WILMINGTON UNIVERSITY COLLEGE OF ARTS AND SCIENCES BASIC COURSE INFORMATION

COURSE NUMBER ENV 305

COURSE TITLE Earth Science (with Lab)

CREDITS 4

PREREQUISITE None

FACULTY MEMBER

TERM

METHOD OF CONTACT/ OFFICE HOURS

COURSE TIME BREAKDOWN

64 Hours of Structured Learning Activities

TEXTBOOKS

*A list of course textbooks are available on the Wilmington University Bookstore website: http://bookstore.wilmu.edu/

COURSE DESCRIPTION:

This course emphasizes the process of scientific investigation in the study of the earth and its place in the universe. The course shall include discussions of the earth and space, with emphasis on the processes used by geologist and astronomers in developing an understanding of the growth and evolution of the earth and the universe. PRIOR TO FALL 2019, THIS COURSE WAS OFFERED AS SCI 305.

COURSE OBJECTIVES:

This course will provide students with the knowledge and skills to:

- 1. Synthesize the concepts that involve the interrelationships of the processes that affect the atmosphere, hydrosphere, and lithosphere. Laboratory safety, general lab skills, scientific tools, and data analysis will be emphasized.
- 2. Demonstrate map reading skills: longitude, latitude, time zones, and weather maps.
- 3. Describe the composition of the earth's crust: atomic structure of matter, earth minerals, rock formation, weathering, erosion, historical geology, man's use of minerals.
- 4. Describe the composition of the atmosphere: heat transfer, air circulation, seasons, climate, oceans, and man's influence.
- 5. Weather Map Reading.
- 6. Rivers, wind effect on land features.
- 7. Explain the effects of the earth movements: seismology and plate tectonics.
- 8. Earth Interior, continents and oceans.
- 9. Classify the uses of astronomer's instruments.
- 10. Identify components of the universe, including the solar system, starstellations, galaxies, comets, and nebulae.
- 11. Discuss critically the theories of Kepler, Newton, Copernicus, and Galileo.

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- 12. Evaluate theories of the origin of the universe.
- 13. Compare man's methods of studying the universe and the techniques of