SOIL 210 INTRODUCTION TO SOIL SCIENCE

COURSE SYLLABUS
Class Number # Merged Online Courses
Fall 2021
(23 August—17 Dec 2021)

INSTRUCTOR:
Oybek Turayev, Ph.D.
LRSC North Campus
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Office: 701-662-1693
Office Hours: Mon, Wed, 10:00 AM- 11:00 AM or by appointment

COURSE DESCRIPTION: Introduction to basic principles of soil science and the study of soil properties such as physical, chemical, and biological and how each relates to the crop production resources and the environment.

CREDIT HOURS: 3 Credits (includes laboratory)

CLASS HOURS: Lecture and Laboratory online

PREREQUISITES: None.

REQUIRED TEXTBOOK: Plaster, Edward J. 2014. Soil Science and Management. 6th Edition. Delmar, Cengage Learning.

MATERIALS OF INSTRUCTION: Textbook and website

LOCATION: LRSC online campus/Blackboard/ Blackboard Ultra.

NOTE: It is the responsibility of the student to read, understand and apply the information available in the Lake Region State College 2019- 2021 catalog and this syllabus.

General Education Objectives

I.3 Apply Knowledge to the Real World
I.6 Values and Ethics
II.3 Problem Solving Skills
III.2 Understand World Events
V.2 Environment
V.4 Scientific Method/Inquiry
VII.1 Value of Lifelong Learning
VII.2 Adapt to the future

TRADE AND TECHNICAL DIVISION MISSION STATEMENT:
*(Lake Region State College Catalog 2019-2021, p. 31)***:** The Trade and Technical Division offers various specialized programs. The division frequently assesses industry trends and standards and alters curricula to ensure the quality of its programs. It is the mission of the Trade and Technical Division to provide students with current knowledge and training necessary for immediate entry into various specialties within the job market.

COURSE OBJECTIVES: This course introduces basic principles of soil science. Emphasis is placed on managing soil in a sustainable manner to maximize production and profitability of crops while maintaining and improving soil quality for future generations.

STUDENT OUTCOMES/COMPETENCIES:
Upon completion of this course, students will be able to:

- Explain the functions of soil
- Understand soil components, soil forming factors, and basic taxonomy of soils.
- Understand physical properties of soil related to structure, texture, porosity, and water holding capacity of soils
- Understand basic chemical properties of soil
- Understand biological properties of soil, and types and functions of soil organisms and their effects on soil quality
- Understand land use management and soil conservation in modern crop production
- Describe the effects of erosion, water management, and crop residue on the sustainability of soils for crop production.

MAJOR UNITS OF INSTRUCTION:
Chapter 1. The Importance of Soil
Chapter 2. Soil Origin and Development
Chapter 3. Soil Classification and Survey
Chapter 4. Physical Properties of Soil
Chapter 5. Life in the Soil
Chapter 6. Organic Matter
Chapter 7. Soil Water
Chapter 8. Water Conservation
Chapter 9. Drainage and Irrigation
Chapter 16. Tillage and Cropping Systems
Chapter 18. Soil Conservation
Chapter 19. Urban Soil
Chapter 20. Government Agencies and Programs

Assessment Tools			**Grading Scale:**
Exam I	50 pts		A =90-100%
Exam II	50 pts		B =80-90%
Exam III	50 pts		C =70-80%
Final Exam	50 pts		D =60-70%
Quizzes	100 pts		F =0-60%
Labs	200 pts		
Assignments	150 pts		
Total Points	650 pts		

ATTENDANCE: Regular attendance and participation are important parts of this course. Participation in class discussions is required.

ACADEMIC HONESTY: Plagiarism takes the words and/or ideas of another and uses them as your own without giving appropriate credit to the original source. Any clear violations of these standards and others such as cheating, or violating copyright laws, are handled promptly, firmly, privately, and fairly by the instructor. Other examples of scholastic dishonesty and the grievance process can be found in the LRSC Student Catalogue.

Students who either intentionally or unintentionally practice plagiarism will receive a grade of zero for that assignment. Additionally, instructors have the ability to have students submit assignments through **TurnItIn** via Pearson Learning Studio or the website www.turnitin.com. The website will provide plagiarism check of similar content, citations and sources, provide feedback on grammar, spelling and word usage and critiques on writing from Pearson professional tutors.

