Molecular, Cellular and Developmental Biology Major Requirements (54)

Foundation Courses

- ☐ BIOL 107 - Introduction to Cell Biology
- ☐ BIOL 108 - Introduction to Biological Diversity
- ☐ CHEM 101 - Introductory University Chemistry I
- ☐ MATH 134 - Calculus for the Life Sciences I (See Note 1)
- ☐ STAT 151 - Introduction to Applied Statistics I

Senior Courses

- ☐ BIOCH 200 - Introductory Biochemistry
- ☐ BIOL 207 - Molecular Genetics and Heredity
- ☐ GENET 270 - Foundations of Molecular Genetics
- ☐ CHEM 261 - Organic Chemistry I

3 units from:
BIOL 201 - Eukaryotic Cellular Biology
CELL 201 - Introduction to Molecular Cell Biology _____

6 units from:
BIOL 208 - Principles of Ecology
BIOL 221 - Mechanisms of Evolution
BOT 205 - Fundamentals of Plant Biology
GENET 301 - Molecular Genetics of the Eukaryotic Cell _____
GENET 302 - Genetics of Eukaryotic Chromosomes
IMIN 200 - Infection and Immunity
MICRB 265 - General Microbiology _____
ZOOL 303 - Animal Developmental Biology

9 units from MC&D List A at the 300 or 400 level**:**

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6 units from MC&D List A at the 400 level:

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_____

3 units from MC&D List B at the 300 or 400 level**:**

_____

- ☐ COMM
- ☐ COMM
- ☐ IND
- ☐ BO___
- ☐ BO___
- ☐ BSBS
- ☐ BSFS
- ☐ BSSS
- ☐ LAB

MC&D List A:

- ☐ BIOL 495 - Special Topics in Biology (if appropriate topic)
- ☐ BOT 303 - Plant Development
- ☐ BOT 380 - Drug Plants
- ☐ BOT 445 - Molecular Plant Physiology
- ☐ BOT 464 - Plant Functional Genomics
- ☐ GENET 304 - Gene Expression and its Regulation
- ☐ GENET 305 - Genetic Analysis
- ☐ GENET 364 - Plant Genetics
- ☐ GENET 390 - Gene Manipulation
- ☐ GENET 412 - Genetic Control of Animal Development
- ☐ GENET 418 - Human Genetics
- ☐ GENET 422 - Current Topics in Developmental Genetics
- ☐ GENET 424 - Ethical Issues in Genetics
- ☐ IMIN 405 - Innate Immunity
- ☐ IMIN 452 - Advanced Immunology
- ☐ MICRB 311 - Microbial Physiology
- ☐ MICRB 315 - Applied Microbiology and Biotechnology
- ☐ MICRB 316 - Molecular Microbiology

MC&D List B:

- [ ] BIOIN 301 - Bioinformatics I
- [ ] BIOIN 401 - Bioinformatics II
- [ ] BIOL 343 - Techniques for Macromolecular Characterization
- [ ] BIOL 391 - Techniques in Molecular Biology and Bioinformatics
- [ ] BIOL 398 - Research Project
- [ ] BIOL 399 - Research Project
- [ ] BIOL 498 - Research Project
- [ ] GENET 375 - Introduction to Molecular Genetics Techniques
- [ ] GENET 420 - Research Techniques in Molecular Genetics
- [ ] IMIN 372 - Research Techniques in Immunology
- [ ] IMIN 410 - Bioinformatics for Molecular Biologists

Notes

1. MATH 134 is strongly recommended; however, it may be replaced with MATH 117, MATH 144, or MATH 154.
2. Students should consult the Department of Biological Sciences for advice about course selection throughout the program.