

Academic Advising Spring 2017



UNIVERSITY OF
NORTHERN COLORADO

School of Biological Sciences

Registration Preparation

- **This presentation should help you prepare for your meeting with an advisor.**
- **Contents:**
 - Recommended course sequences
 - What to do if a course is full (i.e. waitlists)
 - Math progressions
 - Advanced biology electives
 - Opportunities for biology majors
 - Pre-health majors
 - Student athletes
 - Secondary Teaching majors
 - Registration schedule

Four-year Plan

- The following pages show the first three years of each of the 2016-2017 Biology Degree emphases. A link to the complete four-year plan is at the bottom of each page.
- *Remember that these 4-YR Plans are merely one path through your degree. Depending on what you bring in from other schools or other unique scenarios, your own personal plan may be different.*

Pre-Health and Biomedical

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (15-16 credits)	
ENG 122 College Composition (LAC Area 1a) (F,S)	3 credits	BIO 111 Survey of Organismal Biology (F,S)	4 credits
BIO 110 Principles of Biology (LAC Area 6) (F,S)	4 credits	CHEM 112 Principles of Chemistry II (F,S)	5 credits
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 (Areas 3, 4, 5, 7, or 8)	3 credits	Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8) OR	3 credits
		MATH 171 Calc I for Life Sciences (LAC Area 2) (F,S)	4 credits
YEAR 2- FALL (14 credits)		YEAR 2-SPRING (15-16 credits)	
BIO 210 Cell Biology (F, S)	3 credits	BIO 220 Genetics (F,S)	4 credits
CHEM 331 Organic Chemistry I (F)	5 credits	CHEM 332 Organic Chemistry II (S)	5 credits
STAT 150 Intro to Stat Analysis (LAC Area 2) (F,S)	3 credits	BIO 300+ Upper Division Elective in Major ³	3 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) OR	3 credits
		MATH 171 Calc I for Life Sciences (LAC Area 2) (F,S)	4 credits
YEAR 3- FALL (16 credits)		YEAR 3- SPRING (15-16 credits)	
BIO 300+ Upper Division Elective in Major ³	4 credits	BIO 351 Microbiology (S)	4 credits
PHYS 220 General Physics I ² (LAC Area 6) (F)	5 credits	PHYS 221 General Physics II ² (S)	5 credits
*University Wide Electives	4 credits	BIO 300+ Upper Division Elective in Major ³	3 credits
BIO 341 Human Anatomy OR BIO 552 Mammalian Physiology I ⁴ (F)	3 credits	BIO 350 Human Physiology OR BIO 553 Mammalian Physiology II ⁴ (S)	3-4 credits

http://www.unco.edu/regrec/PDF%20Forms/FourYearPlans/2016_2017/Biology_PreHeathBioMed_1617.pdf

Cell and Molecular

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (16 credits)	
ENG 122 College Composition (LAC Area 1a)	3 credits	BIO 111 Survey of Organismal Biology (F,S)	4 credits
BIO 110 Principles of Biology (LAC Area 6) (F,S)	4 credits	CHEM 112/112L Principles of Chemistry II (F,S)	4/1credits
CHEM 111/111L Principles of Chemistry I (LAC Area 6) (F,S)	4/1 credits	SCI 291 Scientific Writing (LAC Area 1b) (F,S)	3 credits
Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	3 credits	MATH 171 Calc I for Life Sci (LAC Area 2) (F.S)	4 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
PHYS 220 General Physics I ² (LAC Area 6) (F)	5 credits	PHYS 221 General Physics II ² (S)	5 credits
CHEM 331/331L Organic Chemistry I (F)	4/1 credits	CHEM 332/332L Organic Chemistry II (S)	4/1credits
STAT 150 Intro. to Statistical Analysis (LAC Area 2)	3 credits		
YEAR 3- FALL (16-18 credits)		YEAR 3- SPRING (13-16 credits)	
BIO 360 Ecology (F, Su)	4 credits	BIO 351 Microbiology (S)	4 credits
University Wide Electives	3 credits	BIO 300+ Upper Division Elective in Major ³	3 credits
CHEM 481 General Biochemistry I OR CHEM 381/381L Principles of Biochemistry ⁴ (F)	3-4 credits	Physiology ⁵	0-3 credits
Physiology ⁵	3-4 credits	Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	6 credits
Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	3 credits		

[http://www.unco.edu/regrec/PDF%20Forms/FourYearPlans/2016 2017/Biology_CellMolecular_1617.pdf](http://www.unco.edu/regrec/PDF%20Forms/FourYearPlans/2016%202017/Biology_CellMolecular_1617.pdf)

