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MOLECULAR AND BIOMEDICAL BIOLOGY, BACHELOR OF SCIENCE

To obtain a BS in Molecular and Biomedical Biology (MBB), a student must fulfill university, college, and department requirements. Students choose one of two tracks: Molecular Biotechnology or Biomedical Humanities.

Molecular and Biomedical Biology, Bachelor of Science - Molecular Biotechnology Requirements

C	ode	Title Cre	dits
G	ENERAL EDUCATIO	ON REQUIREMENTS - 46 Hours	
Re	equired		
М	inimum of "C-"requi	red	
Fu	Indamental Acade	emic Skills	15
	ENGL 1150	ENGLISH COMPOSITION I	
	ENGL 1160	ENGLISH COMPOSITION II	
	Writing in the Disci	pline Course	
	CMST 1110	PUBLIC SPEAKING FUNDS	
	or CMST 2120	ARGUMENTATION AND DEBATE	
	MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
	or MATH 1100	DATA LITERACY AND VISUALIZATION	
	or MATH 1130	QUANTITATIVE LITERACY	
	or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
	or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
	or STAT 1100	DATA LITERACY AND VISUALIZATION	
	or STAT 1530	ELEMENTARY STATISTICS	
Di	stribution Require	ements	31
	Natural Science - Fr 7 hrs	rom two disciplines and at least one lab -	
	Social Science - Fro	m two disciplines - 9 hrs	
	Humanities and Fin	e Arts - From two disciplines- 9 hrs	
	Global Diversity - 3	hrs	
	US Diversity - 3 hrs		
Μ	AJOR REQUIREM	ENTS	
**	Course will satisfy U	NO's General Education requirement	
^ C	Course requires pre-r	requisite(s)	
M Bi	olecular and Bion otechnology - 70-3	nedical Biology Major, Molecular 73 Hours Required	
Re	equirements		
Th de 18 re	e Bachelor of Scienc gree requires 36-45 credits must be 30 quirements are belo	e in Molecular and Biomedical Biology credits of biology courses of which 00-4000 level courses. The course w.	
A	l of the following:		20
	BIOL 1450	BIOLOGY I (** ^)	
	BIOL 1750	BIOLOGY II (^)	
	BIOL 2140	GENETICS ([^])	
	BIOL 3020	MOLECULAR BIOLOGY OF THE CELL (^)	
	BIOL 3240	INTRODUCTION TO IMMUNOLOGY (^)	

Biochemistry Lectu	re and Lab Select one of the following	4
BIOL/CHEM 4650	BIOCHEMISTRY I (^ with the following lab)	
BIOL/CHEM 4654	BIOCHEMISTRY I LABORATORY (^)	
or		
CHEM 4610	BIOCHEMISTRY OF METABOLISM (^)	
Select three of the t	following, at least two must be lab-	10-13
BIOL 4130	MOLECI II AR GENETICS (^ lab-based)	
BIOL 4140	CELLULAR BIOLOGY (^ lab-based)	
BIOL 4450	VIROLOGY	
& BIOL 4454	and VIROLOGY LABORATORY (^)	
BIOL 4460	COMPARATIVE IMMUNOLOGY (^ lab- based)	
BIOL 4640 & BIOL 4644	MOLECULAR MICROBIOLOGY and MOLECULAR MICROBIOLOGY LAB (^)	
BIOL 4810	BEHAVIORAL GENETICS (^ lab-based)	
BIOL 4850 & BIOL 4830	DEVELOPMENTAL BIOLOGY and DEVELOPMENTAL GENETICS (^ lab- based. BIOL 4850 concurrent or prior to BIOL 4830)	
BIOL 4860	COMPARATIVE GENOMICS (^)	
BIOL/CHEM 4660	BIOCHEMISTRY II (^ with the following lab)	
BIOL 4664 & CHEM 4664	BIOCHEMISTRY II LABORATORY and BIOCHEMISTRY II LABORATORY (^)	
BIOL 4760	GENOME TECHNOLOGY AND ANALYSIS (^)	
BIOL/NEUR 4870	MOLECULAR AND CELLULAR NEUROBIOLOGY (^)	
Required Chemistry	y and Physics Sequence	21
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY (** ^)	
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY (^)	
CHEM 2250	ORGANIC CHEMISTRY I (^)	
CHEM 2260	ORGANIC CHEMISTRY II (^)	
CHEM 2274	ORGANIC CHEMISTRY LABORATORY (^)	
PHYS 1110	GENERAL PHYSICS I (** ^)	
Mathematics	GENERAL FITTICS LABORATORTI (****)	
Two courses in mat	hematics or statistics are reauired	6
and must include o	ne of the following calculus courses	
MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES (^)	
MATH 1940	CALCULUS FOR BIOMEDICINE (^)	
MATH 1950	CALCULUS I (^)	
Molecular Biotechr	nology Focus Area	
This focus area will po medical, business, or Students will have abo focus area.	osition students to excel in graduate, law schools, as well as industry careers. out 10 hours of free electives with this	
Internship		3
BIOL 4550	MOLECULAR AND BIOMEDICAL BIOLOGY INTERNSHIP (^)	
Six hours in Inform	ation, Innovation, and Development	6

