

BIOL & EDUC/sed Majors, 2009-2010 Cohort
 Program Checksheet & Sequencing Guidelines, cont.

Name: _____	ID: _____	Date filled out: _____
-------------	-----------	------------------------

Note: Major requirements are broken down by the year typically taken, with a section for those that have flexible timing. Depending on which selective you complete, major requirements for BIOL & EDUC/sed total **99 - 101 credits** (86 - 88 credits strictly for the major, plus 13 credits that overlap with GenEds).

Major Requirements -- typically taken during the FIRST YEAR:

Course code Title Cr Sem/Yr Grade Note

For the BIOL major:

BIOL 121	Bioscience I	NA			<i>Record credits on GenEd page</i>
BIOL 123	Bioscience I Laboratory	NA			<i>Fall only</i>
BIOL 122	Bioscience II	3			Prerequisite: BIOL 121 and 123 <i>Spring only</i>
BIOL 124	Bioscience II Laboratory	1			
CHEM 121	General Chemistry I	3			<i>Fall only</i> Students who are weak in math may wish to take CHEM 121-124 during their 2nd year
CHEM 123	General Chemistry I Laboratory	1			
CHEM 122	General Chemistry II	3			Prerequisite: CHEM 121 and 123 <i>Spring only</i>
CHEM 124	General Chemistry II Laboratory	1			
MATH ____		NA			<i>Select from MATH 125, 131, 140, 142, or 215 (two of these are required for this major)</i>
MATH ____		3			

For the EDUC/sed major:

EDUC 100	Introduction to Education	2			
----------	---------------------------	---	--	--	--

In addition, you should take the following **General Education requirements** your first year:

ENGL 113	College Writing I (<i>Fall only</i>)	<i>GenEd requirements -- record on GenEd page</i>			
ENGL 114	College Writing II (<i>Spring only</i>)				

You should take any of these (or other) **General Education requirements**, to total 33-36 credits for the year:

CISC ____	Computer Applications Competency	<i>GenEd requirements -- record on GenEd page</i>			
HLTH 100	Wellness: A Way of Life				
.5 to 2 credits of PEAC courses (or PEAI credit)					

BIOL & EDUC/sed Majors, 2009-2010 Cohort
 Program Checksheet & Sequencing Guidelines, cont.

Name: _____	ID: _____	Date filled out: _____
-------------	-----------	------------------------

Major Requirements -- typically taken during the SECOND YEAR:

Course code Title Cr Sem/Yr Grade Note

For the EDUC/sed major:

EDUC 237	Foundations of Multicultural Education	NA			Record credits on GenEd page
PSYC 250	Childhood and Adolescent Development	3			

Plus General Education requirements (see page 1) or major requirements listed in the "flexible timing" section (see page 5) to total **35-36 credits for the year.**

MTEL Communication and Literacy Skills Test
 Reading Test passed: ___ / ___ / ___ Writing Test passed: ___ / ___ / ___

Major Requirements -- typically taken during the THIRD YEAR:

Course code Title Cr Sem/Yr Grade Note

For the EDUC/sed major:

EDUC 234	Curriculum, Methods, and Organization for Secondary Teachers	3			Corequisite: A pre-practicum
EDUC 318	Tutorial Pre-Practicum	3			
EDUC 364	Pre-Practicum -- Teaching and Special Issues in Secondary Education	3			Prerequisite: Must have passed MTEL Communication and Literacy Exam.
EDUC 471	Learning, Teaching, and Technology	3			Prerequisite: CISC 105

Plus General Education requirements (see page 1) or major requirements listed in the "flexible timing" section (see page 5) to total **35-36 credits for the year.**

MTEL Subject Test
 Biology Subject Test passed: ___ / ___ / ___

Major Requirements -- typically taken during the FOURTH YEAR:

Course code Title Cr Sem/Yr Grade Note

For the EDUC/sed major:

EDUC 463	Practicum Seminar	2			Corequisite: Practicum
----------	-------------------	---	--	--	------------------------

In addition, select a **total of 10 credits** from:

EDUC 464	Practicum - Middle School (5-10 cr.)				Prerequisite: EDUC 318 & 364. Must be an official candidate for teacher licensure. Must have passed MTEL exams and courses designated by program.
EDUC 465	Practicum - High School (5-10 cr.)				

