# BIOLOGICAL SCIENCES with Teacher Certification

COLLEGE OF ARTS + SCIENCES



people say. Or amazing. Or chaotic, beautiful, unfair, and too short. But a biologist says that life is discoverable. And as a teacher of biology, you are—quite literally—teaching future generations about life. Medicine, dentistry, pharmacy, environmental service, molecular genetics, virology, botany, ecology, marine biology, microbiology, physiology, zoology—our program is the first step toward all of these specialties and more. Whether your interest is micro or macro, we'll turn you into an expert-level life scientist and teacher.

## Possible Careers:

- High School Biology Teacher
- Ecologist
- Veterinarian
- Microbiologist

ATTENDING LOYOLA means being in the heart of New Orleans. Our campus is located in the city's historic Uptown neighborhood, just a short drive from the Central Business District, the city's hub of innovation and strategic thinking. You'll learn to hone your talents in the city named #1 new brainpower city in America and the #5 city in the U.S. for women in tech.



### COURSES

The courses listed below represent the curriculum offered within the biological sciences discipline. The additional teacher's certification requires 30 credit hours of supplemental teaching curriculum, after which students will be prepared to teach secondary education (grades 6-12). Here's a sample of what you can expect to learn and do:

#### **Conservation Biology**

The study of the conservation of biodiversity based in the principles of ecology, evolution, and genetics. The primary goal of this course is to understand natural ecological systems in the context of a human dominated world to learn to best maintain iological diversity in concert with an exploding human population. This is accomplished through lecture, Socratic discussion, and videos.

#### **Developmental Biology**

The study of animal development from fertilization through organogenesis. Major developmental events, embryo anatomy, the origin of major cell types, cell-cell interactions as well as the molecular mechanisms guiding development are explored.

#### **Parasitology**

This course is designed to actively engage students in the study of parasitology. The course emphasizes parasites of public health concern reviewing recent studies using current technologies. Major conceptual themes include evolutionary relationships, virulence, origins of a parasitic life, life histories, manipulation of hosts, host immune responses, and consequences for hosts.