1st Offense: Since it is impossible to evaluate a plagiarized paper, no credit can be given. At the discretion of the instructor, a student may also be:

Assigned a reduced grade for the course
Allowed to rewrite and submit the assignment for credit

2nd Offense: Dismissed from the class with a failing grade

Please go to the following site for resource information on Plagiarism:
http://www.academicplagiarism.com/?page_id=109
Use the following sites to check your papers for plagiarism:
http://www.plagtracker.com
http://www.dustball.com/cs/plagiarism.checker/

If you are caught copying another person's assignment, quiz, or test or knowingly allow a classmate to copy your work, you will be given an automatic grade of 0 on that assignment.

Students are expected to adhere to the Student Code of Conduct as listed in the Lake Region State College 2019-2021 catalog pages 24-38. Scholastic dishonesty is addressed in the Lake Region State College catalog.

ACCOMODATIONS: If you need special accommodations because of a disability, I will gladly work to meet your needs. Please let me know if you need any special accommodations of the curriculum, instruction, or assessments of this course to enable you to participate fully. I will keep any information you share with me confidential**.**

Note: This is a merged online course, therefore some of the laboratory assignments will be assigned to each individual group. I will email laboratory assignments for each group separately with instructions to complete.

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Tentative Class Schedule

Dates	Chapters	Assignments
August 24-26	Review of Basic Science	Watch Lecture & Complete Quiz by midnight on **Aug 27th, 2021**
August 27-31	Chapter 1 The Importance of Soil: Life in Soil Series:	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 1 related assignments by midnight on **Aug 31st, 2021**
September 1-4	Chapter 2 Soil Origin and Development **Lab 1**	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 2 related assignments by midnight on **Sept 8th, 2021**
September 7-11	Chapter 3 Soil Classification & Survey	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 3 related assignments by midnight on **Sept 14th, 2021**
September 13-17	**Exam will cover Chapters 1-3** **Lab 2**	**Exam 1** Complete Exam 1 by Midnight on the last day of **Sept 21st, 2021**
September 20-24	Chapter 4 Physical Properties of Soil	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 4 related assignments by midnight on **Sept 30th, 2021**
September 25-30	Chapter 5 Life in the Soil **Lab 3**	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 5 related assignments by midnight on **Oct 5th, 2021**
October 1-8	Chapter 6 Organic Matter	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 6 related assignments by midnight on **Oct 12th, 2021**
October 11-15	**Exam will cover Chapters 4-6** **Lab 4**	**Exam 2** Complete Exam 2 by Midnight on the last day of **Oct 19st , 2021**
October 18-22	Chapter 7 Soil Water	Watch Lecture & Complete Quiz Complete & Submit all the Chapter 7 related assignments by midnight on **Oct 24th, 2021**
October 25-31	Chapter 8 Water Conservation **Lab 5**	Watch Lecture & Complete Quiz Complete Quiz Complete & Submit all the Chapter 8 related assignments by midnight on **Oct 31th, 2021**

November 1-5	Chapter 9 Drainage & Irrigation	Watch Lecture & Complete Quiz Complete Quiz Complete & Submit all the Chapter 8 related assignments by midnight on **Nov 9th, 2021**
November 8-12	**Exam will cover Chapters 7-9** **Lab 6**	**Exam 3** Complete Exam 2 by Midnight on the last day of **Nov 16th, 2021**
November 15-19	Chapter 16 Tillage & Cropping Systems	Watch Lecture Complete Quiz
November 22-30	Chapter 16 Tillage & Cropping Systems Cont. **Lab 7**	Complete & Submit all the Chapter 16 related assignments by midnight on **Nov 30th, 2021**
December 1-4	Chapter 18 Soil Conservation **Lab 8**	Watch Lecture Complete Quiz Complete & Submit all the Chapter 18 related assignments by midnight on **Dec 6th, 2021**
December 6-10	Course Review	Complete & Submit all the course related assignments by midnight on **Dec 13th, 2021**
December 13-17	**Final Exam is Comprehensive Exam will cover Chapters 1-18**	**Final Exam** Complete the Final Exam by Midnight on the last day of **Dec 17th, 2021**

Schedule and assignments are subject to change. Unannounced quizzes may be given.

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