Take any outstanding major requirements from the "flexible timing" section or outstanding General Education requirements to complete your schedule for your fourth year.

BIOL & EDUC/sed Majors, 2009-2010 Cohort
 Program Checksheet & Sequencing Guidelines, cont.

Name: _____	ID: _____	Date filled out: _____
-------------	-----------	------------------------

Major Requirements -- flexible timing (note prerequisites):

Course code Title Cr Sem/Yr Grade Note

For the BIOL major:

BIOL 260	General Ecology	NA			Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken any time after meeting prerequisites
BIOL 261	General Ecology Laboratory	1			Record credits for lecture on GenEd page
BIOL 270	Plant Biology	3			Prerequisite: BIOL 121 - 124
BIOL 271	Plant Biology Laboratory	1			Can be taken any time after meeting prerequisites
BIOL 280	Genetics	3			Prerequisite: BIOL 121 - 124 and CHEM 121 - 124
BIOL 281	Genetics Laboratory	1			Can be taken any time after meeting prerequisites
BIOL 315	General Microbiology	3			Prerequisite: BIOL 121 - 124 and CHEM 121 - 124
BIOL 317	General Microbiology Laboratory	1			Can be taken any time after meeting prerequisites
BIOL 482	Seminar in Biology	3			Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken 3rd or 4th year
CHEM 221	Organic Chemistry I	3			Prerequisite: CHEM 121-124
CHEM 223	Organic Chemistry I Laboratory	1			Typically taken 2nd or 3rd year, fall only (or 4th year, if necessary)
CHEM 222	Organic Chemistry II	3			Prerequisite: CHEM 221 and 223
CHEM 224	Organic Chemistry II Laboratory	1			Typically taken 2nd or 3rd year, spring only (or 4th year, if necessary)
PHYS 210	General Physics I	4			Prerequisite: MATH 125, 131, 140, or 142
PHYS 212	General Physics I Laboratory				Typically taken 2nd or 3rd year, fall only (or 4th year, if necessary)
PHYS 211	General Physics II	4			Prerequisite: PHYS 210
PHYS 213	General Physics II Laboratory				Typically taken 2nd or 3rd year, spring only (or 4th year, if necessary)

In addition, you must complete **three** of the following selectives, with labs, if applicable (total 9 - 12 credits). BIOL/EDUC majors are strongly recommended to take BIOL 250/252 and BIOL 251/253 during their 2nd or 3rd year to help prepare for the MTEL Biology Subject Test. Choose your third selective from the courses listed under "additional selectives."

BIOL 250	Human Anatomy and Physiology I (3 cr)				Strongly recommended for BIOL/EDUC
BIOL 252	Human Anatomy and Physiology I Laboratory (1 cr)				Prerequisite: BIOL 121 - 124 and CHEM 121 - 124
BIOL 251	Human Anatomy and Physiology II (3 cr)				Strongly recommended for BIOL/EDUC
BIOL 253	Human Anatomy and Physiology II Laboratory (1 cr)				Prerequisite: BIOL 250 and 252

Additional selectives:

BIOL 230	Animal Biology (3 cr)				Prerequisite: BIOL 121 - 124 Can be taken any time after meeting prerequisites
BIOL 241	Developmental Biology (3 cr)				Prerequisite: BIOL 121-124, CHEM 121-124, CHEM 221-224
BIOL 242	Developmental Biology Laboratory (1 cr)				Can be taken any time after meeting prerequisites
BIOL 264	Flora of New England (3 cr)				Prerequisite: BIOL 121 - 124
BIOL 266	Flora of New England Laboratory (1 cr)				Can be taken any time after meeting prerequisites

Selectives continued on next page

BIOL & EDUC/sed Majors, 2009-2010 Cohort
 Program Checksheet & Sequencing Guidelines, cont.

