BZGE 5272. CONSERV LIFE SCI CUR & INS I. (3 Credits)
This Bronx Zoo course will give participants working toward a career in secondary science education an in depth look at the science topics they will be required to teach from the perspective of developing an engaging learning environment. Prospective teachers will learn how to incorporate NY State science standards, and gain the background necessary to teach science, instill the values of environmental conservation, and inspire them to share their expertise and bring enthusiasm and the joy of discovering the natural world to their future classrooms.

BZGE 5273. CONSERV LF SCI CURR & INST II. (3 Credits)
This Bronx Zoo course is a continuation of Science Course I and will give participants working toward a career in adolescent science education an in-depth look at the science topics they will be required to teach, with an emphasis on how the topics are relevant to our natural environment, today and in the future. Prospective teachers will learn how to incorporate New York State science into their teaching. During this course, participants will develop an elective semester long environmental science class. This course will give students opportunities to do original research and will provide teachers with the background and techniques necessary to build connections between students’ lives and environmental issues.

BZGE 5274. TCHR ASSESS CONS LF SCI:ADOLES. (3 Credits)
This Bronx Zoo course will provide students with the skills and knowledge to integrate science with language arts, social studies, math, art, music, and more into their classroom curricula. Students will learn successful techniques for incorporating science across the disciplines while adhering to the national and NY State science standards. This course is designed to provide students with a familiarity of perspectives, theories, methods, and materials for teaching science effectively for students in grades 7-12.

BZGE 5275. INTEGR CONS LF SCI MATH & TECH. (3 Credits)
This course assumes a strong knowledge base in math and/or science content knowledge, pedagogical content knowledge, and pedagogical knowledge. One goal of this course is to gain a deeper knowledge and understanding of models of integrated teaching and learning such as project-based learning, problem-based learning, thematic and interdisciplinary teaching and learning. The second goal is to explore technology through integrated learning activities and projects. In order to gain this knowledge and experience, we will engage in dialogue, investigation, analysis, and reflection of specific projects that integrate math, science, and technology in secondary school.

BZGE 5304. LEARN ENVIRON ADOL:RFL FLD EXP. (3 Credits)
This Bronx Zoo course will provide students with the skills and knowledge to guide and facilitate classroom interactions to meet the learning needs of a diverse population of adolescents. Students will examine curriculum materials, teaching strategies, and lesson design options to accommodate a diverse group of learners. Participants will examine the characteristics of a differentiated classroom and identify techniques for differentiating content. This course will also use Bronx Zoo programs and curricula as models to help the students discover effective strategies for using informal science institutions to support and enhance learning their classrooms.

BZGE 5308. STUD TCHING/ADOL: RESCH& PRAC. (3 Credits)
In this course, teacher candidates develop an understanding of the processes integral to researching student knowledge while promoting student learning. Teacher candidates will review, evaluate, and interpret a wide range of alternative approaches to assessment, acquiring an abundant repertoire of strategies for assessing student learning in the classroom context, and using that information to plan or modify instruction. Students will learn how to use research to examine and reflect on their teaching, and to update knowledge and skills in teaching.