Requirement Area	Course	Course Title Prerequisites	Units
	•	First Semester (FALL)	
Recommened	SCI 130	Connecting to STEM Majors	
1C		Oral Communication	3
LD Major/5A&5C	PHYS 135	Physics for Scientists and Engineers I	4
D Major/Area 2	MATH 130	Calculus I	4
24		0.44	
3A		Arts Total:	16
		Second Semester (SPRING)	1 10
		Second Semester (SFRING)	
1A		Written Communication	3
LD Major	PHYS 136	Physics for Scientists and Engineers II	4
LD Major	MATH 131	Calculus II	
3B		Humanities	3
		Total:	13
	1	Third Semester (FALL)	
1D/Cocond Comp			
1B/Second Comp LD Major	PHYS 137	Physics for Scientists and Engineers III	3
Area 4/Code 1		Social Science/US Code	3
,			T -
5B		Life Science	3
Elective			3
		Total:	16
	1	Fourth Semester (SPRING)	1
10.44 : /6		AATU 220 LEUWS 427 DUWS	
LD Major/Second Comp	PHYS 230	MATH 230, and PHYS 137 or PHYS Physical Reasoning 126.	] 3
LD Major	MATH 215	Introduction to Linear Algebra	3
Free Elective	WATTI 213	introduction to Elical Algebra	3
THE EICEUVE			_
Area 4/Code 2		Social Science/US Code	3
Area 6		Ethnic Studies	3
		Total:	15
		Fifth Semester (FALL)	
		MATH 230, and PHYS 137 or PHYS	
UD Major	PHYS 350	Quantum Mechanics I 126 MATH 230, and PHYS 137 or PHYS	3
UD Major	PHYS 380	Advanced Lab I 126	3
UD Major		Physics Elective	
	PHYS	Physics Elective	3
UWR		Physics Elective	3
UWR		Physics Elective  Total:	3
UD Major UWR UD Free Elective		Total: Sixth Semester (SPRING)	3
UWR UD Free Elective	PHYS	Total: Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS	3 3 3 15
UWR UD Free Elective		Total: Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS 126  Analytical Mechanics 126	3 3 3 15
UWR UD Free Elective UD Major	PHYS	Total: Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS	3 3 3 15
UWR UD Free Elective  UD Major  UD Major	PHYS 330	Total:  Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS 126  Advanced Laboratory II: Experimental	3 3 3 15
UWR  UD Free Elective  UD Major  UD Major  UD Free Elective  UD Free Elective	PHYS 330	Total: Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS 126  Analytical Mechanics 126  Advanced Laboratory II: Experimental	3 3 3 15
UWR  UD Free Elective  UD Major  UD Major  UD Free Elective  UD Free Elective	PHYS 330	Total:  Sixth Semester (SPRING)  MATH 230, and PHYS 137 or PHYS 126  Advanced Laboratory II: Experimental Methods  PHYS 380	3 3 3 15 3 3 3 3 3
UWR  UD Free Elective  UD Major  UD Major  UD Major  UD Free Elective  UD Free Elective	PHYS 330	Total:  Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:	3 3 3 15 3 3 3 3 3
UWR  UD Free Elective  UD Major  UD Major  UD Major  UD Free Elective  UD Free Elective	PHYS 330	Total:  Sixth Semester (SPRING)  Analytical Mechanics 126 Advanced Laboratory II: Experimental Methods PHYS 380  Total:  Seventh Semester (FALL)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major  UD Major  UD Free Elective  UD Free Elective  UD Free Elective	PHYS 330	Total:  Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:	3 3 3 3 15
UUN R UD Major UD Major UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Blective	PHYS 330 PHYS 381	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  MATH 230, and PHYS 137 or PHYS  MATH 230, and PHYS 137 or PHYS	3 3 3 15 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major  UD Major  UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  MATH 230, and PHYS 137 or PHYS  MATH 230, and PHYS 137 or PHYS	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major  UD Major  UD Free Elective  UD Free Elective  UD Free Elective  UD Free Elective  UD Major  UD Major  UD Major	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics 126 Advanced Laboratory II: Experimental Methods PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Total:  MATH 230, and PHYS 137 or PHYS 126	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR	PHYS 330 PHYS 381 PHYS 450	Total:  Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B,	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major  UD Major  UD Free Elective  UD Free Elective  UD Free Elective  UD Free Elective  UD Major  UD Major  UD Major	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics	3 15 15 15 15 15 15 15 15 15 15 15 15 15