BIOI 2000	FOUNDATIONS OF BIOINFORMATICS (^)
BIOI 3000	APPLIED BIOINFORMATICS (^)
ACMP 1110	INTRODUCTION TO IT INNOVATION
ACMP 2220	CREATIVITY AND INNOVATION
ENTR 3710	ENTREPRENEURIAL FOUNDATIONS (^)
ENTR 4740	TECHNOLGY AND INNOVATION MANAGEMENT (^)
ACCT 2010	PRINCIPLES OF ACCOUNTING I (^)
MGMT 3490	MANAGING PEOPLE AND ORGANIZATIONS (^)
STAT 4410	INTRODUCTION TO DATA SCIENCE (^)

Writing in the Discipline

All students are required to take a writing in the discipline course within their major. For the Molecular and Biomedical Biology major, the writing in the discipline requirement can be fulfilled by completing a sequence of approved biology courses at UNO that incorporate discipline specific writing as part of their requirements. To satisfy the requirement for the writing in the discipline course students must complete BIOL 1450 AND BIOL 1750, two courses from BIOL 2140, BIOL 3020 and BIOL 3340 and two additional 3000/4000 level courses that are approved as meeting the writing requirement by the Department of Biology. Only courses taken at UNO and after January 1, 2010 can be applied to this requirement. Students not meeting the writing requirement through this sequence of courses will fulfill the writing requirement by completing BIOL 3150, ENGL 3980, or another college-approved advanced writing course. College Breadth (choose one option)

conege Breddin (choose one option)	13-30+
Option 1: Complete any UNO minor or undergraduate certificate - 15+ hours	
Option 2: Additional General Education Requirements - 19+ hours	
Additional quantitative literacy - 3 hours	
Additional Social Science Gen. Ed. from 3rd Discipline - 3 hours	
Additional Humanities Gen. Ed. from 3rd Discipline - 3 hours	
HIST 1000 and HIST 1010 - 6 hours	
Additional Nat. and Physical Science w/ Lab - 4-5 hours	
Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)	
Bachelor of Science Cognate Requirement	0-15
See advisor	
ELECTIVES	
Fleative house no versioned to versible total of 120 house	

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Elective hours as required to reach a total of 120 hours

Molecular and Biomedical Biology, Bachelor of Science - Biomedical Humanities Requirements

C	ode	Title	Credits
Gi Re	ENERAL EDUCATIO	IN REQUIREMENTS - 46 Hours	
М	inimum of "C-"requi	red	
Fu	undamental Acade	mic Skills	15
	ENGL 1150	ENGLISH COMPOSITION I	
	ENGL 1160	ENGLISH COMPOSITION II	

