INDIANA UNIVERSITY

University Graduate School 2005-2006 Academic Bulletin

General Science

University Graduate School Kirkwood Hall 111 Indiana University Bloomington, IN 47405 (812) 855-8853

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Bloomington

Interdepartmental Graduate Committee on General Science

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Associate Professor William Harwood* (Chemistry, Education), Chairperson; Professor Emeritus Gary Lane* (Geological Sciences); Professor Catherine Olmer* (Physics); Professor Albert Ruesink* (Biology); Professor Emeritus V. Jack Shiner* (Chemistry)

Graduate Advisor

Professor William Harwood*, Wright Education Building 3010, (812) 856-8164

Degrees Offered

Master of Arts for Teachers

Special Program Requirements

(See also general University Graduate School requirements.)

Admission Requirements

Bachelor's degree with 35 credit hours in science or in science and mathematics. It should be understood that the program of study for this degree is not designed to allow one to continue for the Ph.D. degree.

Course Requirements

Sixty-five (65) credit hours in science and mathematics (counting courses taken as an undergraduate) to include:

- 35 credit hours in the physical sciences, distributed as follows: astronomy (3 credit hours), chemistry (10 credit hours), geology (6 credit hours), physics (10 credit hours), and electives (6 credit hours);
- 25 credit hours in the biological sciences, distributed as follows: plant sciences (10 credit hours), microbiology (5 credit hours), and zoology (10 credit hours). Certain general biology courses may count toward this requirement (see below); and
- 3. 5 credit hours in mathematics or computer science.

At least 36 credit hours are required beyond the bachelor's degree, including 26 credit hours in the abovenamed sciences, mathematics, or computer science, the remaining 10 credit hours in science, mathematics, or education.

These minimum requirements are to be met by selecting from the following courses; an advisor in the program should be consulted regarding the acceptability of other courses.

1. Physical Sciences

Astronomy: A100, A105 (or A110), A201, A202, A451, A452, X311

Chemistry: C105 and C125, C106 and C126, C315, C317, C318, C335, C341, C342, C343,

C344, C360

Geological Sciences: G111, G112, G221, G222, G300, G301 (or G411), G316, G319, G334,

G404

 $Physics: P201-P202 \ (or \ P221-P222), \ E250, \ P300, \ P301, \ P302, \ P310, \ P331, \ P340, \ P360, \ P421, \ P360, \ P360, \ P460, \ P360, \ P36$

P431

2. Biological Sciences

General Biology: L111, L112, L113, L211, L311, L312, L313, L318, L319, L323

Microbiology: M310, M315

Plant Sciences: B300, B351, B352, B364, L313, B371, B372, B373 Zoology: Z265, Z373, Z374, Z375, Z406, Z460, Z464, Z466

3. Mathematics and Computer Science

Mathematics: M215, M216 Computer Science: C201

Other 300- and 400-level science courses must be approved by your advisor.

Grades

B (3.0) average or higher; at least B in science courses.

Certification Requirements

All students seeking the M.A.T. degree must be eligible for certification to teach at the middle school or high school level in Indiana or another state.