	Degree: Biolo	gical Sciences, B.S.: Physiology Concentr	ation 23-24	
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester (FALL)		_
E	BIOL 130	Connecting to Biology		2
A1	COMM 100	Communication		3
B4/LD Major Prereq	Math 120	Precal		3
C1				3
D1/CODE 1			Tabali	3
		Constant (CDDING)	Total:	14
		Second Semester (SPRING)		_
A2	ENGL 102			3
A3	PHIL 100	Workshop in Critical Thinking		3
B2/LD Major	BIOL 140A	Principles of Cell and Molecular Biology		5
UD Major	STAT 303	Statistics for Biology	Completion of GE area B4.	3
(OD Major	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exam, MATH 120 or MATH 125 (either course with grade C- or better).	4
			Total:	18
		Third Semester (SPRING)		
C2				3
LD Major	BIOL 140B	Principles of Organismal Biology	BIOL 140A with grade C- or better.	5
B1/LD Major	CHEM 111	General Chemistry I		3
D3/ID Major	CHEM 111L	General Chemistry Lab I		2
B3/LD Major	CHEWITTE	General Chemistry Lab i	Total:	13
	-	Fourth Semester (FALL)	iotai.	13
Writing II/WID (2nd	1	routti Semester (FALL)		
Comp)	ENGL 200 or PHYS 230	Accelerated College Writing		3
B3/LD Major	CHEM 112	General Chemistry II	CHEM 111 with grade C- or better.	5
	0.0.0.0		BIOL 140B with a grade of C- or	١.
UD Major	BIOL 310	Genetic Anallysis I	better.	4
UD Major/Elective 1				3
			Total:	15
		Fifth Semester (SPRING)	iotai.	13
UWR		Than Semester (Si kinto)		3
			Satisfactory score of 78 or higher on Math Proficiency Assessment or	
LD Major	PHYS 125	Principles of Physics I	MATH 120.	4
UD Major	CHEM 230	Survey of Organic Chemistry	CHEM 112 with grade C- or better.	5
UD Major	BIOL 320	Evolutionary Biology	BIOL 310.	3
OD IVIAJOI	BIOL 320	Evolutionally biology	Total:	15
		Sixth Semester (SPRING)	Totali	15
E		Sixui Scinester (Si riire)		1
Add'l C1 or C2*				3
UD-B/Overlay	BUNG 486	E	21100 425	3
LD Major	PHYS 126	Elementary Physics II	PHYS 125.	4
LID Major	BIOL 370	Animal Physiology	BIOL 140B with grade C- or better and CHEM 112.	4
UD Major	DIOL 370	Animal Physiology	Total:	15
	1	Seventh Semester (FALL)	iotal.	15
UD Major	CHEM 340	Survey of Biochemistry		2
UD Major/Capstone	BIOL 488	Environmental Physiology	BIOL 370.	3
D2/Code 2	DIUL 400	Environmental Physiology	DIUL 37U.	3
	1			3
UD Major/Elective 2	+			
UD Major/Elective 3	+		Total:	15
	-	Fighth Competer (FALL)	iotal:	15
UD C/Overland		Eighth Semester (FALL)		_
UD-C/Overlay	1			3
UD-D/Overlay	+			3
UD Major/Elective 4	1			3
UD Major/Elective 5	1			3
UD Major/Elective 6	1			3
			Total:	15
Total Units:			iotal.	120
iotal Units:				120

Note: No changes to, or from, the credit/no credit pattern are permitted after the Grade Type Change period. There are no exceptions to this rule. Courses in a student's major department, regardless of course prefix, may not be taken "CR/NC," unless that is the only grading pattern in the course.

Revised: 05/31/23

Cei	JEB General Breadth and Graduation Requirement Checklist
	ts): Communication in the English Language & Critical Thinking (Must earn
	passing grade of C-/CR or better)
	100 or 104, MLL 111
☐ A2. ENGL 10	
☐ A3. PHIL 100	
☐ B1. Physical	Area B (9 units) : Scientific Inquiry & Quantitative Reasoning
☐ B2. Life Scie	
B3. Laborato	
	ative Reasoning (Must earn passing grade of C-/CR or better.)
	s): Arts & Humanities - Minimum of two different disciplines as designated by course prefix (e.g., ART, THEA, MUS)
☐ C1. Arts	
C2. Humanit	
□ *Additional	Lower-division Area C Course in Arts (C1) or Humanities (C2)
Area D (6 unit	s) : Social Sciences - Minimum of two different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)
□ D1.	
□ D2.	
n.	Area E (3 units) : Lifelong Learning and Self-Development
□ E.	Augo F (2iss). Fahmis Caudins
□ F.	Area F (3 units): Ethnic Studies
	nposition : Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.
☐ Second Com	
	University Writing Requirement
	ments of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California
Code Require	State & Local Government).
Code Require	
□ Code 1.	State & Local Government).