UWR UD Free Elective  UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Total:  Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better Completion of GE Areas 1A, 1B, 1C ampletion of GE Areas 1A, 1B, 1C ampletion of GE Areas 1A, 1B, 1B, 1B, 1B, 1B, 1B, 1B, 1B, 1B, 1B	3 3 3 15 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Major UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UUD Major  UD Major  UD Major  UD Free Elective  UD Major  UD Major  UD Major  UD Major  UD Major	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UUD Major  UD Major  UD Major  UD Free Elective  UD Major  UD Major  UD Major  UD Major  UD Major	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better	3 19 19 19 19 19 19 19 19 19 19 19 19 19
UWR UD Free Elective  UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Major UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics	3 19 19 19 19 19 19 19 19 19 19 19 19 19
UWR UD Free Elective  UD Major UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Major UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  Total:  Total:  Total:  126  Analytical Mechanics 127  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better Total:  Eighth Semester (SPRING)  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better Total:  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better Total:  Eighth Semester (SPRING)	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major UD Free Elective UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Major UD Free Elective	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Eighth Semester (SPRING)  Eighth Semester (SPRING)  Total:  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Total:  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective UD Major UD Major UD Free Elective UD Major UD Major UD Major UD Major UD Area 3/Overlay UD-Area 5/Overlay	PHYS 330 PHYS 381 PHYS 450 PHYS 460 PHYS elective	Sixth Semester (SPRING)  Analytical Mechanics	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UWR UD Free Elective  UD Major UD Major UD Free Elective UD Free Elective UD Free Elective UD Major UD Major UD Major UD Major UD Major UD Area 3/Overlay UD-Area 5/Overlay UD-Area 4/Overlay UD Major	PHYS 330 PHYS 381 PHYS 450	Sixth Semester (SPRING)  Analytical Mechanics Advanced Laboratory II: Experimental Methods  PHYS 380  Total:  Seventh Semester (FALL)  Electromagnetism I  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Eighth Semester (SPRING)  Eighth Semester (SPRING)  Total:  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better  Total:  Completion of GE Areas 1A, 1B, 1C and GE-2 with grade C- (CR) or better	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
UUD Major  UD Major  UD Free Elective  UD Free Elective  UD Free Elective  UD Free Elective  UD Major  UD Major  UD Major  UD Major  UD Major  UD Hajor  UD Major  UD Area 3/Overlay  UD-Area 4/Overlay  UD Major  UD Free Elective	PHYS 330 PHYS 381 PHYS 450 PHYS 460 PHYS elective	Sixth Semester (SPRING)  Analytical Mechanics	
UUD Major  UD Major  UD Major  UD Free Elective  UD Major  UD Free Elective  UD Major  UD Major  UD Major  UD Free Elective	PHYS 330 PHYS 381 PHYS 450 PHYS 460 PHYS elective	Sixth Semester (SPRING)  Analytical Mechanics	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

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.

