

NAME: _____

ID#: _____

IN EFFECT FALL 2009

**MICROBIAL, CELLULAR & MOLECULAR BIOLOGY (MCCM)
CELL & MOLECULAR BIOLOGY OPTION:**

FRESHMAN YEAR

| | | | |
|---|----|--|----|
| ENGL 1100 English Comp I..... | 3 | ENGL 1120 English Comp II..... | 3 |
| MATH 1610 Calculus I..... | 4 | MATH 1620 Calculus II..... | 4 |
| CHEM 1030 Fund. of Chemistry I..... | 3 | CHEM 1040 Fund of Chemistry II..... | 3 |
| CHEM 1031 Chem Lab..... | 1 | CHEM 1041 Chem Lab..... | 1 |
| BIOL 1020/1021 Principles of Biology..... | 4 | BIOL 1030/1031 Organismal Biology..... | 4 |
| | 15 | | 15 |

SOPHOMORE YEAR

| | | | |
|-----------------------------------|----------|--|----------|
| CHEM 2070 Organic Chem I..... | 3 | CHEM 2080 Organic Chem..... | 3 |
| CHEM 2071 Organic Lab..... | 1 | CHEM 2081 Organic Lab..... | 1 |
| PHYS 1500/1501 Physics I..... | 4 | PHYS 1510/1511 Physics II..... | 4 |
| BIOL 3000 Genetics..... | 4 | BIOL 3200 General Microbiology..... | 4 |
| ENGL 2200 World Literature I..... | 3 | ENGL 2210 World Literature II..... | 3 |
| | 15 | | 15 |

JUNIOR YEAR

| | | | |
|---|----------|--|----------|
| BCHE5180 Biochemistry I..... | 3 | BCHE5190 Biochemistry II..... | 3 |
| BCHE5181 Biochemistry I Lab..... | 1 | BIOL5521 Recombinant DNA Lab..... | 2 |
| BIOL4100 Cell Biology..... | 3 | BIOL5220 Intro. To Mol. Genetics..... | 3 |
| BIOL4101 Cell Biology Lab..... | 2 | CORE HISTORY II..... | 3 |
| CMBL Elective**..... | 3 | CORE FINE ARTS..... | 3 |
| CORE HISTORY I..... | 3 | Free Elective..... | 2 |
| | 15 | | 16 |

SENIOR YEAR

| | | | |
|--------------------------------------|----------|--|----------|
| Evolution Electives**..... | 3 | Physiology Electives**..... | 3 |
| CMBL Electives**..... | 3 | CMBL Electives**..... | 3 |
| Biodiversity Electives**..... | 3 | MCMB/MCCM Electives**..... | 6 |
| CORE SOC SCI GROUP I..... | 3 | CORE SOC SCI GROUP II..... | 3 |
| CORE PHILOSOPHY..... | 3 | BIOL4950 Undergrad Seminar..... | 1 |
| | 15 | | 16 |

TOTAL HOURS 122

Long range schedules for COSAM courses are online at www.auburn.edu/cosam/students/registration/
Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin, under Core Curriculum.

Students not prepared for MATH 1610 will meet with advisor to determine appropriate math course.

**Approved MCMB, MCCM, Evolution, Biodiversity, & Physiology electives are on the back of this sheet.

Microbial, Cellular and Molecular Biology (MCMB/MCCM) ELECTIVES

Note: All of the courses listed on this page may be used to satisfy the MCMB/MCCM electives listed in each Option

Microbiology Option (MICR) Electives:

| | |
|--------------------------------------|----------|
| BIOL 3020 Genomic Biology | 4 |
| BIOL 4200* Clinical Microbiology | 4 |
| BIOL 5260* Prokaryotic Mol. Genetics | 3 |
| BIOL 5270 Host-Microbe Interactions | 3 |
| BIOL 5210* Microbial Physiology | 3 |
| BIOL 5220 Intro. To Mol. Genetics | 3 |
| BIOL 5521 Recombinant DNA Lab | 2 |
| BIOL 5230 Virology | 3 |
| BIOL 5700 Appl. Env. Micro | 4 |
| BIOL 4970 Special Topics | variable |
| BIOL 4980 Undergrad Research | variable |
| BIOL 5660 Food Microbiology | 5 |
| BIOL 5465 Marine Microbiology | 5 |
| BIOL 5500 Immunology | 3 |
| BIOL 5501 Immunology Lab | 2 |
| AGRN 5060 Soil Microbiology | 4 |

***Required in Microbiology Option**

Cell and Molecular Biology Option (CMBL) Electives:

| | |
|-------------------------------------|----------|
| BIOL 3020 Genomic Biology | 4 |
| BIOL 5210 Microbial Physiology | 3 |
| BIOL 5220* Intro to Molecular Gen. | 3 |
| BIOL 5270 Prokaryotic Mol. Gen. | 3 |
| BIOL 5521* Recomb. DNA Lab | 2 |
| BIOL 5230 Virology | 3 |
| BCHE 5250 Plant Metabolism Pathways | 3 |
| BIOL 5320 Plant Gene Expression | 4 |
| BIOL 4970 Special Topics | variable |
| BIOL 4980 Undergrad Research | variable |
| BIOL 5190 Cell & Mol. Sig. Trans | 3 |
| BIOL 4150 Human Genetics | 3 |
| BIOL 5465 Marine Microbiology | 5 |
| BIOL 5500 Immunology | 3 |
| BIOL 5501 Immunology Lab | 2 |

*** Required in Cell & Molecular Biology Option**

Physiology Electives:

| | |
|-------------------------------------|---|
| BIOL 5210* Microbial Physiology | 3 |
| BIOL 5240 Animal Physiology | 4 |
| BIOL 5600 Mammalian Physiology | 6 |
| BIOL 5130 Advanced Plant Physiology | 3 |
| BIOL 5131 Advanced Plant Phys. Lab | 1 |

*** Required in Microbiology Option**

Evolution Electives

| | |
|--|---|
| BIOL 3050 Evolution & Systematics | 3 |
| BIOL 5250* Microbial Evolution & Diversity | 4 |

***Required in Microbiology Option**

Biodiversity Electives:

| | |
|--|---|
| BIOL 5110 Parasitology | 4 |
| BIOL 5340 Protozoology | 4 |
| BIOL 3060 Ecology | 4 |
| BIOL 3040 Biology of Marine Systems | 3 |
| BIOL 3100 Plant Biology | 3 |
| BIOL 3101 Plant Biology Lab | 1 |
| BIOL 4010 Invertebrate Biodiversity | 4 |
| BIOL 4020 Vertebrate Biodiversity | 4 |
| BIOL 5250* Microbial Evolution & Diversity | 4 |
| ENTM 3040 General Entomology | 4 |
| PLPA 5200 Introductory Mycology | 4 |

*** Required in Microbiology Option**