Instructor:

Times:

Classroom:

Office/Office Hours:

Phone:

Email:

Course Description:
A study of the physical and chemical properties of soils, soil fertility, and management. Topics include soil formation, classification, testing, fertilizer application, and other amendments. Students learn to analyze, evaluate, and properly amend soils and media for horticultural use.

Credits: 3

Course Outcomes:
Upon successful completion of this course, students will:

- Identify types and application methods or organic and inorganic fertilizers.
- Identify symptoms of nutritional deficiencies in plants.
- Collect soil samples and interpret test results.
- Formulate fertilizer rates and analyze plant response to nutritional applications.
- Calibrate fertilizer equipment.
- Interpret soil survey maps.
- Identify soil structure by physical appearance.

Required Text:
Please see bookstore link for textbook information.

Grading, Examinations and Papers:

Grading Policy:

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Grading Scale:

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**Attendance/Withdrawal Policy:**
Absences in excess of the total number of class hours in one week may result in a drop in a letter grade.

Failure to attend class will result in a final course grade of “FA” or “FN”
- **FA** – Failure – attendance related (last date of attendance required)
- **FN** – Failure – never attended class

It is the student’s responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

Nashville State Community College has implemented an Early Warning System to notify students via e-mail about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or lack of classroom participation. *Please note that Early Warning Alerts do not affect a student’s academic standing.*

**Course Competencies:**

**Physical nature of soil**
- Geological formations
- Particle size
- Classification systems
- Soil mapping
- Land use
- Water, air movement
- Organic matter
- Compaction
- Texture, porosity
- Physical factors affecting plant growth

**Chemical nature of soil**
- Ion exchange capacity
- Soil reaction, pH
- Distribution of elements
- Cycles of major plant nutrients
- Tennessee soils
- Artificial soils, amendments
Plant nutrition
- Absorption and movement in the plant
- Essential elements
- Major, minor nutrients
- Deficiency symptoms
- Soil testing, tissue testing and interpretation
- Fertilizer labeling
- Fertilizer breakdown in soils
- Nitrogen fertilizers
- Phosphorus fertilizers
- Potassium fertilizers
- Complete fertilizers
- Micronutrient fertilizers
- Specialty fertilizers
- Application methods, equipment
- Liming and soil acidifying materials
- Fertilization systems
- Fertilizing nursery crops and perennials
- Fertilizing trees and shrubs
- Fertilizing turf areas and golf courses
- Fertilizing interiorscapes

Biological nature of soil
- Bacteria
- Fungi
- Insects
- Nematodes
- Mammals
- Control of harmful organisms in the soil

Accommodations:
Nashville State complies with the Americans with Disabilities Act. Consult with the office of Student Disability Services. If you need any accommodation(s) for this class, notify the instructor by the second class meeting.

Classroom Misconduct and Procedures:
Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct which violates the general rules and regulations of the College. Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevents concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.). Each student should refer to the current Nashville State Student Handbook for guidelines for student conduct.
**Academic Dishonesty:**

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your works” (A Writer’s Reference, 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructors’ permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature.

In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty, the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper or examination, or to assign an “F” for the course.

If a student believes that he/she has been erroneously accused of academic dishonesty and if his/her final grade has been lowered as a result, the student may appeal the case through the appropriate college grade appeal procedures.

**NOTE:**

*This syllabus is a master syllabus. Specific course requirements are subject to revision at the discretion of the individual instructor. A course syllabus will be provided the first day of class.*