

# AG SCIENCE (AGSC)

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## **AGSC 115. Agricultural Science & Context. (1 Credit)**

An introductory course in Agricultural Science intended for majors and students in related disciplines. This course will introduce students to the variety of industries and career paths within the agricultural science discipline as well as to the common skills necessary within these industries. Topics covered will include agricultural research from literature review through disseminating research results, computer literacy in agricultural science, and New York agriculture in context as compared to the North East, the United States as a whole, and the world. 1 credit (1 lecture hour), fall semester

## **AGSC 120. Domestic Animal Behavior. (3 Credits)**

This course is designed to provide the student with an introduction to, and a general understanding of domestic animal behavior. The evolutionary aspects of behavior, learning theory, normal and abnormal behaviors will be studied. Material will be presented concerning dogs, cats, sheep, goats, hogs, cattle and horses with an emphasis on cattle and horses. 3 credits (3 lecture hours), spring semester

## **AGSC 132. Introduction to Precision Farming. (2 Credits)**

Course introduces the student to site-specific crop management and precision farming. It involves the application of selective computer software and hardware in site-specific crop management. In addition, it focuses on providing the student with an overview of the basics of global positioning system (GPS), an introduction to geographic information systems (GIS), and an introduction to remote sensing. 2 credits (1 lecture hour, 2 laboratory hours) fall semester This course satisfies the Liberal Arts and Sciences requirement and the SUNY General Education Requirement for Natural Science.

## **AGSC 135. Computers in Ag Research. (1 Credit)**

Application of computer software in agricultural research including: statistical packages which include ANOVA, Duncan Multiple range test, correlation, etc. 1 credit, spring semester

## **AGSC 137. Agricultural Statistics. (3 Credits)**

This course involves the application of procedures and techniques for collecting, analyzing, and interpreting agricultural data. The course encompasses an introduction to statistical methods using examples and applications. The course also focuses on basic statistical analysis using the MS Excel spreadsheet program and other pertinent computer tools. Emphasis is placed on providing the student with problem-solving skills and the ability to interpret the results of basic agricultural statistical analysis. Prerequisite: MAGN 101 or equivalent 3 credits (3 lecture hours), spring semester This course satisfies the Liberal Arts and Sciences requirement and the SUNY General Education Requirement for Mathematics and Quantitative Reasoning

## **AGSC 246. Internship Agricultural Sci. (4 Credits)**

This internship involves students working in an approved job in agriculture. A journal, written report, and employer and faculty evaluation are required upon completion of the internship. 4 credits (12 weeks, 480 hours minimum), fall semester

## **AGSC 250. Application in Ag Science. (3 Credits)**

A capstone course in Agricultural Science intended for majors and students in related disciplines. Students completing the Agricultural science, AAS degree and are either moving into a Bachelor's degree program or entering the workforce will put the skills they've acquired over the preceding semesters into practice. Each semester a new issue facing agricultural production will be selected and students will develop proposals for how they would proceed to address the issue. This course will be conducted in a seminar style with associated lab. 3 credits (2 hours seminar, 2 hours lab), spring

## **AGSC 320. Contemporary Issues in Agricul. (3 Credits)**

This course involves a critical evaluation of the aspects of modern agricultural production, and its impact on society and the environment. The course explores the history of agriculture and its impact on civilization, investigates current topics impacting the agricultural industry and discusses different viewpoints in a debate setting. How food is produced in the United States informs many political discussions and debates. This course is designed to bring students with diverse backgrounds together to discuss modern agriculture and food production and its impact on society and the environment. This course is cross-listed as PHIL 320. Prerequisite: C or better in COMP 101 or COMM 105 This course satisfies the Liberal Arts and Sciences requirement and the SUNY General Education Requirement for Humanities. 3 credits (seminar), fall or spring semester

## **AGSC 350. Animal Genetics. (3 Credits)**

This course provides an application of the principles of genetic selection for the improvement of dairy cattle and horses. The basic concepts of inheritance from both mathematical and biological perspectives are emphasized. Progeny and performance testing programs, pedigree analysis, mating systems and their application to selection and production of genetically superior animals are discussed. Prerequisites: DANS 100 or ESCI 305 and DANS 120 or ESCI 110 with a C or better (prerequisite or co-requisite) 3 credits (3 lecture hours), spring semester for equine or fall semester for dairy students, alternate years, even years

## **AGSC 460. Agricultural Science Capstone. (3 Credits)**

As students prepare for their full semester internship, this course will help students conceptualize the knowledge and skills that they have developed over their bachelor degree program. Capstone projects will be specific to the students selected area of interest, and examples include unit curriculum, useable management plan, relevant agricultural science experiment, or general research report. This project will require students to apply previously learned knowledge, gather new information from professionals and research, and present a capstone project as a written report and oral presentation. Co-requisite: ENRM 450 3 credits (3 lecture hours)

## **AGSC 480. Internship Agricultural Scienc. (12-15 Credits)**

In this course, students will be placed at a business, not-for-profit or government organization focused on agronomy, agricultural education, animal agriculture, or other agricultural science related field for supervised real-world career training. Students carry out a planned program of educational experiences under direct supervision of an owner, manager, or supervisor of the organization. Each intern will be advised and monitored by a member of the faculty on a regular basis. Requirements include a journal, interim reports, supervisor evaluations, a summary report and an oral presentation. Every 40 hours is equal to 1 credit with the expectation that this internship will fulfill 480-600 hours (12-15 credits) over approximately 15 weeks. Prerequisites: ENRM 450, completion of degree coursework or permission of instructor 12-15 credits