# College of Science and Health | Undergrad

Michael R. Hulsizer, Dean

College of Science and Health website (external to catalog)

#### Mission Statement

Science is the foundation of our understanding of the natural and physical world that sustains us, life on our planet, and of humanity's efforts to promote health in the body, mind, and spirit for all persons and peoples. The science and health disciplines in our college directly contribute to healthy groups, organizations, and communities across cultural contexts and within sustainable natural environments. Through interprofessional collaborations, the College of Science and Health facilitates high-impact educational and professional experiences that develop global citizens whose work promotes the advancement of science and holistic health, healing and well-being of persons and peoples, and strives toward a healthier natural world in ways that are equitable, inclusive, accessible, and sustainable.

## **Degree Distinctions**

#### **International Distinction**

The student must have a significant, practical, international field experience in a country other than his or her native country. This experience may be an internship, community service, volunteer work with a nongovernmental organization or other organization, paid employment in the second country, or other field experience that is proposed and approved

The approval process involves submission of the proposed plan, identifying what the student will accomplish, and who will be involved, i.e. supervisor of the actual field experience, contact person at the University, etc. The student will work with his or her advisor and the Director of the Center for International Education in developing the plan for the international field experience. Prior to the field experience, the student must receive approval of the plan from the department in which the student expects to receive her or his undergraduate degree.

Approval must also be given by the Academic Director (or appointee) of the country in which the field experience will take place. Approval forms will be available electronically. During the field experience, a journal will be kept and will be handed in at the end of the experience along with a written synopsis of the field experience. The department will determine if the experience was acceptable or unacceptable.

Students should register for ISTL 2500 for 3-5 credit hours. Grade will be pass or fail. A minimum of 10 hours and a maximum of 20 hours per week will be spent doing the field experience.

# **Study Abroad Distinction**

Students must have completed at least one term of study (eight weeks) as a full-time student at a Webster University international campus or a Webster University affiliated campus abroad. This campus must be a campus other than the student's home campus.

#### **Natural Sciences and Mathematics**

Andrew Elvington, Chair

# **Majors and Degrees**

- Biological Sciences (BS)
   Optional emphasis areas:
  - Chemistry
  - Bioinformatics
  - · Health and Medicine
  - Research and Technology
- · Biology (BA)

Optional emphasis areas:

- Biodiversity
- Bioinformatics
- Education
- · Health Science
- Chemistry (BS)
- Exercise Science (BS)

### **Minors**

- Biology
- Chemistry
- Exercise Science
- General Science
- Mathematics

#### Certificates

 Entrepreneurship (Exercise Science majors track) (In cooperation with the Walker School of Business & Technology)

## **Pre-Professional Programs**

- · Pre-Engineering
- Pre-Dental
- Pre-Medical
- · Pre-Nursing
- Pre-Occupational Therapy
- Pre-Pharmacy
- Pre-Veterinary

#### **Teacher Certification Opportunity**

Students interested in middle school or secondary mathematics education generally earn majors in mathematics and education while completing the requirements for state certification. The Coordinator of Mathematics Pre-Service Education works closely with these students to assure they are prepared and qualified for their practice teaching experience.

## **Department Mission**

The Department of Natural Sciences and Mathematics provides a rigorous and applied learning experience that integrates the fundamental sciences of biology, chemistry, physics and mathematics. We serve a highly diverse student population coming from a range of ethnic and educational backgrounds. As a department, we focus on a personalized approach to education, tailoring each experience to meet the academic and career goals of the individual student. By maintaining small class sizes and emphasizing group activities, our students interact directly with the faculty and with each other on a regular basis.

The degrees offered in the natural sciences and mathematics are designed to prepare students for rewarding careers as scientists, educators, professionals, and global citizens. The department currently offers six baccalaureate programs (a BA in biology and a BS in biological sciences, each with associated emphases, a BS in chemistry, a BS in exercise science, and two BS programs in mathematics (pre-engineering and non-engineering)) and five

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minor programs (biology, chemistry, exercise science, general science, and mathematics). We also offer individual courses satisfying the requirements for general education and special interest courses in environmental studies, education and health science.

Given the importance of independent research and experimentation in science, the department faculty are committed to providing hands-on research opportunities to all majors in the biological sciences. Our curriculum includes extensive laboratory experience, ensuring that each student will develop proficiency in a wide range of lab techniques, as well as in the analysis, interpretation and presentation of scientific data.

## **Special Requirements**

Courses taken more than 10 years ago may not count as the prerequisite for certain advanced courses.

Transfer students must complete a minimum of 18 credit hours at Webster University within the Natural Sciences and Mathematics Department. This must include Research Methods (BIOL 4400 or CHEM 4400) and Senior Thesis (BIOL 4420, BIOL 4430 or CHEM 4430) for the appropriate majors. Transfer courses taken prior to enrollment at Webster University may be used to substitute for required courses if accepted by the chair.

No more than 6 credit hours of independent study courses may count toward the required biology hours. Coursework completed with a grade of "D" may not be counted toward the fulfillment of departmental requirements.

## **Nursing Department**

Jody Spiess, Chair

## **Majors and Degrees**

Nursing (BSN)
 RN to BSN
 Bachelor of Science in Nursing

#### **Department Mission**

The Nursing Department's mission is to provide exemplary experiential, student centered learning in an environment that encourages lifelong learning, accountability for self, respect for all humans and individual excellence in nursing practice.