	Writing in the Disci	pline Course	
	CMST 1110	PUBLIC SPEAKING FUNDS	
	or CMST 2120	ARGUMENTATION AND DEBATE	
	MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
	or MATH 1100	DATA LITERACY AND VISUALIZATION	
	or MATH 1130	QUANTITATIVE LITERACY	
	or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
	or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
	or STAT 1100	DATA LITERACY AND VISUALIZATION	
	or STAT 1530	ELEMENTARY STATISTICS	
D	istribution Require	ements	31
	Natural Science - Fr 7 hrs	rom two disciplines and at least one lab -	
	Social Science - Fro	m two disciplines - 9 hrs	
	Humanities and Fin	e Arts - From two disciplines- 9 hrs	
	Global Diversity 3 h	irs	
	US Diversity 3 hrs		
M	AJOR REQUIREM	ENTS	
**	Course will satisfy U	NO's General Education requirement	
`C	Course requires pre-r	equisite(s)	
M	olecular and Bion	nedical Biology Major, Biomedical	
	umanities - 76-79 l	Hours Required	
R(equirements		
lh de 1 0	e Bachelor of Science egree requires 36-45 Peredite must be 300	e in Molecular and Biomedical Biology credits of biology courses of which	
re	auirements are belo	w.	
R	equired Courses		20
	BIOI 1450		
	BIOL 1750		
	BIOL 2140	GENETICS (^)	
	BIOL 3020		
	BIOL 3240		
R	iochemistry Lectur	re and I ab Select one of the following	4
	BIOL/CHEM 4650	BIOCHEMISTRY I (^ with the following lab)	-
	BIOL/CHEM 4654	BIOCHEMISTRY I LABORATORY (^)	
С	R		
	CHEM 4610	BIOCHEMISTRY OF METABOLISM (^)	
5	elect three of the f	ollowing, at least two must be lab- 1	0-13
b	ased		
	BIOL 4130	MOLECULAR GENETICS (^ lab-based)	
	BIOL 4140	CELLULAR BIOLOGY (^ lab-based)	
	BIOL 4450	VIROLOGY	
	& BIOL 4454	and VIROLOGY LABORATORY (^)	
	BIOL 4460	COMPARATIVE IMMUNOLOGY (^ lab- based)	
	BIOL 4640 & BIOL 4644	MOLECULAR MICROBIOLOGY and MOLECULAR MICROBIOLOGY LAB (^)	
	BIOL 4810	BEHAVIORAL GENETICS (^)	
	BIOL 4850	DEVELOPMENTAL BIOLOGY	
	& BIOL 4830	and DEVELOPMENTAL GENETICS (^ BIOL 4850 concurrent or prior to BIOL 4830)	
	BIOI 4860	COMPARATIVE GENOMICS (^)	
	2.02 1000		

BI	IOL/CHEM 4660	BIOCHEMISTRY II (^ must take BIOL 4664)	
BI	IOL/CHEM 4664	BIOCHEMISTRY II LABORATORY (^ must take with BIOL 4660)	
BI	IOL 4760	GENOME TECHNOLOGY AND ANALYSIS (^)	
BI &	IOL 4870 NEUR 4870	MOLECULAR AND CELLULAR NEUROBIOLOGY and MOLECULAR AND CELLULAR NEUROBIOLOGY (^)	
Req	uired Chemistry	and Physics Sequence	2
Cl &	HEM 1180 CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY (** ^)	
C &	HEM 1190 CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY (^)	
C	HEM 2250	ORGANIC CHEMISTRY I (^)	
C	HEM 2260	ORGANIC CHEMISTRY II (^)	
C	HEM 2274	ORGANIC CHEMISTRY LABORATORY (^)	
Pł	HYS 1110	GENERAL PHYSICS I (** ^)	
	or PHYS 2110	GENERAL PHYSICS I - CALCULUS LEVEL	
Pł	HYS 1154	GENERAL PHYSICS LABORATORY I (** ^)	
Mat	hematics		
Two and	courses in math must include or	nematics or statistics are required ne of the following calculus courses	
М	IATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES (Requires MATH 1320 or MATH 1300 ^)	
М	IATH 1940	CALCULUS FOR BIOMEDICINE (^)	
М	IATH 1950	CALCULUS I (^)	

Biomedical Humanities Focus Area

This is a path to prepare students for success in healthcare and affiliated training programs. Students will have approximately 4 hours of free electives with this track. Requires completion of minor in Medical Humanities. Nine credits must be in upper division (3000 or higher) courses.