Ecology and Evolutionary

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (15-16 credits)	
ENG 122 College Composition (LAC Area 1a)	3 credits	BIO 111 Survey of Organismal Biology (F,S)	4 credits
BIO 110 Principles of Biology (LAC Area 6) (F,S)	4 credits	CHEM 112/112L Principles of Chemistry II (F,S)	4/1credits
CHEM 111/111L Principles of Chemistry I (LAC Area 6) (F,S)	4/1 credits	SCI 291 Scientific Writing (LAC Area 1b) (F,S)	3 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) OR	3 credits
		MATH 171 Calc I for Life Sciences (LAC Area 2) (F,S)	4 credits
YEAR 2- FALL (13-15 credits)		YEAR 2-SPRING (15-16 credits)	
BIO 210 Cell Biology (F,S)	3 credits	BIO 220 Genetics (F,S)	4 credits
STAT 150 Intro to Statistical Analysis (LAC Area 2)	3 credits	University Wide electives	4 credits
CHEM 331/331L Organic Chemistry I or CHEM 231 Prin. of Organic Chemistry ⁸ (F,S)	3-5 credits	BIO 300 Upper Division Elective in Major ³	4 credits
BIO 360 Ecology (F, Su)	4 credits	Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8) OR	3 credits
		MATH 171 Calc I for Life Sciences (LAC Area 2) (F,S)	4 credits
YEAR 3- FALL (12-16 credits)		YEAR 3- SPRING (12-16 credits)	
Liberal Arts Core ¹ (Areas 3, 4, 5, 7, or 8)	4 credits	BIO 351 Microbiology (S)	4 credits
PHYS 220 General Physics I ² (LAC Area 6) (F, Su)	5 credits	PHYS 221 General Physics II ² (S, Su)	5 credits
ENST 265 Conservation of Natural Resources (F)	3 credits	BIO 300+ Upper Division Elective in Major ³	3 credits
Physiology ⁴	0-4 credits	Physiology ⁴	0-4 credits

http://www.unco.edu/regrec/PDF%20Forms/FourYearPlans/2016_2017/Biology_EcologyEvol_1617.pdf

Secondary Science Teaching

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (17 credits)	
ENG 122 College Composition (LAC Area 1a)	3 credits	BIO 111 Survey of Organismal Biology (F,S)	4 credits
BIO 110 Principles of Biology (LAC Area 6) (F,S)	4 credits	CHEM 281/281L Fundamentals of Biochem (LAC Area 6) (S)	4/1credits
CHEM 111/111L Principles of Chemistry I (LAC Area 6) (F,S)	4/1credits	SCI 291 Scientific Writing (LAC Area 1b) (F,S)	3 credits
Liberal Arts Core ¹	3 credits	STAT 150 Intro to Statistical Analysis (LAC Area 2) (F,S)	3 credits
		EDFE 110 Initial PTEP Application ⁵	0 credits
		Liberal Arts Core ¹	3 credits
YEAR 2- FALL (17 credits)		YEAR 2-SPRING (16 credits)	
BIO 210 Cell Biology (F,S)	3 credits	BIO 220 Genetics (F,S) or BIO 350 Human Phys (S)	4 credits
STEP 161 Observation/Analysis Sec. Teaching ²	2 credits	GEOL 201 Physical Geology	4 credits
EDF 366 Conceptions of Schooling ²	3 credits	EDSE 360 Exceptional Learner ²	3 credits
Liberal Arts Core ¹	9 credits	PSY 349 Educational Psychology ²	3 credits
		STEP 262 Observation/Analysis in Sec Teaching II ²	2 credits
YEAR 3- FALL (16 credits)		YEAR 3- SPRING (15 credits)	
AST 100 or MET 205 or OCN 302	4 credits	BIO 351 Microbiology (S)	4 credits
BIO 354 Plant Phys ³ (F) or BIO 220 Genetics (F,S)	4 credits	BIO 465 Evolution (S, Su)	3 credits
PHYS 220 General Physics I (LAC Area 6) (F)	5 credits	PHYS 221 General Physics II (S)	5 credits
Environmental Studies or Science electives ⁴	3 credits	SCED 440 Strategies in Teaching Secondary Sciences	1 credit
		Environmental Studies or Science Electives ⁴	2 credits
		EDFE 120 Full Admission to PTEP Application ⁵	0 credits

http://www.unco.edu/regrec/PDF%20Forms/FourYearPlans/2016_2017/Biology_SecScienceTeaching_1617.pdf

Prerequisite flow charts

- Many of the core biology (and other science) courses need to be taken in a particular order since some are prerequisites for later classes
- For each of the emphasis areas, there is a prerequisite flow chart. See:
- <http://www.unco.edu/nhs/biology/current-students/prerequisite-charts.aspx>

Full Courses

- If you are unable to get into a course because it is full, sign up for the waitlist.
 - Waitlist is accessed by putting course CRN in box at bottom of add/drop page.
 - If spot opens, you will be notified through your bearmail and have 24 hours to register before spot goes to next person.
- Courses with labs will not have a waitlist.
Contact the main office to request to be on the waitlist.

