

EFFECTIVE FOR STUDENTS ENTERING 2005-06
EARTH SCIENCE/PHYSICS EDUCATION PLAN OF STUDY
7-12 GRADES

MIAMI PLAN FOR LIBERAL EDUCATION

Foundation	Course #	Hrs	Course Title
I	ENG 111	3	College Composition
I	ENG 112	3	Composition and Literature
II A	Fine Arts	3	(choice)
II B	EDL 204	3	Socio-cultural Studies in Education
II C	EDP 201	3	Human Development & Learning in Social & Educational Contexts
IIA, B, or C		3	(choice)
III A	U.S. Cultures	3	(choice)
III B	World Cultures	3	(choice)
IV A&B	Bio/Phys. Sci.	9	Content courses in major (below) fulfill this requirement.
V	MTH 151	5	Calculus I
		9	Thematic Sequence (PHY 1 sequence fits this major.)
		3	Senior Capstone (CHM 491, GLG 411 and ZOO 400 are capstones)

At least one Miami Plan course must meet the historical (**H**) perspective requirement

Content Courses (Several of the following courses also meet Miami Plan requirements.)

No course can count for more than one requirement. CHECK PREREQUISITES

Take all of the following:

CHM 141(or 137)/144 + 142/145 College Chem.+ Labs (3,2,3,2)
MTH 151 Calculus I (5)
MTH 251 Calculus II (4)
MTH 252 Calculus III (4)
PHY 111 Astronomy and Space Physics (3)
PHY 118 or AER 118 Introduction to Atmospheric Science(3)
PHY 181/182/183/184 The Physical World + Labs (4,4,1,1)
PHY 286 Intro. To Computational Physics (spring) (3)
PHY 291/293 Contemporary Physics + Lab (fall) (4,2)
PHY 292/294 Electronic Instrumentation + Lab (spring) (3,2)

1. GLG plus lab(choose one course with lab):

GLG 111 +115.L Dynamic Earth + Lab (4)
GLG 121 +115.L Environmental Geology + Lab (4)
GLG 141 +115.L Geology of U.S. National Parks + Lab (4)

3. Earth Science electives--choose TWO—

GLG 201 Mineralogy (+ lab) (fall) (4)
GLG 211 Chemistry of Earth Systems (fall) (4)
GLG 244 Oceanography (fall) (3)
GLG 301 Sedimentology and Stratigraphy (spring) (4)
GLG 322 Structural Geology (fall) (4)
GLG 401 Global Climate Change (spring) (4)
GLG 402 Geomicrobiology (spring) (3)
GLG 404 Geodynamics and Tectonic Geomorphology (1-3)
GLG 408 Introduction to Hydrogeology (spring) (4)
GLG 411 Field Geology (summer only) (6)

PROFESSIONAL EDUCATION REQUIREMENTS

EDT 190 Intro. to Adolescent Educ. (3)
EDP 201 Educational Psychology (3)
EDL 204 Sociocultural Studies in Educ. (3)
EDL 318A Leadership in Education (3)

4. Intro Biology course (choose one):

BOT/MBI/ZOO 115 Biological Concepts (4)
BOT 191 General Botany (4)
ZOO 113 Animal Diversity (4)
ZOO 114 Prin. Of Biology (4)

5. Science, Technology & Society (choose one):

CHM 491 Chemistry in Societal Issues (3)
GLG 207 Water & Society (spring) (3)
PHL 205 Science and Culture (3)
PHL 376 Environmental Philosophy (3)
PHY 121 Energy & Society (3)
WCP 222 Natural Systems II (4)
WCP 333.B or 334.B Sem. In Sci/Tech/Envir (4)
ZOO 400 Capstone: Contemporary Issues (3)
EDT 374 The Nature of Science (3)

6. Inquiry Course (choose one):

PHY 215 Physics by Inquiry (spring) (3)
EDT 415 Inquiring Life Science (fall) (3)

7. Evolution course (choose one):

GLG 205 Evolution and Earth Systems(fall) (3)
ATH 355 Fossil Evidence for Human Evolution (3)
BOT 204 Evolution of Plant Biodiversity (4)
ZOO 206 Evolutionary Biology (3)

(6)

FSW 481A Adol. Dev- Diverse Families (3)

(other choices are all Miami Plan courses: AMS 101, ATH 185, BWS 185, ENG 162, ENG 248, ENG 254, GEO 201, IDS 159, or WMS 201)

EDP 440 Integrating Technology (1)
EDP 352 Inclusion of Children/Youth w/Excep. (3)

Remember--your **cohort year** is the year during which you take the two-semester sequence of methods courses. **Prerequisites to EDT 431:** admission to science cohort, EDT 190, EDP 201, EDL 204, 33 hrs of content courses, 2.5 gpa (cumulative, education core, and in content courses,) evidence of computer competency by passing CSA 141 test (or successful completion of CSA 141) 64 cr. hrs. earned.

Prerequisite to EDT 432- successful completion of EDT 431

Take the following course in the **Fall** term:

EDT 431 Adolescent Science Methods I (3)

Take the following courses **concurrently (Spring)**

EDT 432 Adolescent Science Methods II (3)

EDP 301A Assessment/Eval. in Educ. (3)

EDT 421A Classroom Management (2)

EDT 446 Integ. Literacy Across Content Areas (3)

Student teaching prerequisites-- pass Praxis II, admission to cohort, successful completion of methods with 2.5, 47 content hrs., 2.5 gpa (cumulative, education core, and in content courses,) and 96 credit hrs. earned.

EDT 419 Supervised Teaching (15)