



COLLEGE OF NATURAL SCIENCES AND MATHEMATICS
OFFICE OF THE DEAN

RECEIVED FEB 12 2009

A handwritten signature in black ink, appearing to be "J. Evans".

Memorandum

To: Jeanette Morales
From: Ian Evans
Subject: Catalog changes
Date: 12 February 2009

The college Curriculum Committee has met and approved the following catalog changes (I have attached hard copy of the online catalog highlighting where these changes occur):

1. A change in the wording for Special Requirements – Bachelor of Arts degree Natural Sciences requirement:

Natural Sciences: 7 hours

Two approved courses in the same discipline, chosen from biochemical and biophysical science, biology, chemistry, earth and atmospheric sciences and physics. These courses must be from outside the student's major, and only include those courses approved for NS&M majors.

2. A change in the wording for Special Requirements – Bachelor of Science degree Natural Sciences requirement:

Natural Sciences: 14 hours

Approved courses, including two laboratories in the same discipline, chosen from biochemical and biophysical science, biology, chemistry, earth and atmospheric sciences, and physics. These courses must be from outside the student's major, and only include those courses approved for NS&M majors.

3. A change in the wording for Special Requirements – Bachelor of Arts degree Natural Sciences requirement:

NSM Capstone: 6 – 21 hours

The NSM Capstone requirement may be satisfied by completing one of the following options:

- A double major
- A double or previous four-year degree
- A six hour senior research project
- A senior honors thesis
- 6 hours of NSM-designated paired capstone courses – GEOL 3355-3360; COSC 3351- 4352.
- an approved minor
- Completion of TeachHouston requirements
- Computer Science (Business Option) majors may satisfy the capstone requirement by completing six approved advanced hours from MIS 3380 and one of MIS 4374, or 4379, or 4478.

4. A change in the wording for Special Requirements – Bachelor of Science degree Natural Sciences requirement:

NSM Capstone: 6 – 21 hours

The NSM Capstone requirement may be satisfied by completing one of the following options:

- A double major
- A double or previous four-year degree
- A six hour senior research project
- A senior honors thesis
- 6 hours of NSM-designated paired capstone courses – GEOL 3355-3360; COSC 3351- 4352.
- an approved minor
- Completion of TeachHouston requirements
- Computer Science (Business Option) majors may satisfy the capstone requirement by completing six approved advanced hours from MIS 3380 and one of MIS 4374, or 4379, or 4478.

5. Editorial change in the area of the Computer Science Major (Software Design Option). Mathematics – MATH 1431, 1432, 2331, 3336, 3338, and 3339 sums to 20 rather than 21 total hours as currently shown in the online catalog.

6. Editorial change in the area of the Computer Science Major (Software Design Option). Computer Science – delete “with at least six hours of regular 3000- or 4000-level computer science electives.

Baccalaureate Degrees

The college offers the Bachelor of Science degree in all departments and the Bachelor of Arts degree in biochemical and biophysical sciences, biology, chemistry, earth science, mathematics, and physics. Students interested in teaching biology, chemistry, earth science, mathematics, or physics at the secondary level should contact the Office of the Dean for advisement.

Requirements for a Baccalaureate Degree

The following requirements must be met by students who expect to earn a Bachelor of Arts or a Bachelor of Science degree with a major in the College of Natural Sciences and Mathematics. Students will also be required to meet special requirements listed in the Academic Regulations and Degree Requirements section of this catalog

1. Completion of a minimum of 122 semester hours. At least 36 of the 122 semester hours are to be advanced according to the respective degree plans. Any change or substitution must have the College Dean's written approval. Students must earn a 2.00 minimum cumulative grade point average in all courses attempted at the university.
2. Completion of the core curriculum requirements.

Core Curriculum Requirements	Hours
<u>ENGL 1303, 1304</u> . Freshman Composition I, II	6
<u>MATH 1310</u> . College Algebra	3
Three hours in approved math, logic, statistics, computer science, or music theory courses	3
Approved courses in Natural Sciences	6
Approved courses in Social and Behavioral Sciences	3
Approved courses in Writing in the Discipline	3
Approved courses in Humanities	3
Approved courses in Visual/Performing Arts	3

American History: HIST 1377 and 1378 6
or equivalent
American Government: POLS 1336 and 6
1337 or equivalent

3. Completion of college degree requirements (B.A. or B.S.) to include a major (29 to 50 semester credit hours of which at least 18 must be advanced) and NSM Capstone course work (at least 6 advanced hours)
- Of all courses attempted in the major (including both required and "elective" courses in the major), no more than six semester hours with grades below C-. Students exceeding that limit must retake sufficient courses and obtain acceptable grades (C- or above), so that they do not exceed the two course limit. Students may choose the course(s) to retake unless prohibited by specific catalog language. Substitutions must be approved by the major department and the Dean's Office.
 - Students must earn a minimum 2.00 grade point average in all courses in the major (both required and elective) attempted at the university.

