



DEGREE WORKSHEET FOR:
BS Biological Sciences, Cell and Molecular
Emphasis (NSF-BIOTA)
2011-2012 Catalog
Degree Requirement – 120 credits

YEAR 1- FALL (14 credits)		YEAR 1- SPRING (14 credits)	
BIO 102 Success in Biology I ⁵	1 credit	BIO 103 Success in Biology II ⁵	1 credit
BIO 110 Principles of Biology (LAC Area 6) (F,S)	4 credits	BIO 111 Survey of Organismal Biology (F,S)	4 credits
BIO 112 Principles of Biology Applications ⁵ (F,S)	1 credit	BIO 114 Applications of Organismal Biology ⁵ (F,S)	1 credit
CHEM 111 Principles of Chemistry I (LAC Area 6) (F,S)	5 credits	SCI 291 Scientific Writing (LAC Area 1b) (F,S)	3 credits
Liberal Arts Core ¹ (ENG 122 Area 1a)	3 credits	CHEM 112 Principles of Chemistry II (F,S)	5 credits
YEAR 2- FALL (16 credits)		YEAR 2-SPRING (14 credits)	
BIO 210 Cell Biology (F,S)	3 credits	BIO 220 Genetics (F, S)	4 credits
BIO 211 Cell Biology Applications ⁵ (F,S)	1 credit	BIO 221 Genetics Applications ⁵ (F, S)	1 credit
CHEM 331 Organic Chemistry I (F)	5 credits	CHEM 332 Organic Chemistry II (S)	5 credits
STAT 150 Intro to Statistical Analysis (LAC Area 2)	3 credits	MATH 171 Calc I for Life Sciences (LAC Elective)(F,S)	4 credits
Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	4 credits		
YEAR 3- FALL (15-19 credits)		YEAR 3- SPRING (15-16 credits)	
PHYS 220 General Physics I (LAC Area 6) (F)	5 credits	BIO 351 Microbiology (S)	4 credits
University Electives	4 credits	PHYS 221 General Physics II ² (S)	5 credits
CHEM 481 General Biochemistry I OR CHEM 381 Principles of Biochemistry ⁴ (F)	3-4 credits	Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	3 credits
Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	3 credits	Physiology ⁴	0-4 crs
Physiology ⁴	0-4 crs		
YEAR 4- FALL (16 credits)		YEAR 4- SPRING (15 credits)	
BIO 425 Molecular Genetics (F)	3 credits	BIO 450 Cell Physiology (S)	3 credits
BIO 360 Ecology (F, Su)	4 credits	BIO 442 Molecular and Cellular Laboratory	2 credits
BIO>300 Upper Division Elective in Major ³	4 credits	BIO 465 Evolution (S, Su)	3 credits
University Electives	5 credits	BIO>300 Upper Division Elective in Major ³	3 credits
		Capstone Professional Experience ⁶	1 credit
		Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	3 credits
		School of Biological Sciences Exit Exam ⁷	

(F) = offered in Fall (S) = offered in Spring (SU) = offered in summer

Admission Requirement – No separate admission requirement.

Minor Required – No Minor required.

Notes – see page 2.

BS Biological Sciences – Cell and Molecular Emphasis (NSF-BIOTA) (cont.)

Contact Information – School of Biological Sciences

Ross Hall Room 2480, (970) 351-2921

School Web Page: <http://www.unco.edu/nhs/biology>

This worksheet is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 40 credit hours in courses designated as Liberal Arts Core and meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on any additional graduation requirements.**

Notes

- ¹Liberal Arts Core courses can be taken any semester. It is strongly suggested that they be evenly distributed over the entire 4 years of study rather than concentrated in the first 2 years. **NOTE: Be certain to select courses from Areas 7 and 8 that also count for Areas 3, 4 or 5.**
- ²Either PHYS 220/221 or PHYS 240/241 can be taken. PHYS 240/241 can be substituted but both MATH 131 and MATH 132 are required.
- ³Elective Major Courses- Must take at least 13 credits from BIO courses level 300 or higher. Course credit ranges from 1-4.
- ⁴Either BIO 350 Human Physiology or BIO 354 Plant Physiology or BIO 552 and 553 are required.
- ⁵BIO 102, 103, 112, 114, 211 and 221 will count as Biological Science Advanced Study category.
- Capstone Professional Experience requirement can be met by completing a minimum of 1 credit hour from the following course options: BIO 422, BIO 492, or BIO 494.
- All Biology Majors must take the School of Biological Sciences Exit Exam during the last semester of Senior Year. (Excluding summer). **Make an appointment at Testing Center.**
- All Biology Majors are required to have a minimum of a 2.0 GPA in all BIO prefix courses taken to meet their major requirements.
- Students receiving "D" or "F" in BIO courses taken to meet their major requirements must repeat the courses.
- Some Upper Division Biology courses are offered every other year. Check with your advisor to find out when they are offered.
- If CHEM 381 is completed in lieu of CHEM 481, the number of Advanced Study credits required will be reduced by (1). If BIO 552 and BIO 553 are completed for the Physiology requirement, the number of Advanced Study credits required will be reduced by (2).
- Remember to get a graduation check in Carter Hall (Room 3002) after 90 semester hours.
- A maximum of 6 credits total of BIO 422, 492, 494, 495, 585, and 592 can count toward the Biological Advanced study category.

Minimum entrance requirements for University of Colorado Medical School (as of 5/10)

Check other schools in which you are interested for their current requirements.

- One year of biology with lab (8 semester hours)
- One year of general chemistry with lab (8 semester hours)
- One year of organic chemistry with lab (8 semester hours)
- One year of physics with lab (8 semester hours)
- Six credits of math (Algebra and above)
- Six credits of English (Composition and English Literature)

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