

STUDENT NAME: _____ (**Attach Transcript**)
 ADVISOR NAME: _____

GRADUATE MINOR MOLECULAR BIOLOGY PROGRAM

This program consists of a minimum of 10 credit hours including:

- MOLB 545 Molecular and Biochemical Genetics, 3 credits
- MOLB 590 Research seminar, 1 credit
- MOLB 520 Molecular Cell Biology, 3 credits
- OR** MOLB 542 Biochemistry I, 3 credits
- Any Tier II course or Core Course, 3 credits

A minimum grade of B is required in all courses. At least one member of the student's Graduate Committee must be a faculty member approved as a MOLB active participant (see Graduate Catalog listing of faculty under MOLB).

Tier II Courses

AGRO 486	Intermediate Genetics	3 Credits
AGRO /HORT /MOLB 506	Plant Genetics	3 Credits
AGRO 516	Molecular Analysis of Complex Traits	3 Credits
AGRO/HORT 531	Plant Physiology: Growth and Development	3 Credits
AGRO/ HORT/ MOLB 685	Plant Genetic Engineering	3 Credits
BCHE 494	Techniques in Genetic Engineering	4 Credits
BCHE 546 / MOLB 546	Biochemistry II	3 Credits
BCHE 645	Nucleic Acid Metabolism	3 Credits
BCHE 647	Graduate Physical Biochemistry	3 Credits
BCHE 648	Proteins and Enzymes	3 Credits
BIOL 474	Immunology	3 Credits
BIOL 475	Virology	3 Credits
BIOL 477	Applied and Environmental Microbiology	4 Credits
BIOL 478	Molecular Biology of Microorganisms (offered fall only)	3 Credits
BIOL 490	Neurobiology	3 Credits
BIOL 451	Physiology of Microorganisms	3 Credits
BIOL 520 / MOLB 520	Discussions in Molecular Biology	1 Credit
BIOL 523	Mechanisms of Microbial Pathogenicity	3 Credits
BIOL 540	Science and Ethics, or equivalent	1 - 3 Credits

BIOL 541	Professional Development Seminar	1 Credit
BIOL 541	Advanced Genetic Aspects of Population Biology	3 Credits
BIOL 550	Molecular Biology of Disease Vectors	3 Credits
BIOL 550	Genomics Techniques in Life Sciences -Dr. Xu	3 Credits
BIOL 550	Bioinformatics Applications & Databases - Dr. Xu	3 Credits
BIOL 591	Principles of Confocal Microscopy	1 Credit
BIOL 592	Microscopy Practicum	1 – 3 Credits
BIOL 482	Molecular Systematics	3 Credits
BIOL 577	Adv. Topics Environmental Microbiology	3 Credits
BIOL 590 / MOLB 590	Advanced Neurobiology - special topics	1 – 3 Credits
BIOL 698	Selected Topics	1 – 3 Credits
CHEM 516	Advanced Organic Chemistry I, Physical Organic Chemistry	3 Credits
CHEM 517	Advanced Organic Chemistry II, Synthetic Organic Chemistry	3 Credits
CHEM 546	Biochemistry II	3 Credits
EPWS 486	Plant Virology	3 Credits
MOLB 450	Special Topics in Molecular and Cellular Biology	1 - 3 Credits
MOLB 452	Independent Studies in Bioinformatics	1 - 3 Credits
MOLB 470	Genome Analysis and Bioinformatics, or equivalent	1 - 3 Credits
MOLB/AGRO/HORT 506	Plant Genetics	1 - 3 Credits
MOLB 520 / BIOL 520	Discussions in Molecular Biology	1 Credit
MOLB 530	Plant Physiology: Metabolism	3 Credits
MOLB 546 / BCHE 546	Biochemistry II	3 Credits
MOLB 550	Topics in Molecular Biology	1 - 3 Credits
MOLB 571	Molecular and Cellular Mycology	3 Credits
MOLB 590 / BIOL 590	Special Topics	1 - 3 Credits
MOLB 650	Advanced Topics in Molecular Biology	1 - 3 Credits
TOX 461	Toxicology I	3 Credits
WLSC 488	Principles of Conservation Genetics	3 Credits

(Revised: 4/2013)

**MOLECULAR BIOLOGY PROGRAM
NEW MEXICO STATE UNIVERSITY
GRADUATE MINOR REQUIREMENTS**

To: Student's Dean. _____ **Date:** _____

Student Name: _____

Advisor Name: _____

Student ID Number: _____ has completed the following courses, which satisfy the requirements for a GRADUATE minor in _____ Molecular Biology.

It is mandatory you provide a copy of this form, with applicable signatures, to the MOLB office (Chemistry Bldg., 361).

Successful completion of the minor will be certified by the Molecular Biology Program. A grade of "B" or better is required of all minor courses. **(Please attach a copy of your transcript – thank you.)**

COURSE	CREDITS
TOTAL	

Dr. Charles Shuster, Approved by Molecular Biology Program Director

- (Revised: 4/2013)

Minor Requirements on Back