CSUEB General Breadth and Graduation Requirement Chec Area 1 (9 units): English Communication	Jena
☐ 1A - Lower Division English Composition	
☐ 1B - Lower Division Critical Thinking and Composition	
☐ 1C - Lower Division Oral Communication	
Area 2 (3 units) : Mathematical Concepts and Quantitative Re	asoning
☐ Area 2 - Mathematical Concepts and Quantitative Reasoning	
Area 3 (6 units): Arts & Humanities - Minimum of two diffe	rent
disciplines as designated by course prefix (e.g., ART, THEA,	MUS)
3A - Arts and Humanities (Arts)	
3B - Arts and Humanities (Humanities)	
Area 4 (6 units): Social and Behavioral Sciences - Minimum of different disciplines as designated by course prefix (e.g., ANTH POSC)	
☐ Area 4 - Lower Division Social and Behavioral Sciences	
☐ Area 4 - Lower Division Social and Behavioral Sciences	
Area 5 (7 units): Physical and Biological Sciences	
5A - Lower Division Physical and Biological Sciences (Physical)	
☐ 5B - Lower Division Physical and Biological Sciences (Biologica	
☐ 5C - Lower Division Physical and Biological Sciences (Laborato	
May be embedded in 5A or 5B course, as long as 7 units met for division Subject Area 5.	iowei-
Area 6 (3 units): Ethnic Studies	
☐ Area 6 - Ethnic Studies	
Second Composition : Second Composition (Required as part of 1B	
for 2025-26 or later catalog)  Second Composition	
University Writing Requirement (3-4 units)	
□ UWR	
U.S. Code (American Institutions Requirement) - Two courses	
covering three U.S. Code Requirements of US-1 (U.S. History), S. Constitution), and US-3 (California State & Local Governo	
S. Constitution), and US-3 (California State & Local Governm  Code 1	icitij.
□ Code 1	
Upper Division GE Requirements (9 units): Should be taken	after
completion of 1A, 1B, 1C, and Area 2 with a C- (CR)	
☐ UD- Area 3 - Upper Division Arts or Humanities	
☐ UD- Area 4 - Upper Division Social and Behavioral Sciences	
UD- Area 5 - Upper Division Science or Mathematical	
Concepts/Quantitative Reasoning	
Overlay Requirements (9 units): Courses may be upper or lo division, and GE or major	ower
uivision, and de or major	
☐ Diversity (Div)	
☐ Social Justice (SJ)	
☐ Sustainability (S)	
Elective Courses	
Choose a minimum of 6 units from the following: CHEM 100 - Introduction to College Chemistry Units: 3; G.E./G.R. Area	. FA FC
CHEW 100 - Introduction to conege chemistry offics. 3 , G.E./G.N. Area	a. JA, JC
	a: 5A. 50
CHEM 110 - General Chemistry for Engineering Units: 3 ; G.E./G.R. Are	, , ,
	,
CHEM 111 - General Chemistry I Units: 5 ; G.E./G.R. Area: 5A, 5C	
CHEM 111 - General Chemistry I Units: 5 ; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5	
CHEM 111 - General Chemistry I Units: 5 ; G.E./G.R. Area: 5A, 5C	
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A	
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A;	
CHEM 111 - General Chemistry I Units: 5 ; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4 ; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3 ; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3 ; G.E./G.R. Area: 5A; Sustainability	
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A, 5C PHYS 105 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainabilit PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainabilit PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5A	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 105 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5A	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: 5C	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: 5C	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: SA, SC CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, SC PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 105 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, SC  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 351 - Quantum Mechanics II Units: 3 PHYS 360 - Selected Topics Units: 1	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 105 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 