Writing in the Discipline

All students are required to take a writing in the discipline course within their major. For the Molecular and Biomedical Biology major, the writing in the discipline requirement can be fulfilled by completing a sequence of approved biology courses at UNO that incorporate discipline specific writing as part of their requirements. To satisfy the requirement for the writing in the discipline course students must complete BIOL 1450 AND BIOL 1750, two courses from BIOL 2140, BIOL 3020 and BIOL 3340 and two additional 3000/4000 level courses that are approved as meeting the writing requirement by the Department of Biology. Only courses taken at UNO and after January 1, 2010 can be applied to this requirement. Students not meeting the writing requirement through this sequence of courses will fulfill the writing requirement by completing BIOL 3150, ENGL 3980, or another college-approved advanced writing course.

College Breadth (choose one option) - 15-30+ Hours Requried

Option 1: Complete any UNO minor or undergraduate certificate - 15+ hours

Option 2: Additional General Education Requirements - 19+ hours

Additional quantitative literacy - 3 hours

Additional Social Science Gen. Ed. from 3rd Discipline - 3 hours

Additional Humanities Gen. Ed. from 3rd Discipline - 3 hours HIST 1000 and HIST 1010 - 6 hours Additional Nat. and Physical Science w/ Lab - 4-5 hours

Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)

Bachelor of Science Cognate Requirement - 0-15 Hours Required

See advisor

ELECTIVES

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Elective hours as required to reach a total of 120 hours

Molecular and Biomedical Biology, Bachelor of Science -Molecular Biotechnology Four Year Plan

Freshman Fall Credits ENGL 1150 **ENGLISH COMPOSITION I** 3 **CMST 1110** PUBLIC SPEAKING FUNDS 3 or CMST 2120 or ARGUMENTATION AND DEBATE **CHEM 1180 GENERAL CHEMISTRY I** 4 & CHEM 1184 and GENERAL CHEMISTRY I LABORATORY **BIOL 1450 BIOLOGY I** 5 Credits 15 Spring ENGL 1160 **ENGLISH COMPOSITION II** 3 **CHEM 1190 GENERAL CHEMISTRY II** 4 & CHEM 1194 and GENERAL CHEMISTRY II LABORATORY **BIOL 1750 BIOLOGY II** 5 Humanities/Fine Arts Course 3 Credits 15 Sophomore Fall 3-5 Calculus Course* **CHEM 2250 ORGANIC CHEMISTRY I** 3 **BIOL 2140** GENETICS 4 3 Social Sciences US Diversity if 3 credit Calculus course was taken. 3 *Calculus options include MATH 1930, MATH 1940, or MATH 1950. Prerequisites vary. Credits 16-18 Spring **CHEM 2260 ORGANIC CHEMISTRY II** 5 & CHEM 2274 and ORGANIC CHEMISTRY LABORATORY **BIOL 3020** MOLECULAR BIOLOGY OF THE CELL 3 Math or Statistics 3 Humanities/Fine Arts 3 Credits 14 Junior Fall **CHEM 4650 BIOCHEMISTRY I** 4 & CHEM 4654 and BIOCHEMISTRY I LABORATORY **BIOL 3240** INTRODUCTION TO IMMUNOLOGY 3 3 Humanities/Fine Arts***