☐ Code 1. ☐ Code 2. Upper Division	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and 84 with a C- (CR)
☐ Code 1. ☐ Code 2. Upper Division ☐ UD-B. Upper	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) r-division Science Inquiry and Quantitative Reasoning
☐ Code 1. ☐ Code 2. Upper Division ☐ UD-B. Upper	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and 84 with a C- (CR)
☐ Code 1. ☐ Code 2. Upper Division ☐ UD-B. Upper	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) r-division Science Inquiry and Quantitative Reasoning
□ Code 1. □ Code 2. Upper Division □ UD-B. Upper	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) r-division Science Inquiry and Quantitative Reasoning
Code 1. Code 2. Upper Division UD-B. Upper UD-C.Upper UD-D. Uppe	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences rements (9 units): Courses may be upper or lower division, and GE or major
□ Code 1. □ Code 2. Upper Division □ UD-B. Upper □ UD-C.Upper □ UD-D. Uppe Overlay Requi □ Diversity (Di	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major
□ Code 1. □ Code 2.  Upper Division □ UD-B. Upper □ UD-C.Upper □ UD-D. Uppe Overlay Requi □ Diversity (Di □ Social Justice	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences rements (9 units): Courses may be upper or lower division, and GE or major v)  e (SJ)
□ Code 1. □ Code 2. Upper Division □ UD-B. Upper □ UD-C.Upper □ UD-D. Uppe Overlay Requi □ Diversity (Di	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning division Arts OR Humanities  r-division Social Sciences rements (9 units): Courses may be upper or lower division, and GE or major v)  v) v (S)
Code 1. Code 2. Upper Division UD-B. Upper UD-C.Upper UD-D. Uppe Overlay Requi Diversity (Di Social Justice Sustainabilit	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  -division Science Inquiry and Quantitative Reasoning division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  e (SJ)  y (S)  Elective Courses
□ Code 1. □ Code 2. Upper Division □ UD-B. Upper □ UD-C.Upper □ UD-D. Uppe Overlay Requi □ Diversity (Di □ Social Justic □ Sustainabilit Choose 18 unit	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major (9)  e (SJ)  y (S)  Elective Courses  s of electives from the following courses. Note: BIOL 398 Co-operative
Code 1. Code 2. Upper Division UD-B. Upper UD-C. Upper Overlay Requi Diversity (Di Social Justic Sustainabilit Choose 18 unit technose 18 unit februard elective credit.	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  -division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  (5)  (6)  Flective Courses  of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units  Enrollment in these courses requires approval by a faculty member and the
Code 1. Code 2. Upper Division UD-B. Upper UD-D. Uppe UD-D. Uppe Overlay Requi Social Justic Sustainabilit Choose 18 unit Education and/elective credit. Department CF	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major  v)  e (S)  Flective Courses  s of electives from the following courses. Note: BIOL 398 Co-operative for BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.
Code 1. Code 2. Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity (bi Social Justic Sustainabilit Education and/elective credit. Department Co	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences rements (9 units): Courses may be upper or lower division, and GE or major v) e (s)) y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair. eral Microbiology Units: 5
Code 1. Code 2. Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity (bi Social Justic Sustainabilit Education and/elective credit. Department Co	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences rements (9 units): Courses may be upper or lower division, and GE or major v) e (s)) y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair. eral Microbiology Units: 5
Code 1. Code 2. Upper Division UD-B. Upper UD-D. Uppe Overlay Requi Diversity [0] Social Justic Sustainabilit Choose 18 unit Education and/elective credit. Biol. 330 - Gen Biol. 330 - Gen Biol. 350 - Ecol	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major  v)  y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5  ggy Units: 4
Code 1. Code 2. Upper Division UD-B. Upper UD-C. Upper Overlay Requi Diversity (Di Social Justic Sustainabilit Choose 18 unit Education and/elective credit. Department Ch BIOL 330 - Gen BIOL 330 - Ente BIOL 330 - Inte	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR) division Science Inquiry and Quantitative Reasoningdivision Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  e (Si)  y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 14 obial Physiology and Metabolism Units: 3
Code 1. Code 2. Upper Division Upper Division UD-B. Upper UD-C. Upper UD-C. Upper Overlay Requi Diversity (Di Social Justic Social Justic Social social Education and/elective credit. Department CF BIOL 330 - Gen BIOL 330 - Ecol BIOL 398 - Inter	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major  v)  y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 orgy Units: 1-4  robial Physiology and Metabolism Units: 3  ecular Virology Units: 3
Code 1. Code 2. Upper Division Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity [0] Social Justic Sustainabilit Education and/elective credit. Education and/elective credit. BIOL 330 - Gen BIOL 330 - Ecol BIOL 398 - Inte BIOL 398 - Inte BIOL 398 - Inte BIOL 440 - Mol. BIOL 441 - Para	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  -division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y (5)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 4  mship Units: 1-4  obial Physiology and Metabolism Units: 3 ecular Virology Units: 3 stology Units: 3
