PA 4950 Creative Inquiry-PerformingArts 1-4(1-4)
In consultation with and under the direction of a faculty member, students pursue scholarly activities individually or in teams. These creative inquiry projects may be interdisciplinary. Arrangements with mentors must be established prior to registration. May be repeated for a maximum of eight credits. Preq: Consent of instructor.

PA 4990 Independent Studies 1-3(1-3)
Supervised study for students with special interests in performing arts outside the scope of existing courses. May be repeated for a maximum of six credits. Preq: Consent of department chair.

PAN AFRICAN STUDIES
Associate Professor: A. A. Barley

PAS 1010 Africa and the Atlantic World 3(3)
Study of Africa and its impact on the culture and life of peoples in the New World. Traces the impact Africans have had on shaping the music, language, dress, art, religion, and culture of the Western world.

PAS 3010 Introduction to Pan African Studies 3(3)
Study of African American experience from an Afrocentric perspective from colonial America to the present.

PAS 4000 Studies in Pan African Studies 3(3)
Study of selected topics or themes in Pan African Studies. Allows for individualized study of specific topics related to Pan African Studies such as music, dance, religion, colonization, slavery, or economic development. May be repeated for a maximum of six credits, but only if different topics are covered.

PAS 4100 Studies in African Experience 3(3)
Looks at the impact of Africans or African Americans on U.S. society. Interdisciplinary course that allows for the study of Africans and their descendants from a variety of perspectives. Focuses primarily on the United States. May be repeated for a maximum of six credits, but only if different topics are covered.

PAS 4300 Hip-Hop and African American Contemporary Culture 3(3)
Examines the controversial history and legacy of Hip-Hop culture, and explores how the artistic expression of the American underclass has evolved into worldwide cultural expression. Combines scholarship and theory with considerable audio and video exposure to various Hip-Hop songs and artists. Preq: Sophomore standing.

PAS 4680 Comparative Racism and Discrimination in the Atlantic World 3(3)

PAS 4710 Directed Studies in the Black Experience in Education 1-3(1-3)
Students conduct research and produce scholarship on academic, social, and historical issues that impact the Black experience in educational settings. Students may also participate in service learning activities to broaden their understanding and apply their knowledge in the community. May be repeated for a maximum of nine credits.

PAS 4980* Seminar on Pan African Studies 3(3)
Research/writing seminar on the African American experience. Selected topics and themes from 1900 to present. Preq: PAS 3010; and one of HIST 3110 or HIST 3120 or HIST 3390.

PEARCE CENTER FOR PROFESSIONAL COMMUNICATION

PCPC 4990 Pearce Center Internship 1-3(1-3)
Students work in the Class of 1941 Studio for Student Communication on projects involving multimodal communications, public relations, graphic design, and publishing. Students edit copy, pitch stories, research and write articles for print, web, and/or video publication, create ePubs, develop and execute social media strategies, design marketing materials, develop public relations strategies, design websites, and other related tasks. Preq: Consent of instructor.

PLANT AND ENVIRONMENTAL SCIENCES

Professors: H. Liu, T. Whitwitt, G. Zehnder, P. Zungoli; Associate Professors: P. A. Juleo, J. Andrae, K. Gasic, E. Mikhailova, D. Park, N. Tharayil; Assistant Professors: S. Narayanan, D. Thavarajah; Adjunct Faculty: J. Ellis, V. Suseela

PES 1040 Introduction to Plant Sciences 3(3)
Fundamental course in plant sciences, including agronomic and horticultural crops of the major agricultural areas of the world and emphasizing the crops of South Carolina. Includes Honors sections.

PES 2020 Soils 4(3)
Introduces world land resources, soil formation, classification, and mineralogy. Emphasizes basic chemical and physical properties of soil. Also discusses soil microorganisms, plant nutrients, and fertilization. Soil properties are related to growth. Preq: CH 1010 or CH 1020 or GEO 1010. Coreq: PES 2021.