Social Sciences		3	Course towards Mir	or/2nd Major or Elective^
Course towards N	finor/2nd Major or Elective [^]	3	*Approved Uppe	r Level BIOL courses incluc
***HFA course	must be in a 2nd field.		BIOL 4140, BIOL	4450/BIOL 4454, BIOL 44
^Students must	t have a minimum of 120 credits, with		BIOL 4760, BIOL	4810, BIOL 4850, BIOL 48
27 upper-level	credits (3000-4000 level) throughout the		NEUR 4670, or C	HEM 4000/4004. At least
degree, 18 of w	which must come from the major. Biology and			
Chemistry clas	ses required for the major will include at least		nrerequisite	U-level upper level NIBB co
24 creats at th	at 3000-4000 level so 3 additional credit nours		^Students must h	ave a minimum of 120 cre
program.	at 5000-4000 level somewhere in the degree		27 upper-level cr	edits (3000-4000 level) thr
F 3	Credits	16	degree, 18 of wh	ich must come from the m
Spring			Chemistry classe	s required for the major w
	course with Lab*	4	24 credits at the	3000-4000 level so 3 addi
		4	will need to be at	3000-4000 level somewh
& PHYS 1154	and GENERAL PHYSICS LABORATORY I	5	program.	
Course in Informa	tion Innovation and Development***	3		Credits
Course towards M	Aligor/2nd Major or Elective^	3		Total Credits
*Approved Upr		J		
			Moleculo	ir and Biom
BIOL 4760, BIO)L 4810, BIOL 4850, BIOL 4830, BIOL 4860,		Biology	Bachelor of
NEUR 4870, or	CHEM 4660/ CHEM 4664. At least two of the			
three required	upper level BIOL courses must have a lab.		Biomedic	al Humanit:
***Approved ID	D courses include: BIOI 2000, 3000,		Plan	
ITIN 1110, 222	0, ENTR 3710, 4740, ACCT 2010,			
MGMT 3490, S	TAT 4410. BIOI 3000 requires BIOI 2000,		Freshman	
ENTR 2710 an	Ires IIIN 1110, ENIR 4/40 requires		Fall	
EINTR 37 10, dh	a MGMT 5490 requires ACCT 2010.		ENGL 1150	ENGLISH COMPOSITIC
	Credits	15	CMST 1110	PUBLIC SPEAKING FUN
Senior			or CMST 2120	or ARGUMENTATIO
Fall			MATH 1320/	PRE-CALCULUS ALGEB
Upper Level BIOL	Course with lab*	4	or MATH 1300	or COLLEGE ALGEB
Social Sciences**		3	BIOL 1450	BIOLOGY I
Global Diversity		3	BIOL 1060	INTRODUCTION TO M
Course in Informo	ition, Innovation, and Development***	3		& ETHICS (^)
Course towards N	linor/2nd Major or Elective^	2-3	**MATH 1300 or	1320: See the catalog for
*Approved Upp	er Level BIOL courses include: BIOL 4130,			S.
BIOL 4140, BIO)L 4450/BIOL 4454, BIOL 4460, BIOL 4640,		BIOL 1060 is ree	quirea within the Meaicai anities Track
BIOL 4760, BIC)L 4810, BIOL 4850, BIOL 4830, BIOL 4860,		Dometical Hum	Credite
NEUK 4670, or	Elevel BIOL courses must have a lab		C	Creats
**Social Scione	as course muct be in a 2nd field		Spring	
***Approved IC	P courses include: PIOI 2000, 2000		ENGL 1160	
ITIN 1110 222	0 ENTR 3710 4740 ACCT 2010		Humanities/Fine Ar	ts Course + Global Diversit
MGMT 3490. S	TAT 4410. BIOI 3000 requires BIOI 2000.		CHEM 1180	GENERAL CHEMISTRY
ITIN 2220 requ	ires ITIN 1110, ENTR 4740 requires		& CHEM 1184	
ENTR 3710, an	d MGMT 3490 requires ACCT 2010.		PIOL 1750	
^Students must	t have a minimum of 120 credits, with		BIOL 1750	
27 upper-level	credits (3000-4000 level) throughout the			Creaits
degree, 18 of w	which must come from the major. Biology and		Sopnomore	
Chemistry clas	ses required for the major will include at least		Fall	
24 creats at th	at 3000-4000 level so 3 additional credit nours		CHEM 1190	GENERAL CHEMISTRY
program.	at 5000-4000 level somewhere in the degree		& CHEM 1194	
1 5	Credits	15-16	Medical Humanitia	
Spring			Humanitias /Eina Ar	e te
	Course*	3_4	Social Science + US	Diversity Course
BIOL 4550		3-4	Social Science + US	Diversity Course
DIOL 4000	BIOLOGY INTERNSHIP (**)	3	Calculus Course**	
US Diversity if 3-o	redit Calculus was taken: or if 5-credit	2	^^Calculus option	ns include: MAIH 1930, 19
Calculus was take	en, course towards Minor/2nd Maior or	5		Credits
Elective [^]	,, , _, , 		Spring	
Course towards M	1inor/2nd Major or Elective^	3	CHEM 2250	ORGANIC CHEMISTRY
	-			