Code 1. Code 2. Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity (Di Social Justice Sustainabilit Choose 18 unit Education and/elective credit. Department Ch Biol. 330 - Ecol Biol. 330 - Ecol Biol. 340 - Moi	GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C-(CR) -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y  y  (s (S))  y (S)  Elective Courses  s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5  ogy Units: 4  rnship Units: 1-4  robial Physiology and Metabolism Units: 3  stology Units: 3  stology Units: 3  stology Units: 3  stology Units: 3
Code 1. Code 2. Upper Division Upper Division UD-B. Uppe UD-B. Uppe Overlay Requi Diversity [Di Social Justic Social Justic Social social Education and/elective credit. Department CF BIOL 330 - Gen BIOL 350 - Ecol BIOL 340 - Micc BIOL 441 - Para BIOL 443 - Hen BIOL 443 - Hen BIOL 443 - Hen BIOL 444 - Hen	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  -division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major  v)  y (s)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative for BIOL 490 independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 orgy Units: 4  rmship Units: 1-4  robial Physiology and Metabolism Units: 3  ecular Virology Units: 3  astology Units: 3
Code 1. Code 2. Upper Division Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity (Di Social Justice Social Justice Social Justice Social Justice Social Justice Social Justice Biol. 330 - Gen Biol. 330 - Gen Biol. 330 - Ecol Biol. 330 - Ecol Biol. 330 - Ecol Biol. 330 - Ecol Biol. 330 - Here Biol. 431 - Here Biol. 443 - Here Biol. 443 - Here Biol. 443 - Here Biol. 447 - Anim	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning - division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y (S)  Elective Courses s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 4  robial Physiology and Metabolism Units: 3  sitology Units: 3  sitology Units: 3  satology Units: 3  nal Senses Units: 3  nal Senses Units: 4
Code 1. Code 2. Upper Division Upper Division UD-B. Uppee UU-B. Uppee Overlay Requi Diversity (bi Social Justic Sustainabilit Education and/elective credit. Education and/elective and Education and	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and 84 with a C- (CR)  -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y (s)  Elective Courses
Code 1. Code 2. Upper Division Upper Division UD-B. Uppe UD-D. Upp	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  -division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major (v)  (e (S)  (e (S)  Flective Courses  s of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the air.  eral Microbiology Units: 5 oogy Units: 4  reship Units: 1-4  obiolal Physiology and Metabolism Units: 3  ecular Virology Units: 3  stology Units: 4  unology Units: 4  unology Units: 4  robiology Libris: 4  robiology Libris: 3  nal Senses Units: 3  robiology Libris: 3  robiology Libroratory Units: 4
Code 1. Code 2. Upper Division Upper Division UD-B. Upper UD-B. Upper Overlay Requi Diversity [0] Social Justic Social Justic Social Justic Social Justic Social Justic Social Justic Bloom Social Justic Bloo	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning - division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y (S)  Elective Courses so of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 4  robial Physiology and Metabolism Units: 3 estudy Wints: 3 sitology Units: 3 sitology Units: 3 and Senses Units: 4 robiology Units: 3 and Senses Units: 4 robiology Units: 3 and Senses Units: 4 robiology Units: 3 robiology Units: 3 robiology Laboratory Units: 4 parative Physiology Units: 3
Code 1. Code 2. Upper Division Upper Division UD-B. Uppee UUD-B. Uppee Overlay Requi Diversity (bi Social Justic Sustainabilit Education and/elective credit. Education and/elective and Education and	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  -division Science Inquiry and Quantitative Reasoning -division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y  y  (s)  Elective Courses  so f electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 4  rnship Units: 1-4  robial Physiology and Metabolism Units: 3  eacular Virology Units: 3  sitology Units: 3  anatology Units: 3  anatology Units: 4  robiology Units: 3  robiology Units: 4  robiology Units: 3  robiology Units: 4  robiology Units: 3  robiology Laboratory Units: 4  roparative Physiology Units: 3  nedical Physiology Units: 3  nedical Physiology Units: 3  nedical Physiology Units: 3
□ Code 1. □ Code 2. Upper Division □ Upe Division □ UD-D. Upper □ UD-D.	State & Local Government).  GE Requirements (9 units): Should be taken after completion of A1, A2, A3 and B4 with a C- (CR)  r-division Science Inquiry and Quantitative Reasoning - division Arts OR Humanities  r-division Social Sciences  rements (9 units): Courses may be upper or lower division, and GE or major v)  y (S)  Elective Courses so of electives from the following courses. Note: BIOL 398 Co-operative or BIOL 490 Independent Study may be used for a maximum total of 3 units Enrollment in these courses requires approval by a faculty member and the lair.  eral Microbiology Units: 5 ogy Units: 4  robial Physiology and Metabolism Units: 3 estudy Wints: 3 sitology Units: 3 sitology Units: 3 and Senses Units: 4 robiology Units: 3 and Senses Units: 4 robiology Units: 3 and Senses Units: 4 robiology Units: 3 robiology Units: 3 robiology Laboratory Units: 4 parative Physiology Units: 3

<sup>\*</sup>Students are required to take a minimum of 40 semester units as upper division (includes 9 units upper division GE)  $\,$