PES 2021 Soils Laboratory 0(2)

PES (ENGP) 3150 Environment and Agriculture 3(3)
Survey of the interrelationships of the environment and current agriculture and agricultural practices to include both the environmental impacts of agriculture and the role of agriculture in conservation and improving the environment. Includes Honors sections. May also be offered as ENSP 3150. Preq: Sophomore standing and one of the following combinations: BIOL 1040 and BIOL 1060; or BIOL 1100 and BIOL 1110; or CH 1010 and CH 1020; or CH 1050 and CH 1060.

PES 3350 Agricultural Biotechnology 3(2)
Strategies for the best use of biotechnology and genetic resources to alleviate constraints in global hunger, environmental sustainability, and health. Includes genetic enhancement and chromosome engineering of plant, animal, and microbial systems; issues related to commercial implementation; the impact on developing countries, environmental impact, and governmental policies. Preq: GEN 3000. Coreq: PES 3351.

PES 3351 Agricultural Biotechnology Laboratory 0(2) Non-credit laboratory to accompany PES 3350. Coreq: PES 3350.

PES (BIOL) 3400 Medical Botany 3(3)
Study of use of compounds of plant and fungal origin as poisons, hallucinogens, and pharmaceuticals. May also be offered as BIOL 3400. Preq: BIOL 1040 and BIOL 1060; or BIOL 1110; and CH 1020.

PES 3500 Practicum 1-6(1-6)
Preplanned practical or research experience related to student-selected Plant and Environmental Sciences concentration. Practicum is undertaken with an approved advisor or agency. May be repeated for a maximum of six credits. Preq: Plant and Environmental Sciences major.

PES 4010 Academic and Professional Development 1(1)
Students work with Career Center staff and the instructor to develop interview skills, resumes and professional goals, as well as identify skills necessary to be competitive. The importance of ethics in the workplace is discussed.

PES 4030* Soil Genesis and Classification 2(1)

PES 4031* Soil Genesis and Classification Laboratory 0(3) Non-credit laboratory to accompany PES 4030. Coreq: PES 4030.

PES 4050* Plant Breeding 3(3)
Application of genetic principles to the development of improved crop plants. Principal topics include the genetic and cytogenetic basis of plant breeding, mode of reproduction, techniques in selfing and crossing, methods of breeding, inheritance in the major crops, and biometrical methods. Offered spring semester only. Preq: GEN 3000. Coreq: PES 4051.

PES 4051* Plant Breeding Laboratory 0(2) Non-credit laboratory to accompany PES 4050. Coreq: PES 4050.

PES 4060 Special Problems 1-3(1-3)
Acquaints students with the scientific method. Literature investigation, planning, and execution of an experiment are integral parts of the course. Not open to students who have taken or are taking PES 4910 and PES 4920. May be repeated for a maximum of six credits. Preq: Senior standing.

PES (BE) 4080* Land Treatment of Wastewater and Sludges 3(3)
Principles for designing environmentally acceptable land application systems using municipal and industrial wastewater and sludges are presented. Topics include land-limiting constituent analysis, soil plant interactions, system equipment and design, and system operation and management; public acceptance, social, and regulatory issues. Case studies and field trips are planned. Preq: Senior standing. May also be offered as BE 4080.

PES 4090* Biology of Invasive Plants 3(3)
Introductory course covering mechanisms of plant invasions. Emphasizes unique traits that confer invasiveness and/or weediness to plants, and how these plant traits interact with the environment to facilitate invasion of agricultural lands, forests, rangelands and less-managed landscapes. Covers various cultural, chemical and biological control aspects. Preq: BIOL 1040 and BIOL 1060; or BIOL 3040.

PES 4210* Principles of Field Crop Production 3(3)
Principles for production of field crops. Topics include botany and physiology, tillage, harvesting, storage, and crop quality. Principles are illustrated using examples from various crops. Preq: PES 1040 and PES 2020.