prerequisite.)-level upper level MBB course as a co- or	
[^] Students must h 27 upper-level cre degree, 18 of whi Chemistry classes 24 credits at the will need to be at program.	ave a minimum of 120 credits, with edits (3000-4000 level) throughout the ch must come from the major. Biology and s required for the major will include at least 3000-4000 level so 3 additional credit hours 3000-4000 level somewhere in the degree	
	Credits	14-16
	Total Credits	120-125
Molecula Biology, l Biomedia Plan	r and Biomedical Bachelor of Science al Humanities Four	- Year
reshman		
reshman all		Credits
reshman G all NGL 1150	ENGLISH COMPOSITION I	Credits 3
reshman Gall NGL 1150 CMST 1110 or CMST 2120	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	Credits 3 3
reshman Gall NGL 1150 CMST 1110 or CMST 2120 MATH 1320/ or MATH 1300	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT	Credits 3 3 3-4
reshman fall NGL 1150 MST 1110 or CMST 2120 MATH 1320/ or MATH 1300 BIOL 1450	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I	Credits 3 3 3-4 5
Freshman Fall INGL 1150 CMST 1110 or CMST 2120 MATH 1320/ or MATH 1300 BIOL 1450 BIOL 1060	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I INTRODUCTION TO MEDICAL CAREERS & ETHICS (^)	Credits 3 3 3-4 5 2
reshman all NGL 1150 CMST 1110 or CMST 2120 AATH 1320/ or MATH 1300 BIOL 1450 BIOL 1060 **MATH 1300 or date prerequisite	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I INTRODUCTION TO MEDICAL CAREERS & ETHICS (^) 1320: See the catalog for the most up-to-ss.	Credits 3 3 3-4 5 2
reshman fall NGL 1150 CMST 1110 or CMST 2120 AATH 1320/ or MATH 1300 BIOL 1450 BIOL 1060 **MATH 1300 or date prerequisite ^BIOL 1060 is rea Biomedical Huma	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I INTRODUCTION TO MEDICAL CAREERS & ETHICS (^) 1320: See the catalog for the most up-to- s.	Credits 3 3-4 5 2
Freshman Fall INGL 1150 CMST 1110 or CMST 2120 MATH 1320/ or MATH 1300 BIOL 1450 BIOL 1060 **MATH 1300 or date prerequisite ^BIOL 1060 is rea Biomedical Huma	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I INTRODUCTION TO MEDICAL CAREERS & ETHICS (^) 1320: See the catalog for the most up-to- s. uired within the Medical Humanities minor/ inities Track. Credits	Credits 3 3 3-4 5 2 2 16-17
reshman fall NGL 1150 CMST 1110 or CMST 2120 MATH 1320/ or MATH 1300 BIOL 1450 BIOL 1060 **MATH 1300 or date prerequisite ^BIOL 1060 is rec Biomedical Huma	ENGLISH COMPOSITION I PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE PRE-CALCULUS ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT BIOLOGY I INTRODUCTION TO MEDICAL CAREERS & ETHICS (^) 1320: See the catalog for the most up-to- s. puired within the Medical Humanities minor/ mities Track. Credits	Credits 3 3 3-4 5 2 2 16-17

*Approved Upper Level BIOL courses include: BIOL 4130, BIOL 4140, BIOL 4450/BIOL 4454, BIOL 4460, BIOL 4640, BIOL 4760, BIOL 4810, BIOL 4850, BIOL 4830, BIOL 4860, NEUR 4870, or CHEM 4660/4664. At least two of the three required upper level BIOL courses must have a lab.

