NAME: _____ ID#:_____

IN EFFECT FALL 2016

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

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 1031Chem Lab	1	CHEM 1041Chem 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 Physics II	4
BIOL 3000 Genetics	**4**	**BIOL 3200 General Microbiology**	**4**
CORE LITERATURE	3	CORE HISTORY	3
	15		15

JUNIOR YEAR

BCHE 5180 Biochemistry I	**3**	**BCHE 5190 Biochemistry II**	**3**
BCHE 5181 Biochemistry I Lab	**1**	**BIOL 4100 Cell Biology**	**3**
BIOL 5220 Molecular Genetics	**3**	**BIOL 4101 Cell Biology Lab**	**2**
MMCB Elective[4]	**3**	CORE FINE ARTS	3
BIOL 5521 Recombinant DNA Lab	**2**	CORE SOC SCI or HUM[3]	3
CORE HISTORY or LIT[1]	3	Free Elective	2
	15		16

SENIOR YEAR

Evolution Elective[4]	**3**	**Physiology Elective[4]**	**3**
Biology Elective[4]	**4**	**MMCB Elective[4]**	**4**
Biodiversity Elective[4]	**3**	**Biology Electives[4]**	**4**
CORE SOCIAL SCIENCES[2]	3	CORE SOCIAL SCIENCES[2]	3
CORE HUMANITIES	3	**BIOL 4950 Undergrad Seminar**	**1**
	16		15

TOTAL HOURS 122

Long range schedules for COSAM courses are online at www.auburn.edu/cosam/students
Courses in **BOLD** will be used to calculate GPA in major.
Options for courses labeled CORE are in the Auburn University Bulletin (www.auburn.edu/bulletin) under Core Curriculum.

[1] Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the Bulletin.

[2] Students who have AP or transfer credit for US History should talk to an advisor about CORE SOC SCI choices.

[3] If a LIT sequence is chosen, this course must be a CORE SOC SCI. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

[4] Approved courses are on the back of this sheet.

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

Micro/Mol/Cell Biol (MMCB) Electives:

BIOL 3020 Genomic Biology	4
BIOL 4100** Cell Biology Lab	2
BIOL 5190 Cell and Mol. Signal Trans.	3
BIOL 5200* Clinical Microbiology	5
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
BCHE 5250 Plant Metabolism Pathways	3
BIOL 5320 Plant Gene Expression	4
BIOL 5330 Developmental Genetics	3
BIOL 5660 Food Microbiology	5
BIOL 5500 Immunology	3
BIOL 5501 Immunology Lab	2
AGRN 5060 Soil Microbiology	4

Biology Electives

BIOL 4920 Internship in Biology	variable
BIOL 4970 Special Topics	variable
BIOL 4980 Undergrad Research (6hr max)	variable
Any other BIOL course listed on this page	

Physiology Electives:

BIOL 5210* Microbial Physiology	3
BIOL 5240 Animal Physiology	4
BIOL 5600 Biomedical Physiology	5
BIOL 5130 Advanced Plant Physiology	3
BIOL 5131 Advanced Plant Phys. Lab	1

*** Required in Microbiology Option**

Evolution Electives

BIOL 3030 Evolution & Systematics	3
BIOL 5250* Microbial Evolution & Diversity	4

***Required in Microbiology Option**

Biodiversity Electives:

BIOL 5110 Parasitology	4
BIOL 3060 Ecology	4
BIOL 3040 Biology of Marine Systems	3
BIOL 3100 Plant Biology	4
BIOL 4010 Invertebrate Biodiversity	4
BIOL 4020 Vertebrate Biodiversity	4
BIOL 5250* Microbial Evolution & Diversity	4
BIOL 5650 Ethology	4
ENTM 3040 General Entomology	4
ENTM 5010 Ent. for Educators	4
PLPA 5200 Introductory Mycology	4