Name: _____	ID: _____	Date filled out: _____
-------------	-----------	------------------------

Selective options, continued

Course code	Title	Cr	Sem/Yr	Grade	Note
BIOL 265	Introductory Horticulture (3 cr)				
BIOL 267	Intro to Horticulture Laboratory (1 cr)				
BIOL 310	Evolution (3 cr)				Prerequisite: BIOL 121 - 124 Can be taken any time after meeting prerequisites
BIOL 311	Human Histology (3 cr)				Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken any time after meeting prerequisites
BIOL 312	Human Histology Laboratory (1 cr)				
BIOL 316	Applied Microbiology, Virology, and Immunology (3 cr)				Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken any time after meeting prerequisites
BIOL 318	Applied Microbiology, Virology, and Immunology Laboratory (1 cr)				
BIOL 408	Research Methods in Cell Biology (3 cr)				Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken 3rd or 4th year
BIOL 409	Research Methods in Cell Biology Laboratory (1 cr)				
BIOL 420	Cellular Physiology (3 cr)				Prerequisite: BIOL 121 - 124 and CHEM 121 - 124 Can be taken 3rd or 4th year
BIOL 421	Cellular Physiology Laboratory (1 cr)				
CHEM 331	Biological Chemistry (3 cr)				Prerequisite: CHEM 221 - 224 Can be taken any time after meeting prerequisites
CHEM 341	Analytical Chemistry (2 cr)				Prerequisite: CHEM 121 - 124 Can be taken any time after meeting prerequisites
CHEM 342	Analytical Chemistry Laboratory (2 cr)				
CHEM 351	Physical Chemistry with Biological Applications (3 cr)				Prerequisite: CHEM 121 - 124 Can be taken any time after meeting prerequisites
CHEM 352	Physical Chemistry with Biological Applications Laboratory (1 cr)				

APPROVED MAJOR REQUIREMENT MODIFICATIONS (if applicable):

For education licensure students, any substitution or waiver of the major or program requirements listed above must be approved and signed by 1) the Education department chairperson, 2) the content major chairperson, and 3) the Director of Educator Preparation. See the Educator Preparation Handbook for more information.

Requirement	Modification	Date form was filed (with 3 signatures)

*BIOL & EDUC/sed Majors, 2009-2010 Cohort
 Program Checksheet & Sequencing Guidelines, cont.*

Name: _____	ID: _____	Date filled out: _____
-------------	-----------	------------------------

Elective credits, if applicable:

You must earn as many as 133 to 134 credits to complete all requirements for the BIOL & EDUC/sed majors, so no electives are necessary to reach the minimum 120 required by the College. If you choose to take any electives, list them below.

Course code	Title	Cr	Sem/Yr	Grade

TOTAL CREDITS EARNED: _____ credits as of ____/____/____ (see transcript or course history to verify)

BIOL Major Standards:

As a Biology major, I understand that I must:

- Earn a grade of C- or better in all courses required for the major, including selectives.

Education Program Standards:

In order to be officially admitted to, and continue in, the teacher preparation program, I must meet all educator preparation standards, including (but not limited to) the following:

- Follow an approved course of study for a content major.
- Earn a minimum cumulative GPA of 2.750 for all designated licensure courses (see *Educator Preparation Handbook* for more information).
- Earn a minimum cumulative GPA of 2.500.
- Receive a score of 240 or higher on the Communication and Literacy Skills Test (reading and writing) of the Massachusetts Test for Education Licensure (MTEL).
- Receive a score of 240 or higher on the appropriate MTEL Subject Test.
- Earn minimum grades specified for designated courses (see *Educator Preparation Handbook*).
- Demonstrate the personal characteristics necessary to be a teacher (for example, responsible, professional, etc.).

For more information about these program standards, see the Educator Preparation Handbook.

Undergraduate Degree Requirements:
 (Minimum standards for the College -- major standards may be higher)

- I have completed all General Education domains and competencies.
- I have completed a minimum of 40 credits of General Education coursework.
- I have completed a minimum of 120 credits (see transcript or course history to verify).
- I have a cumulative GPA of 2.000 or better. (The EDUC major requires a cumulative GPA of 2.500 or higher.)
- I have completed all required coursework for my major (see recommended year and flexible timing sections above).
- I have satisfied all program standards for this major (listed above and/or referenced in department publications).