Consent.	ALL
4995	Biology Honors Research	1-4	Honors	[L1-L2]	Prerequisites: Instructor Consent AND Member of Honors College.	ALL
4999	Honors Thesis/Project	3	Honors		Prerequisites: Instructor Consent AND Member of Honors College.	ALL
5011	Mathematical Biology I (MATH 5110)	3			Prerequisites: "C-" or better in (MATH 2250 OR MATH 2280).	F
5012	Mathematical Biology II (MATH 5120)	3	QI		Prerequisites: "C-" or better in (BIOL 5011 OR MATH 5110).	
5120	Gene Expression	3			Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021). Recommended background knowledge: BIOL 2030.	S
5210	Cell Structure & Function	3			Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021).	S
5255	Prokaryotic Genetics	4		[L2]	Recommended background knowledge: BIOL 2020 AND BIOL 2030.	S
5275	Microbial Biodiversity, Genomics and Evolution	4		[L2]	Prerequisites: "C-" or better in ((BIOL 1620 OR BIOL 2010) AND BIOL 2030).	F
5315	Advanced Human Anatomy	3		[L1]	Prerequisites: "C-" or better in BIOL 2325.	S
5350	Ornithology	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010).	F
5355	Ornithology Field Lab	1		[L1]	Corequisites: "C-" or better in BIOL 5350.	F
5370	Mammalogy	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010).	S27?
5425	Mycology	4		[L1]	Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010).	F(even)
5440	Urban Ecology	3			Recommended background knowledge: An upper divisions class in ecology, environmental science, engineering, or urban planning.	F & Su26?
5455	Desert Ecology Field Course	3		[L1]	Prerequisites: Instructor Consent.	F (odd)
5460	Plant Ecology in a Changing World	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010) OR Instructor Consent. Recommended background knowledge: BIOL 3410 prior to or concurrent.	F
5471	Quantitative Models in Evolutionary Ecology	3	QI		Prerequisites: 'C-' or better in (ANTH 1020 OR ANTH 1050 OR BIOL 1620 OR BIOL 3125 OR BIOL 3410 OR BIOL 3430) AND (MATH 1050 OR MATH 1080 OR MATH 1090 OR MATH 1170 OR MATH 1180 OR MATH 1210 OR MATH 1220)	F and S?
5480	Entomology	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010).	F
5485	Entomology Lab	1		[L1]	Corequisites: "C-" or better in BIOL 5480.	F
5490	Ecosystem Ecology	3			Prerequisites: "C-" or better in (BIOL 1620 OR BIOL 2010). Recommended background knowledge: BIOL 3410 OR CHEM 1210 taken concurrently.	S
5510	Genes, Development, and Evolution	3			Prerequisites: 'C-' or better in BIOL 1210 OR BIOL 1610 OR AP Biology score of 4+ OR IB Biology score of 5+. Recommended background knowledge: BIOL 2030 prior to or concurrent.	F and S?
5520	Evolutionary Perspectives in Medicine	3			Prerequisites: "C-" or better in BIOL 1620. Recommended Prerequisites: BIOL 3410.	S
5570	Ecol & Evolution Parasites & Pathogens	3			Prerequisites: 'C-' or better in (BIOL 1210 OR BIOL 1610 OR AP Biology score of 4+ OR IB Biology score of 5+) AND (BIOL 1620 OR BIOL 2010).	F and S?
5575	Ecol & Evolution Parasites & Pathogens Lab	1		[L1]	Corequisites: "C-" or better in BIOL 5570.	F and S?
5665	Computational Paleobiology	3	Half Sem	[L1]	Prerequisites: Instructor Consent. Misc dates, fieldtrips	Su26
5800	Adv Topics in Biochem & Cell Biology	2	Half Sem		Prerequisites: "C-" or better in (BIOL 2020 OR BIOL 2021) AND (BIOL 3510 OR CHEM 3510).	Su
5920	Adv Eukaryotic Genetics	3	Half Sem		Prerequisites: "C+" or better in BIOL 2030.	S
5960	Advanced Special Topics in Biology	1-3			Prerequisites: Instructor Consent. Topics Vary	All
5960	Eukaryotic Genetics & Molecular Biology Lab	3		[L2]	Department Permission Pre-req BIOL 2020 or 2021	F25
5960	Cell Biology & Microscopy	3		[L2]	Department Permission Pre-req BIOL 2020 or 2021	S26
CHEM 5750	Advanced Chemical Biology Lab	2	Half Sem	[L1]	Prerequisites: "C-" or better in (CHEM 2320 OR CHEM 2321) AND (CHEM 3510 OR BIOL 3510).	S

Notes on Biology Major requirements:

42 credits from courses in the list above (except BIOL 1010, 1030, 1040, 1050, 1120 and 4313) or approved transfer courses are required for the Biology Major.

A minimum of 16 upper division (3000-5999 level) biology credits are required for the major.

At least 21 of the credits of the biology course required for the Biology Major must be earned at the University of Utah.

A total of 4 laboratory courses (including BIOL 1615 and 1625), totaling 5 lab credits, are required for the Biology Major.

A maximum of 2 laboratory courses may be transferred from other institutions; a minimum of 2 BIOL lab courses representing 3 lab units must be completed.

Two 5000-level course, each of 2 credits or more, are required for the Biology Major.

The following previously offered courses do not count towards the 5000-level course requirement: BIOL 5312, 5313, 5314, 5316, 5900

Different emphasis options for the Biology Major have other specific requirements. Please consult your advisor.

All major courses must be completed with a C- or better

Special designations:

LS: Life Science Course

DV: Diversity Course

QI: Quantitative Intensive Course

IR: International Course

Honors: For Honors College Students or by Instructor Permission

Hybrid: Course meets partially in person and partially on Canvas

Online: Courses online without a designated meeting time