The Department's vision is to be recognized in the region as the institution of choice for baccalaureate nursing degree completion and for attaining master's degrees in human services and in nursing.

At Webster University Department of Nursing, we value:

- · Our students as adult learners
- · Population-centered care
- · Evidence-based education and practice
- · Interprofessional collaboration
- · Diversity, inclusion and equity
- · Global citizenship

The bachelor of science in nursing (BSN) program is designed for registered nurses who wish to advance their knowledge in nursing, the sciences and the liberal arts. The program helps the registered nurse develop analytic and communication skills for professional excellence.

The BSN curriculum focuses on holistic health promotion for the individual student, the profession, the client, the family, groups and the community. There is a strong emphasis on the nurse's personal development, the needs and future of the profession, and the broad, accountable nursing role that is needed and expected by today's health care consumer. The program prepares the registered nurse for generalist nursing practice. The faculty strives to create a dynamic, interactive learning environment. A variety of faculty members, student experiences and learning environments are used to meet program and individual student goals.

The baccalaureate nursing program at Webster University located in Saint Louis, Missouri is accredited by the Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Rd NE, Suite 1400 Atlanta, GA 30326 (404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the baccalaureate nursing program is continuing accreditation.

View the public information disclosed by the ACEN regarding this program at https://www.acenursing.org/search-programs.

#### **Special Study Opportunities**

Instructional Formats: Courses are offered online in eight-week sessions. Since all RN to BSN students are transfer students, students have individualized plans based on the number and types of transfer credits. Student can complete the core program requirements in two and one-half years on a part-time basis but often have additional credit hour requirements for degree completion.

# **Special Requirements**

To progress through the program, nursing courses (NURS) must be completed with a grade of "C" or higher. In addition, in courses with a clinical/practice experience component, students must receive a grade of "Satisfactory" in the clinical/practice experience portion of the course in order to pass the course. Unsatisfactory completion of the clinical/practice experience component of the course results in automatic failure of the course. Students may repeat a specific nursing course only one time and no more than two nursing courses may be repeated during the program.

# **Special Admission Requirements**

Students are expected to demonstrate a minimum GPA of 2.5 on prior college coursework for admission to the BSN program. The student must also hold current, unencumbered licensure as a registered nurse or, for new graduates, have a scheduled NCLEX exam within three months of beginning the program.

# **Psychology Department**

Morgan Grotewiel, Chair

### **Majors and Degrees**

- Psychological Science (BS)
- Psychology (BA)
- · Psychology (BA) with an Emphasis in Mental Health
- Psychology (BS)

#### Minors

Psychology: General

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· Psychology: Health

#### **Pre-Professional Programs**

- Pre-Counseling
- · Pre-Occupational Therapy

#### **Department Mission**

The Department of Psychology provides students with a solid foundation in the major theoretical perspectives of psychology and its scientific approach. By studying psychology at Webster, students attain a broad understanding of and appreciation for the complexity and diversity of human behavior within a global context.

The bachelor degrees in psychology prepare students for a wide range of professional career opportunities. To that end, there are four different psychology majors to assist students in meeting their career ambitions: psychological science (BS), psychology (BA), psychology (BA) with an emphasis in mental health, and psychology (BS). These majors and designed to prepare students for a variety of career options and graduate opportunities. Students also attain the necessary prerequisites for graduate education in psychology or for professional training in related fields such as counseling, education, social work, criminal justice, law, medicine, business or management. In addition, students who successfully complete the psychology program will have critical thinking, research and data analysis skills to navigate the wealth of information present in our society.

Through the psychology curriculum, students learn about both the scientific and applied areas of psychology from a range of perspectives including biological, clinical/counseling, cognitive/ learning, lifespan developmental and social/cultural. Students take the Careers in Psychology class soon after entering Webster and have the opportunity to explore professional opportunities through specialized courses highlighting applied subfields (e.g. Introduction to Clinical Psychology, Social Work, or Counseling).

The degree opportunities in the Psychology Department were designed according to the most recent research on the scholarship of teaching and learning within the field of psychology. Curriculum is constantly updated to meet the best practices advocated by the American Psychological Association.

# **Special Study Opportunities**

**Study Abroad:** The psychology program at Webster is unique. What distinguishes it from other programs across the country is the importance placed on examining psychology from a global perspective and the emphasis placed on infusing international human rights throughout the curriculum. To that end, psychology is one of the few programs with a full complement of courses available at all of Webster's international sites. Students are strongly encouraged to take advantage of these opportunities.

Individualized Learning/Research Opportunities: Students can also further tailor their learning through individualized coursework, international experiences, and collaborative research with faculty members. Students have the opportunity to engage in numerous high-impact experiences, including conducting their own research projects in the Senior Thesis course, working with faculty mentors on collaborative research, gaining hands-on experience at a community practicum site, and collaborating with faculty to design their own in-depth readings on topics of interest.

**Instructional Formats:** Webster provides students with a wide variety of methods for pursuing their goals. In addition to

traditional coursework, the curriculum includes independent study, practica, research and supervised reading courses. Students will leave Webster having learned material in a fashion that reflects the diversity of opportunities in the real world.

### **Departmental Academic Advising**

Early in a departmental advisee's residence, a departmental faculty advisor is assigned to help assess and plan the student's program of study, focusing on the student's specific academic and career goals. A student's individual academic plan is flexible and may change as he or she fine-tunes his or her goals and interests.