MINOR in Molecular and Cellular Biology CATALOG YEAR 2025-2026



MINOR REQUIREMENTS

- The minor requires 6 unique units that cannot be used to satisfy any other major or minor within the same degree.
 - o Each department has their own unique double dipping policy. Check with your major advisor regarding your department's policy.
 - o Some double dipping policies may require you to take additional electives.
- Total units required: 18
- · Upper division units required: 9

Applicable Coursework	
Introductory Biology	
MCB 181RMCB 181LECOL 182RE	COL 182L
Life Science Electives (Complete any combination of 300-400 leve	el courses from the list below or as pre-approved by a MCB advisor to
make up the rest of the minor.)	
MCB 301 (4-5) The Molecular Basis of Life	MIC 403R (3) Biology of Animal Parasites
MCB 304 (4-5) Molecular Genetics MCB 305 (4-5) Cell & Developmental Biology	MIC 420 (4) Pathogenic Bacteriology
MCB 315 (3) Quantitative Biology	MIC 421B (3) Microbiological Lab TechniquesMIC 433 (3) Medical and Molecular Virology
MCB 325 (3-4) The Biology of Cancer	MIC 452 (3) Antibiotics – A Biological Perspective
MCB 340 (3) Introduction to Biotechnology	NROS 307 (3) Cellular Neurophysiology
MCB 396i (2) Career Exploration and Career Development	NROS 430 (3) Neurogenetics
MCB 397D (3) Molecular Genetics of Plants CURE	PLS 340 (3) Intro. to Biotechnology
MCB 404 (3-4) Bioethics	PLS 424R (3) Plant Biotechnology
MCB 410 (3) Cell Biology	PLS 428R (3) Microbial Genetics
MCB 411 (3) Molecular Biology	PLS 360 (3) Plant Growth and Physiology
MCB 416A (3) Bioinformatics & Functional Genomic Analysis	PLS 448a (3) Plant Biochemistry and Metabolic Engineering
MCB 422 (3) Problem Solving with Genetic Tools	PSIO 465 (3) Neurophysiology
MCB 425 (3) Cancer Discoveries	PSIO 467 (3) Endocrine Physiology
MCB 437 (3) Life in Extreme Environments	PSIO 484 (3) Cardiovascular Muscle Biology & Disease
MCB 442 (3) Human Genetics: Sex, Crime and Disease	CMM 479 (3) The Art of Scientific Discovery
MCB 447 (3) Big Data in Biology and Medicine	BIOC 384 (3) Foundations in Biochemistry
MCB 473 (4) recombinant DNA Methods and Applications	BIOC 385 (3) Metabolic Biochemistry
MCB 480 (3) Intro to Systems Biology	BIOC 462A (3) Biochemistry I
MCB 482 (3) Modeling Human Disease	
MCB 489 (3) Foundations of Synthetic Biology	
MCB 391/491 (3) Lab Preceptorship	
MCB 497A (3) Special Tutoring Workshop	
MCB 399/499/399H/499H (1-5) Independent Study	
MCB 392/492 (1-5) Directed Research	
MCB 498/498H (3) Capstone or Honors Thesis	
ECOL 326 (3) Genomics	
ECOL 346 (3) Bioinformatics	
ECOL 379 (3) Evidence Based Medicine	

Course offerings are subject to change. Please consult the Schedule of Classes for specific semester course information.