Spring			
ENGL 1160	ENGLISH COMPOSITION II	3	
Humanities/Fine A	Arts Course + Global Diversity course	3	
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY	4	
BIOL 1750	BIOLOGY II	5	
	Credits	15	
Sophomore			
Fall			
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	4	
Medical Humaniti	es Minor Course – Lower Level	3	
Humanities/Fine A	Arts	3	
Social Science + U	S Diversity Course	3	
Calculus Course**		3-5	
**Calculus opti	ons include: MATH 1930, 1940, 1950.		
	Credits	16-18	
Spring			
CHEM 2250	CHEM 2250 ORGANIC CHEMISTRY I		

2-3

BIOL 2140	GENETICS	4
Social Science		3
Humanities/Fine Art	ts***	3
Elective		2-3
***HFA course m	ust come from a 2nd discipline.	
	Credits	15-16
Junior		
Fall		
CHEM 2260		5
& CHEM 2274	LABORATORY	
BIOL 3020	MOLECULAR BIOLOGY OF THE CELL	3
Elective		3
Ethical/Religious/Cr	ross-cultural course for minor^	3
[^] The Medical Hu 9 must be 3000-4 course, according	manities minor requires 15 credits, of which 1000 level. Take an upper or lower level alv.	
,,	Credits	14
Spring		-
CHEM 4610	BIOCHEMISTRY OF METABOLISM	4
BIOL 3240	INTRODUCTION TO IMMUNOLOGY	3
Upper Level BIOL co	ourse with Lab***	4
Race/Ethnicity/Gend	der/Sex/Age course for minor^	3
Elective		1
BIOL 4140, BIOL BIOL 4760, BIOL NEUR 4870, or C required upper le	4450/BIOL 4454, BIOL 4460, BIOL 4640, 4810, BIOL 4850, BIOL 4830, BIOL 4860, HEM 4660/4664. At least two of the three evel BIOL courses must have a lab.	
	Credits	15
Senior		
Fall		
Upper Level BIOL Co	burse*	3
PHYS 1110 & PHYS 1154	GENERAL PHYSICS I and GENERAL PHYSICS LABORATORY I	5
Medical humanities	minor course^	3
Elective or Medical I	humanities minor course	1-3
Elective***		3
*Approved Upper BIOL 4140, BIOL BIOL 4760, BIOL NEUR 4870, or C required upper le	r Level BIOL courses include: BIOL 4130, 4450/BIOL 4454, BIOL 4460, BIOL 4640, 4810, BIOL 4850, BIOL 4830, BIOL 4860, HEM 4660/4664. At least two of the three evel BIOL courses must have a lab.	
***Students must upper-level credit upper level credit Electives may nee reach these minin	have a minimum of 120 credits, with 27 ts throughout the degree and 18 of those ts must be concentrated in the major. ed to be selected at the 3000-4000 level to mums.	
^The Medical Hu 9 must be 3000-4 course, according	manities minor requires 15 credits, of which 1000 level. Take an upper or lower level gly.	
	Credits	15-17
Spring		
Upper Level BIOL Co	ourse with Lab* w	4
Narrative medicine/	Communication course for minor^	3
Elective**		3
Elective**		1

Social Science***

*Approved Upper Level BIOL courses include: BIOL 4130, BIOL 4140, BIOL 4450/BIOL 4454, BIOL 4460, BIOL 4640, BIOL 4760, BIOL 4810, BIOL 4850, BIOL 4830, BIOL 4860, NEUR 4870, or CHEM 4660/4664. At least two of the three required upper level BIOL courses must have a lab.

w Meets Advanced Writing requirement: BIOL 4130, BIOL 4140, BIOL 4450/BIOL 4454, BIOL 4640, BIOL 4850, BIOL 4830, CHEM 4660/4664. Alternatively, students may meet the writing requirement by completing BIOL 3150 Writing in Biology or ENGL 3980 Technical Writing Across the Disciplines.

[^]The Medical Humanities minor requires 15 credits, of which 9 must be 3000-4000 level. Take an upper or lower level course, accordingly.

**Students must have a minimum of 120 credits, with 27 upper-level credits throughout the degree and 18 of those upper level credits must be concentrated in the major. Electives may need to be selected at the 3000-4000 level to reach these minimums.

***SS must come from a 2nd discipline.

Credits	14
Total Credits	120-126

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change.

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at https://www.unomaha.edu/enrollment-management/testing-center/ placement-exams/information.php

**Transfer credit or placement exam scores may change suggested plan of study

GPA Requirements: 2.0

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