Math Progression

Algebra → Trigonometry → Calculus

Math 124 → Math 125 → Math 171

- Math 171 is required for some of the emphasis. If taking prereq courses for Math 171, take the next course in the series.
- You must take the Math Placement exam, ALEKS, in order to insure you are in the appropriate class. A link for the exam can be found on the Math Department homepage.

Biology Electives

- Start looking at the electives you would like to take in the future:
- <http://www.unco.edu/nhs/biology/documents/coursecalendar.pdf>
- Helpful handouts can be found by going to Biology's main page, then under the 'Current Students' drop down menu go to 'Academic Advising'. On the right side of the 'Academic Advising' page, there are links to useful program/course information.

Opportunities in The School of Biological Science

- Undergraduate Research
- Teaching Assistant
- Organizations
 - <http://www.unco.edu/nhs/biology/current-students/#clubs>
 - Pre-health Club
 - Tri-Beta National Biology Honors Society
 - Biology Student Association

Undergraduate Research

- Opportunity to become active in your future profession while still in college
- Beneficial when applying to advanced schooling, such as Med or Graduate school
- Be a part of research that will be presented and/or published
- Networking opportunities

Undergraduate Research

- Can count towards >300 level credits when taken as Bio 422 (Maximum of 3 credits). In addition, 1 additional credit of BIO 422 can go towards your required capstone.
- To get involved, look at different Bio Faculty members profiles on the Biology web page. Contact the faculty member by email or in person and ask about joining their lab.

Undergraduate Teaching Assistant

- If you are interested in being a teaching assistant in a course, there are couple of options.
 - BIO 455 Introductory Biology Curriculum and Instruction for BIO 110 labs
 - BIO 494 -- Talk to the professor or lab supervisor for the class you are interested in being a teaching assistant.

Pre-Health

- Read pre-health website on Biology's webpage (soon to be revamped)
 - <http://www.unco.edu/nhs/prehealth/>
- Be sure to see Dr. Fisher or Frank Skufca during second semester of freshman year to make sure you are getting all necessary requirements for your specific goals
- Focus on good grades
- For Med School, take PSY 120 and SOC 100 – Is on MCAT

Student Athletes

- Please meet with Dr. Patrick Burns to have him sign off on progress form.

Secondary Science Teaching

- Please be sure to meet with Dr. Rob Reinsvold to make sure you are completing the necessary requirements.

Registration Schedule

Undergraduate Students	
Undergraduates <u>do</u> require an Alternate PIN number that will be issued by your academic advisor. Contact your academic advisor for an advising appointment.	
<i>*Registration dates are based on EARNED credit hours and DO NOT include hours that you are <u>currently</u> enrolled in.</i>	
<u>Earned</u> Credit Hours	Registration Date
105 and above	April 4
90-104	April 5
75-89	April 6
60-74	April 7
45-59	April 10
30-44	April 11
22-29	April 12
15-21	April 13
7-14	April 14
1-6	April 17
0	April 18
Aims Co-op, High School Concurrent and Senior Citizens (must contact the Registrar's office to register)	April 24

Advisors

- The advising appointment you are signing up for is for Fall 2017 registration. Due to time restraints, if you would like to discuss more with your advisor, it is recommended you set up an additional appointment.
- If you still have questions contact any of us:
 - Robert.Reinsvold@unco.edu
 - Frank.Skufca@unco.edu
 - Ann.Hawkinson@unco.edu
 - Judith.Leatherman@unco.edu

Other Important Resources

- **Academic Support and Advising**
 - <http://www.unco.edu/asa/>
 - (970) 351-1391
- **Registrar**
 - <http://www.unco.edu/regrec/>
 - (970) 351-2231
- **Dean of Students**
 - <http://www.unco.edu/dean-of-students/>
 - (970) 351-2001
- **Counseling Center**
 - <http://www.unco.edu/counseling-center/>
 - (970) 351-2496
- **Student Support**
 - <http://www.unco.edu/admissions/studentssupport/?help>
 - Career Services, CHE, Cultural Centers - Marcus Garvey, Asian/Pacific American, Native American, César Chávez, GLBTA, Women's Resource, Veterans Services