BACHELOR OF ARTS IN NATURAL SCIENCE AND MATHEMATICS DEGREE PROGRAM INFORMATION SHEET FOR STUDENTS

General Information:

The Bachelor of Arts in Natural Science and Mathematics Degree is designed for students who are interested in the flexibility and diversity of a liberal arts degree and the opportunity to pursue more extensive study in natural science and mathematics and the opportunity to develop one or more minors. The degree has multiple concentration options including Biology, Mathematics and Biochemistry. An Interdisciplinary Concentration allows you to design a specific course of study that meets your career goal. Examples include: science and criminal justice for forensics; science and business for pharmaceutical sales; science and politics for environmental careers.

The BA in Natural Science and Mathematics may not necessarily fulfill the requirements for graduate or professional schools. Students planning post-baccalaureate study should check the requirements of the specific program in which they are interested as early as possible.

All students planning to complete the requirements for the Bachelor of Arts in Natural Science and Mathematics Degree Program should complete the following as early as possible in their academic plan.

1. Skills review and all needed developmental courses.
2. Declaration of major form.
3. Meet with an NSM advisor and complete a 4 year academic plan. *The Interdisciplinary Track requires approval of the academic plan by the student's advisor, the NSM School Curriculum Committee, and NSM School dean.*

General Requirements for Graduation:

1. Declaration of major form on file.
2. Complete Institutional Program requirements (printed in the Bulletin).
3. Complete 30 credit hours of 200 level or higher courses at IU East.
4. Complete 15 credit hours of the concentration at IU East.
5. Complete the capstone requirement at IU East (students matriculating fall 1995 or later).
6. Complete 30 credit hours at the 300-400 level.
7. Complete 120 credit hours.

GPA Requirements for Graduation:

1. Minimum overall GPA of 2.3.
2. A grade of C or better in all courses taken for the concentration (see below).
3. Minimum GPA of 2.5 in the major.

Course Requirements for Graduation:

◆ General Campus Requirements: (14-17 cr.)

First Year Seminar EDUC-U100 (2 cr.)
ENG W131 (3 cr.)
Any 2nd college writing course (3 cr.)
SPCH S121 (3 cr.)
Mathematics (3 cr.) 100 level or higher (excluding M110, M117 and T courses).
Computer Literacy (0-3 cr.) (See NSM computer literacy policy)

◆ Distribution Requirements: (36 cr.) Courses used for general education or the concentration cannot be used as distribution credit.

Natural Science and Mathematics (12 cr.) must include courses from at least 2 different disciplines. One course must be a laboratory science. A second math course is required of students in non-math concentrations. Biology majors should take CHEM-C108 or CHEM-C106/126 to complete prerequisites for required Cellular and Molecular courses.

Anatomy	Chemistry	Physical Geography

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Anatomy and Physiology
Astronomy
Biology
Geology
Mathematics
Microbiology
Physics
Physiology

Humanities and Fine Arts (12 cr.) must include courses from at least two different disciplines.

Communication	History	Philosophy
English	Journalism	Religion
Fine Arts	Music	Speech
Foreign Language		Theater

Behavioral and Social Sciences (12 cr.) must include courses from at least two different disciplines.

Anthropology	Folklore	Psychology
Criminal Justice	Human Geography	Sociology
Economics	Political Science	

◆Foreign Language -The first two semesters of a foreign language sequence or equivalent.

◆Natural Science and Mathematics Concentrations – 30* credits

I. BIOLOGY CONCENTRATION (30* cr.)

A. One course from each area plus one additional course from two of the following areas.
Evolution & diversity (B301, L 318, Z301);
Cellular & molecular (L211/213, L314, L315, L321, M310/315);
Ecological & environmental (L325, L333, Z468).

B. Biology electives (200 level or above) to total 30 cr. chosen from those appropriate for biology majors.

C. L452 (0-1 cr.) Capstone in Biology

II. MATHEMATICS CONCENTRATION (30* cr.)

Pre Calculus and Trigonometry are prerequisites for upper level courses. Credits from these courses may be used to satisfy the Mathematics General Education Requirement, but do not contribute to the credit hours in the concentration.

A. The Calculus sequence, Math M215-216-311 (13 cr. hrs).

B. Applications Courses (6 cr.) These courses are chosen from among Linear Algebra, Differential Equations, and Numerical Methods.

C. Transition (6 cr.) Math M380 (History of Math) and M393 (Bridge to Abstract Math)

D. One Course (3 cr.) at the Math M400 level.

E. Mathematics electives (2-3 cr.) to total 30 cr. Must be 200 level or above. This can include certain computer science courses, but excludes Math K300.

F. Capstone in Mathematics (0 cr.)

** Must include at least 20 cr. at the 200 - 400 level. No more than 6 cr. of individualized study may be used.*

III. Biochemistry Concentration (30 cr.)

A. Biology Courses(16 cr. hrs).
BIOL L211, Molecular Biology (3 cr.)
BIOL L213, Molecular biology Laboratory (2 cr.)
BIOL M310, Microbiology (3 cr.)
BIOL M315, Microbiology Laboratory (2 cr.)

B. Chemistry Courses (13 cr.)
CHEM C341, Organic Chemistry Lecture I. (3 cr.)
CHEM C342, Organic Chemistry Lecture II (3cr.)
CHEM C343, Organic Chem. Lab I (2 cr.)

CHEM C344, Organic Chem. Lab II (2 cr.)
CHEM-C483, Biological Chemistry (3 cr.).

C. Capstone (1 cr.)

IV. INTERDISCIPLINARY CONCENTRATION (30 cr.)

A minimum of 16 cr. in Natural Science and Mathematics courses with additional courses to create a well-defined concentration. At least 20 cr. must be at the 200 level or higher. All interdisciplinary programs must be approved by the student's advisor, the NSM division curriculum committee, and the NSM School dean. Students should meet with their advisor early and plan their entire 4 year program.

◆Electives - additional courses as needed to total 120 credits