

College Of Science

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The College of Science was established in 1976 and is composed of three divisions: Biological Sciences, Physical Sciences, and Mathematics and Applied Science. The three divisions contain the college's six academic units (Biological Sciences, Chemistry, Geology, Mathematics, Physics and Physical Sciences, and Integrated Science and Technology). Biological Sciences, Chemistry, Physics and Physical Sciences, and Geology are housed in the Science Building. Mathematics is located in Smith Hall, and Integrated Science and Technology is in Prichard Hall. Course offerings by all departments within the college are available to science majors and to students in other disciplines who are interested in broadening their skills and knowledge in basic science, mathematics, and computers.

MISSION OF THE COLLEGE

Scientific and technologically trained people are essential to our nation's health and prosperity in a rapidly expanding global economy. Students majoring in baccalaureate degree programs in the College of Science receive a broad education conducive to pursuing a wide range of career options. Course requirements include solid grounding in the student's chosen area of scientific interest along with studies in humanities and the social sciences. Students receive instruction in a learning environment that encourages competency in written and oral communication skills along with the ability to work in groups. Special emphasis is placed on experiential learning through participation in activities such as undergraduate research and internships. For non-science majors, departments in the College of Science offer a series of courses which focus on enhancing science literacy through instruction in integrated science and practical applications of mathematics.

ADMISSION REQUIREMENTS

College of Science admission requirements for students at the freshman level are higher than those required for general admission to the university. The ACT scores required for full admission to the College of Science are a minimum mathematics score of 21 and a minimum composite score of 21. For the SAT, a score of 500 in math and a 1000 composite score are required.

Students who do not meet these admission requirements but still wish to pursue a program in the College of Science may gain admission by enrolling in another college and completing the following requirements.

1. Completion of MTH 127 (or MTH 130) and ENG 101 with a grade of C or higher.
2. Completion of at least 15 credit hours of college work with a GPA of 2.0 or higher.
3. Transfer students must have a 2.0 GPA with a C or higher in MTH 127 (or MTH

130) and ENG 101, or meet the ACT or SAT requirements stated above.

PROGRAMS

The following programs are available through the departments in the College of Science:

- Biological Science (B.S.)
- Chemistry (B.S., B.S. in Chemistry)
- Environmental Management (in cooperation with Duke University)
- Environmental Science (B.S.)
- Forestry (in cooperation with Duke University)
- Integrated Science and Technology (B.S.)
- Geology (B.S. and B.A.)
- Mathematics (B.S.)
- Physics (B.S.)

In addition to satisfying the requirements for a specific major, students must meet the college requirements outlined below and the university requirements as described in this catalog. Students entering any baccalaureate degree program in the College of Science are responsible for meeting four requirements of the Marshall Plan, baccalaureate program initiatives approved by the faculty and the university president for all students. These include Writing Across the Curriculum, Computer Literacy, International and Multicultural Studies, and the Capstone Experience. Students in the College of Science are not required to satisfy the 4-hour Integrated Science requirement. Students are to consult with their academic/program advisors or the chairperson of their major departments for guidance in determining the specific details of meeting the above referenced baccalaureate curricular initiatives.

GENERAL COLLEGE REQUIREMENTS

1. Candidates for graduation must apply for graduation through the office of the dean.
2. Candidates for graduation must have a Grade Point Average of 2.0 or higher on all work attempted at Marshall University, and must have an average of 2.0 or higher in their major. Quality point deficiencies in the major cannot be reduced by taking lower division (100/200 level) courses within the major department, except as provided for by the *D/F Repeat Rule*; exceptions may be allowed by the department chair with the concurrence of the dean.
3. A minimum of 128 semester hours of credit is required for graduation. Forty-eight hours must be earned in courses numbered 300-499. Courses transferred from twoyear or community colleges cannot be used to satisfy the upper division requirement.
4. The CR/NC option cannot be used: (1) for any course taken to meet the specific requirements for a B.A. or B.S. degree (see below); (2) for any course taken to fulfill the requirements for a departmental major; or (3) for any course taken to fulfill the requirements for a minor (item 5).
5. Candidates must earn at least 12 hours in a minor subject. Requirements for the minor are determined by the minor department. The minor field may be chosen from any department within the university outside of the major department.
6. During the junior year, and no later than the semester in which they have completed 90 semester hours, students should request an evaluation by the dean's office to determine if they are making satisfactory progress towards graduation.

Specific Requirements for the B.A. and B.S. Degrees
(Do not apply to Engineering Geology area of emphasis
or Integrated Science and Technology)

HUMANITIES

Requirements Credit Hours

I. English 101 and 102, or 201H 6

Students who take either 102 or 201H on a CR/NC basis are required to pass the English Qualifying Examination.

II. Foreign Language 3-12

Successful completion of 12-hour sequence ending with German 204, Greek 302,

Latin 204, French 204, Spanish 204, or Japanese 204. Students with previous language experience should consult the prerequisites listed in the “Courses of Instruction” section of this catalog to determine the appropriate sequence of courses. International students may satisfy this requirement by consultation with the Department of Modern Languages.

III. Communication Studies 0-3 hrs.

Communication Studies 103, 104H or 305. Communication Studies 103 is not required for students who have had high school speech and who can pass a proficiency exam administered by the Communication Studies Department. Communication Studies 305 is open to juniors and seniors who have not had Communication Studies 103.

IV. Literature 6

Courses to be selected from the following:

Classics 230, 231, 232, 233, 234

English: any 300- or 400-level literature course (ENG 350, 354, 360, 377, 378, 402, 405, 408, 420, 444, 446, 455, 458, 475, 476, and 478 do not fulfill this requirement)

French 317, 318, 401, 402, 403, 404

German 301, 302, 417, 418

Latin—any 300 or 400 level course

Religious Studies 320, 325, 351

Spanish 411, 412, 413, 414, 415, 416

V. Classics, Philosophy or Religious Studies 3

One course to be selected from the following:

Classics—any course except 230, 231, 232, 233

Philosophy—any course

Religious Studies—any course except 304, 310, 320, 325, 351

SOCIAL SCIENCES

I. Courses to be distributed in at least three fields from

Economics, Geography, History, Political Science, Psychology, and

Sociology and Anthropology 15

Economics—any course

Geography 100, 203

History—any course

Political Science—any course

Psychology—any course for which the student has the necessary prerequisite, except 223 and 417.

Sociology-Anthropology—any course for which the student has the prerequisite except SOC- 344, 345 and 445.

SCIENCE AND MATHEMATICS

I. Natural and Physical Sciences12

Courses to be distributed in at least two fields from biological sciences, chemistry, geology and physics.

II. Mathematics, minimum requirement: Completion of one of the following:

MTH 130 or equivalent and one of the of the following:

MTH 122, 140, 225, or MTH 229

See individual program descriptions for specific requirements. All students whose Math ACT score is less than 19 are required to take MAT 097. Credit received in MAT 097 cannot be applied toward the 128 hours required for graduation.