360 - Selected Topics Units: 1 PHYS 360 - Selected Topics Units: 1 PHYS 350 - Selected Topics Units: 1 PHYS 351 - Electromagnetism II Units: 3	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 351 - Quantum Mechanics II Units: 3 PHYS 361 - Selected Topics Units: 1 PHYS 461 - Setrophysics Units: 3 PHYS 360 - Selected Topics Units: 3	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: SA, SC CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: SA, SC PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: SA PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: SA PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: SA, Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: SA, Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: SA, SC  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: SA ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: SC PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 351 - Quantum Mechanics II Units: 3 PHYS 350 - Selected Topics Units: 3 PHYS 451 - Electromagnetism II Units: 3 PHYS 461 - Astrophysics Units: 3 PHYS 461 - Astrophysics Units: 3 PHYS 461 - Atomic Physics Units: 3	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 361 - Selected Topics Units: 1 PHYS 360 - Selected Topics Units: 1 PHYS 361 - Selected Topics Units: 3 PHYS 461 - Attomic Physics Units: 3 PHYS 461 - Attomic Physics Units: 3 PHYS 462 - Solid State Physics Units: 3 PHYS 462 - Solid State Physics Units: 3	ty
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 106 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 361 - Quantum Mechanics II Units: 3 PHYS 461 - Astronic Physics Units: 3 PHYS 461 - Astroic Physics Units: 3 PHYS 462 - Solid State Physics Units: 3 PHYS 463 - Particle Physics Units: 3 PHYS 463 - Particle Physics Units: 3 PHYS 463 - Particle Physics Units: 3	ty : 5A;
CHEM 111 - General Chemistry I Units: 5; G.E./G.R. Area: SA, SC CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4; G.E./G.R. Area: 5A, SC PHYS 105 - How Things Work Units: 3; G.E./G.R. Area: 5A PHYS 105 - Physics for Future Leaders Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3; G.E./G.R. Area: 5A, SC  ASTR 138 - Descriptive Astronomy Units: 3; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3; G.E./G.R. Area: UD-Area 5  ASTR 338 - The Cosmos Units: 3; G.E./G.R. Area: UD-Area 5 ASTR 339 - Stars and Galaxies Units: 3; G.E./G.R. Area: UD-Area 5 PHYS 351 - Quantum Mechanics II Units: 3 PHYS 361 - Selected Topics Units: 1 PHYS 461 - Astronhysics Units: 3 PHYS 462 - Solid State Physics Units: 3 PHYS 463 - Particle Physics Units: 3 PHYS 463 - Particle Physics Units: 3 PHYS 463 - Advanced Laboratory III: Modeling, Design, and Analysis U	ty : 5A;
CHEM 111 - General Chemistry I Units: 5 ; G.E./G.R. Area: 5A, 5C CHEM 112 - General Chemistry II Units: 5 CS 100 - Programming for Everyone Units: 3 CS 101 - Computer Science I Units: 4 PHYS 104 - Musical Acoustics Units: 4 ; G.E./G.R. Area: 5A, 5C PHYS 105 - How Things Work Units: 3 ; G.E./G.R. Area: 5A PHYS 105 - How Things Work Units: 3 ; G.E./G.R. Area: 5A PHYS 107 - Science of Energy Units: 3 ; G.E./G.R. Area: 5A; Sustainability PHYS 107 - Science of Energy Units: 3 ; G.E./G.R. Area: 5A; Sustainability PHYS 108 - Astronomy of Indigenous Cultures Units: 3 ; G.E./G.R. Area Diversity  PHYS 115 - Elementary Physics Units: 3 ; G.E./G.R. Area: 5A, 5C  ASTR 138 - Descriptive Astronomy Units: 3 ; G.E./G.R. Area: 5A ASTR 139 - Astronomy Laboratory Units: 1 ; G.E./G.R. Area: 5C PHYS 303 - Biophysics Units: 3 ; G.E./G.R. Area: UD-Area 5  ASTR 337 - Extrasolar Planets Units: 3 ; G.E./G.R. Area: UD-Area 5  ASTR 339 - Stars and Galaxies Units: 3 ; G.E./G.R. Area: UD-Area 5 PHYS 361 - Quantum Mechanics II Units: 3 PHYS 360 - Selected Topics Units: 1 PHYS 461 - Electromagnetism II Units: 3 PHYS 461 - Atomic Physics Units: 3 PHYS 462 - Solid State Physics Units: 3 PHYS 462 - Solid State Physics Units: 3	ty : 5A;

upper division (includes 9 units upper division GE)