Bismarck State College

Bismarck State College, an innovative community college, offers high quality education, workforce training, and enrichment programs reaching local and global communities.

Current Semester: Fall 2018

Course: Soil 210 Lecture

Credit Hours: 2

Instructor Contact Information:

Marko Davinic

Office: CA115

Phone: (701) 224-5409

Email: marko.davinic@bismarckstate.edu

Office hours: M-F 12:00-12:50

Course Materials: Soil Science and Management, 6th Edition by Edward J. Plaster (Ch 1-7, 11 and 18)

Course Description: Physical, chemical and biological properties of soils related to use, conservation and plant growth.

Course Outcomes:

Course Learning Outcomes	Program Learning Outcomes	Institutional Essential Learning Outcomes (IELOs)
Recognize soil as an important and dynamic resource.	Students will gain knowledge and comprehension of plant and soil science in areas of study including classification, physiology, morphology, and culture.	Ethical Reasoning*
Describe basic soil properties and soil formation factors.	Students will apply knowledge and comprehension of plant and soil science to evaluate various production options and formulate a best management practices.	Problem Solving*
Identify and list soil characteristics (e.g. texture, structure, etc.) and their relationship properties.	Students will be able to demonstrate critical thinking and problem solving skills as they apply to a variety of agriculture systems.	Inquiry and Analysis*

*** The BSC Institutional Essential Learning Outcomes can be found at**
https://bismarckstate.edu/uploads/0/BSCsInstitutionalEssentialLearningOutcomes.pdf

Unit Objectives:

1. The importance of soil (soil quality, soil and nature, soil and climate)
2. Soil origin and development (soil profile, parent material, climate and topography)
3. Soil classification and survey (includes land capability classes)
4. Physical properties of soil (texture, structure, density, permeability, color and temperature)
5. Life in soil (soil food chain, microorganisms and soil animals)
6. Organic matter and nitrogen immobilization
7. Soil water (plant use of water, forces, types and measuring soil water)
8. Soil fertility (soil minerals, soil colloids, cation exchange, nutrient uptake)
9. Soil pH and salinity
10. Soil sampling and testing (soil and plant tissue testing)
11. Soil conservation (erosion and climate change, water vs wind erosion)

Active Learning: In addition to educational strategies such as reading, listening, and reflecting, when appropriate this class makes use of learning techniques commonly known as active learning. Students should expect to participate in active learning techniques such as discussions and presentations, small group activities, writing, problem-solving, movement, case studies, role-playing, etc. These activities promote analysis, synthesis, and evaluation of class content in order to improve student learning outcomes.

Assessment Methods: Student achievement will be assessed using a pretest and post-test taken at the beginning and end of the course respectively. Evaluation of class participation, projects, exams, and quizzes throughout the semester will collectively contribute to the measure of student learning.

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Grading: The following percentages are associated with letter grades: A: 90 – 100%; B: 80-89%; C: 70-79%; D: 60-69%; F: <60%

Course Component	**Approx. points**
Assignments	150 points
Quiz	100 points
Course Exams (4)	600 points
Cumulative Final Exam	150 points

Attendance/Makeup: Late work is not accepted and will be given a 0

Policies and Procedures:

Academic Honor Code: Students at BSC are expected to be honorable in behavior and above reproach in pursuit of their academic achievements. Cheating, plagiarism, or collusion in class

work, laboratory performance, shop work, or test taking is unacceptable and subject to disciplinary action. More information can be found at https://bismarckstate.edu/uploads/resources/356/studentacademichonorcode.pdf.

Accessibility: If you have a disability that may limit your ability to fully participate in this class, please contact the Student Accessibility Office (SAO) at 224-2575. Personnel from the SAO will work with you and your instructor to arrange for reasonable accommodations after you have completed the registration process and it has been determined that you qualify.

Camera/Video Recording: Photographic, audio, and video recording of this class and/or the instructor are prohibited unless specifically requested by a student and approved/authorized in writing by the instructor or the Student Accessibility Office.

Email: Please note that I will only correspond with students through their **BSC email account**. Student Email Policy states: "In an effort to protect student privacy and better ensure student authenticity, official email exchanged between registered students and BSC personnel requesting a response shall require the response be exchanged from the student's official email address (i.e., NDUS ID@bismarckstate.edu). This policy is for the protection of faculty, staff, and students." More information can be found at https://bismarckstate.edu/uploads/resources/1197/studentemailpolicy.pdf.

Military/Veteran Statement: If you are currently or have served in the military, please contact the Veterans Services Office at 701.224.5779 regarding services/benefits to which you may be entitled.

Drop/Withdrawal Deadlines: Term dates can be found on Campus Connection in the class details. Drop and withdraw dates for each term can be found at https://bismarckstate.edu/academics/records/calendarsdeadlines/.

Student Rights and Responsibilities: Student rights and responsibilities along with student policies can be found at https://issuu.com/bismarckstatecollege/docs/bsc_student_rights_and_responsibili?e=19734813/52188116.

Title IX: For more information on sexual misconduct/Title IX please go to the BSC home page (www.bismarckstate.edu), scroll to the bottom and click on Title IX.

Guest Speaker Statement: Bismarck State College is committed to presenting timely, innovative educational opportunities for its students. As part of those efforts, BSC faculty may invite guest speakers to address the student members of this course. Under FERPA regulations, such guest speakers are considered volunteers who serve a legitimate educational interest to institutional services or functions. Guest speakers will be informed by the faculty member of their responsibilities under FERPA to ensure student privacy. For more information, please visit the Department of Education's FERPA Student Privacy webpage at https://studentprivacy.ed.gov/

Course Outline:

Tentative Schedule, exam dates subject to change

Date	**Topic**
9/18	Exam #1: Ch 1-2-3
10/16	Exam #2: Ch 4-5
11/06	Exam #3: Ch 6-7
11/29	Exam #4: Ch 11-18
12/10	Finals week - check schedule for exam time and date