Special Requirements - Bachelor of Arts Degree

In addition to meeting the core curriculum requirements, students must complete the following (see major department for specific course work which may be required):

1. Major department courses: 29-50 hours

Of all courses attempted, (including both required and elective courses in the major), no more than six semester hours with grades below C-. Students exceeding that limit must retake sufficient courses and obtain acceptable grades (C- or above), so that they do not exceed the two-course limit. Students may choose the course(s) to retake unless prohibited by specific catalog language. Substitutions must be approved by the major department and the Dean's Office. Students must earn a minimum 2.00 grade point average in all courses (either required or elective) attempted in the major at the university .

2. Foreign Language: 6 hours

Courses at the 2000-level or above in the same language are required. International students may not take English or their native language (more information is available in the Regulations and Requirements in this catalog).

3. Mathematics: 6 hours

These must be selected from courses approved for NSM majors.

4. Natural Sciences: 7 hours

Two core-approved courses in the same discipline, chosen from biochemical and biophysical science, biology, chemistry, geology, and physics. These courses must be from outside the major. No nonscience major course work will meet the requirement.

ITEM 1 ON
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5. NSM Capstone: 6-21 hours

The NSM Capstone requirement may be satisfied by completing one of the following options:

- a double major.
- a double or previous four-year degree.
- a senior research project.
- a senior honors thesis.
- 6 hours of NSM-designated interdisciplinary capstone courses.
- an approved minor.

ITEM 3 ON
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Students should consult the Academic Regulations and Degree Requirements section of this catalog for general information on the requirements for minors. Students must earn a 2.00 minimum cumulative grade point average on all courses attempted in the minor discipline at the University of Houston. Courses which by catalog statement cannot be applied toward a degree in Natural Sciences and Mathematics, or which have other relevant catalog restrictions will not be included in the minor grade point average.

Special Requirements - Bachelor of Science Degree

In addition to meeting the general requirements, students must complete the following (see major department for specific course work which may be required):

1. Major department courses: 29-50 hours

Of all courses attempted, (including both required and elective courses in the major), no more than six semester hours with grades below C-. Students exceeding that limit must retake sufficient courses and obtain acceptable grades (C- or above), so that they do not exceed six hours. Students may choose the course(s) to retake unless prohibited by specific catalog language. Substitutions must be approved by the major department and the Dean's Office. Students must earn a minimum 2.00 grade point average in all courses (either required or elective) attempted in the major at the university.

2. Natural Sciences: 14 hours

Core-approved courses including two laboratories in the same discipline, chosen from biochemical and biophysical science, biology, chemistry, geology, and physics. These courses must be from outside the major. No nonscience major course work will meet this requirement.

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MEMO

3. Mathematics: 12 hours

These must be selected from courses approved for NSM majors.

4. NSM Capstone: 6-21 hours

The NSM Capstone requirement may be satisfied by completing one of the following options:

- a double major.
- a double or previous four-degree degree.
- a senior research project.
- a senior honors thesis.
- 6 hours of NSM-designated interdisciplinary.
- capstone courses.
- an approved minor.

ITEM 4 ON
MEMO

Students should consult the Academic Regulations and Degree Requirements section of this catalog for general information on the requirements for minors. Students must earn a 2.00 minimum cumulative grade point average on all courses attempted in the minor discipline at the University of Houston. Courses which by catalog statement cannot be applied toward a degree in Natural Sciences and Mathematics, or which have other relevant catalog restrictions will not be included in the minor grade point average.

Computer Science Major

Students who choose to major in computer science must meet the following requirements in addition to the special requirements for the Bachelor of Science degree:

Software Design Option

Requirements	Hours
Mathematics <u>MATH 1431, 1432, 2331, 3336, 3338, and 3339</u>	20
Computer Science <u>COSC 1410, 1320, 2320, 2410, 3320, 3351, 3430, 3440, 3380, 4211, 4330, 4351, and 4352</u>	41
Nine approved advanced semester hours of computer science electives (with at least six hours of regular 3000- or 4000-level computer science electives.)	9

21
20

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Systems, Science Option

Requirements	Hours
Mathematics <u>MATH 1431, 1432, 2331, 2433, 3336, 3338, and 3339</u>	24
Three semester hours of approved 4000-level MATH (Designed to complete a minor in mathematics meeting the NSM Capstone requirement. Note: students must file for a minor and meet all university requirements for a minor.)	3
Physics <u>PHYS 1321, 1322</u>	6

Computer Science