

**EAST CENTRAL UNIVERSITY
BIOLOGY - B.S.
MOLECULAR BIOLOGY CONCENTRATION
0049/UG09-UG12**

Advisor _____

Student's Name _____ ID No. _____

DEGREE CHECK INCLUDES CURRENT ENROLLMENT

Checked by _____ Date _____

Required:
124 total hours _____ completed
30 hrs @ ECU _____ completed
(15 of last 30 must be at ECU) _____
60 hrs @ Sr College _____ completed
40 hrs upper level _____ completed
HS Curricular Req ___ met ___ not met

Work in progress _____

2.0 minimum required in the following areas:
ECU Avg _____ Rtn Avg _____
Major Overall Avg _____
Major ECU Avg _____
Minor Overall Avg _____
Minor ECU Avg _____

Work lacking:
Major ___ (inc A/C and Related Work)
Minor ___ (incl Rel Wk)
Prof Educ _____
General Educ _____
Comp Prof ___ met ___ not met
Serv Lrng ___ met ___ not met

REQUIREMENTS

HOURS

I. General Education (45 HOURS)

11 hours (BIOL 1214 or 1314, CHEM 1114, and MATH 1513) counted in the Major

Other hours needed **34**

II. Major in Molecular Biology 43

A. Required General Education 4

___ BIOL 1214 General Botany OR
___ BIOL 1314 General Zoology

B. Required in the Molecular Biology Concentration 33

___ BIOL 2243 Introduction to Biotechnology
___ BIOL 2345 General Microbiology
___ BIOL 3434 Genetics
___ BIOL 3553 Genomics and Bioinformatics
___ BIOL 3634 Human Physiology
___ BIOL 4313 Cell and Molecular Biology
___ BIOL 4545 Advanced Molecular Biology
___ BIOL 4765 Molecular Genetics
___ BIOL 4881 Biology Senior Seminar

C. Required Electives 6

Select 6 hours from the following:
___ BIOL 2773 Forensic Biology
___ BIOL 3013 Research, Methods and Bioethics
___ BIOL 3683 Immunology
___ BIOL 4113 Vertebrate Embryology

III. Related Work 25

A. Required General Education 7

___ CHEM 1114 General Chemistry I
___ MATH 1513 College Algebra

B. Required Related Work 12

___ CHEM 1214 General Chemistry II
___ CHEM 3114 Organic Chemistry I
___ PHYS 1114 General Physics I
Choose one of the following: 3
___ EHS 3703 Biostatistics and Environ Calculations
___ MATH 2213 Intro to Probability and Statistics
___ SOC 3833 Statistics for Social Sciences
Choose one of the following: 3
___ MATH 1713 Trigonometry
___ MATH 3583 Applied Statistics

REQUIREMENTS

HOURS

C. Recommended Molecular Biology Electives

Choose from the following:
___ BIOL 2184 Human Anatomy
___ BIOL 3245 Comparative Vertebrate Anatomy
___ BIOL 3654 Histology
___ CHEM 4114 Organic Chemistry II
___ CHEM 4213 Biochemistry
___ CHEM 4221 Biochemistry Lab
___ EHS 3114 Epidemiology
___ MATH 2825 Calc and Analy Geom I
___ PHYS 1214 General Physics II
___ PHYS 3322 Medical Physics

IV. Minor (Required) 16-21

The minor with the Biology major may be selected by the student from minors whose majors lead to either BS or BA degrees.

V. Electives 1-6

VI. Total Hours Required 124

VII. Special Requirements

“Teachers” or “methods” courses do not count in the major.

The OSRHE computer proficiency graduation requirement will be met through completion of one of the courses in the institution’s general education computer literacy option (including equated or substituted courses) or testing out of the challenge exam for one of these courses (all courses may not have challenge exams), OR successful completion of an associate of arts or associate of science degree at an Oklahoma two-year college in which the computer skills requirement was met. Satisfaction of this requirement may not reduce or remove any program requirements.

Students beginning at East Central University in the fall 2007 semester or later who have earned less than sixty-four semester hours are required to take two classes with designated service-learning component. Students transferring to ECU for the first time in the fall 2007 semester or later with sixty-four or more semester hours will be required to take one class with a service-learning component.

MINOR _____

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____