Department of Plant Biology and Pathology

Expanded Course Description for 11:776:421

Vegetable Production and Marketing
(3.0 credits)

Normally Offered:  Spring every other year (even numbered years only).  By Albert Ayeni.

Pre-requisites and other registration restrictions:
01:119:101 or 01:119:115 (General Biology) or equivalent. Course is recommended especially for juniors and seniors (and graduate students as well) with strong background in agricultural and food sciences; and interest in international perspectives in agriculture.

Format:  Two 80-minute lectures

Description:
Production principles of vegetable crops, post harvest handling for short and long term utilization, emerging vegetable crops, marketing of vegetable crops in NJ and the Mid-Atlantic; also, special topics in vegetable crops in changing US demographics, and global job opportunities in the vegetable crops industry.

Learning Goals:
• Identify the mainstream and emerging vegetable crops of NJ and the Mid-Atlantic United States
• Describe the significance of major vegetable crops of NJ and the Mid-Atlantic United States.
• Understand the classification and adaptation of major vegetable crops of NJ and the Mid-Atlantic United States.
• Understand the crop improvement options for major vegetable crops of NJ and the Mid-Atlantic United States.
• Learn the production and management practices of major vegetable crops of NJ and the Mid-Atlantic United States.
• Understand the harvesting techniques and postharvest handling of major vegetable crops of NJ and the Mid-Atlantic United States.
• Understand the dynamics of the vegetable industry in NJ and the Mid-Atlantic United States.

Measures of Assessment:
• Two exams (one mid-semester, one end of semester) (60%)
• Class presentation on a major topic on vegetable crops (30%)
• Class participation (10%)

Course Website:
Sakai or eCompanion

Topics:
• Vegetable crops - Course Introduction
• Classification
• Adaptations
• Soils & Soil fertility considerations
• Cultural Practices
• Production Management
• Post-Harvest Handling
• Emerging vegetable crops
• Germplasm Diversity, Breeding & Selection
• Production Economics & Marketing
• Developing US Markets for New Vegetable Crops
• Policy and Public Acceptance of New Vegetable Crops
• Job opportunities in the vegetable crops industry

Required and Recommended Course materials:
This course will draw on relevant textbooks, recent reviews and articles from the scientific literature, as well as articles from the popular and business press. Recommended course materials will be announced in class and also posted on the course web site as necessary.

Suggested reference textbooks include:


Policies for Exams, Assignments, Attendance, and Grading
Student knowledge and understanding will be assessed through (a) the mid-term and final exams (60%); (b) a class presentation (30%) developed around a topical issue on vegetable crops and class participation comprising attendance and contribution to class discussions (10%). Class attendance is required in this course. Throughout the semester a maximum of three classes may be missed without excuse or reason. Additional absences without a reason attested by Rutgers
authority will be penalized to a maximum of 10% of total class grade assigned to class participation.

**Other Information:**
Instructor’s contact information: Albert Ayeni, Foran Hall Room 268, Rutgers’ SEBS, P: 848-932-6289; E: ayeni@aesop.rutgers.edu