

Iowa's Rivers and Her Valleys 4.0

Spring & Summer 2020

On-line: UNI continuing education & Adobe Connect then Summer workshop
Credits: 2 credit hours – UNI Grad. Credit
Sessions: Tuesdays 4 to 6 pm
Sponsors: Iowa Department of Natural Resources – REAP CEP Grant
Professor: Dr. Chad Heinzl
Course website: https://www.exploreiowageology.org/UNI_IowaRiversAndHerValleys.php
Adobe address: <http://univnia.adobeconnect.com/heinzl-earthsci-6233-61-sp20/>
Contact: chad.heinzl@uni.edu , (319)-273-6168
Adobe Connect Online Sessions, Tuesdays 4 to 6PM, maybe taken in real-time OR asynchronously.

Learning objectives

- A. Learn about Iowa's surficial geology and the role our rivers play in shaping the landscape
- B. Gain a historical perspective of the importance of our surficial landscapes, so that we may create sustainable interactions now and in the future with these amazing resources.
- C. Use the National Generation Science Standards/Iowa Core Curriculum to explore effective pathways of addressing content development using our landscapes rivers

Course Description –

EarthSci6233 -

Introduction to the interactions and relationships between humans and their rivers and valleys.

Online sessions -

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|-----------|---|
| Session 1 | Iowa's Bedrock, Landform Regions and Rivers – The geologic foundation |
| March 10 | Curricula development |
| Session 2 | Rivers, Valleys and Humans – An integrated history |
| March 31 | |
| Session 3 | Fluvial processes, products and dynamic change |
| April 21 | |
| Session 4 | Pathways toward positive community interactions, mitigation and recreation, Getting ready for the summer field course |
| April 28 | |

Summer workshop – July 15-17 (Wednesday to Friday) – tentative and weather dependent

July 15 – A. Dry Run Creek – learning to effectively use your local resources,
B. NGSS/Iowa Core Curriculum – A rivers perspective

July 16 – Experiential learning a day on the river... Either the South Fork of the Maquoketa OR the Cedar

July 17 – Working together to share our knowledge and engage Iowans in River education through opportunities

Grading

| | |
|---------------------------------|------------|
| Course work | points |
| Homework | |
| Session 1 | 20 |
| Session 2 | 20 |
| Session 3 | 20 |
| Session 4 | 20 |
| Field work (Summer 2019) | |
| 3 days of participation | 30 |
| July 15 activity | 20 |
| July 16 activity | 20 |
| July 17 activity | 20 |
| Post field course contributions | 30 |
| Post-test | 20 |
| | 220 points |

Approx. grade distribution

X>200 = A X>180 = B X>160 = C

Class Attendance and Participation

Course questions will reflect and cover class 1) discussions, 2) field and lab activities, 3) text/journal readings, and 4) small group activities. Anything I say/discuss is fair game for a quiz or exam. Attendance is essential. If you listen, ask questions, take very good notes, and study for tests chances for earning a good grade are high! And the general guidelines of UNI's attendance policy will be employed, <https://policies.uni.edu/306>).

UNI - Statements for Non-discrimination and Accessibility

A. Office of Compliance and Equity Management

The University of Northern Iowa does not discriminate in employment or education. Visit 13.03 Equal Opportunity & Non-Discrimination Statement (<https://policies.uni.edu/1303>) for additional information.

B. Student Accessibility Services - Non-discrimination based on Disabilities

The University of Northern Iowa (UNI) complies with the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), Section 504 of the Rehabilitation Act of 1973, the Fair Housing Act, and other applicable federal and state laws and regulations that prohibit discrimination on the basis of disability. To request accommodations please contact Student Accessibility Services (SAS), located at ITTC 007, for more information either at (319) 273-2677 or Email accessibility services@uni.edu. Visit Student Accessibility Services (<https://sas.uni.edu/>) for additional info.

Additional recommendations from UNI's Center for Excellence in Teaching & Learning

A. Course materials, accessibility and opportunities for enhanced success

- a. Textbook – Landforms of Iowa by Jean Prior, Will be provided to you courtesy of the Iowa Department of Natural Resources and a REAP CEP Grant.
- b. Computers and data – For the online portion you will need access to a computer, a good internet connection and headphones with mic capabilities.
- c. Field trips – Our summer course will be a series of field trips.
- d. Course webpage – You will have access to some course materials and additional learning resources through the following webpage - <https://www.exploreiowageology.org/RiversValleys.php>
- e. UNI-E-Learning – <https://elearning.uni.edu/>, This software will be used to help you keep track of your course progress - primarily scores from homework
- f. Optional resources
 - 1) Iowa Geological Past by Wayne I. Anderson
 - 2) Iowa's Minerals by Paul Garvin

B. Pro-Tips for doing well in this class

1. Engage the content material before coming to the weekly discussions.
2. Participate in activities and discussions, ask a lot of questions ☺
3. If you have to miss a class please let me know ahead of time.

C. Summer course

Through an Iowa Department of Natural Resources, REAP-CEP Grant, you are getting free tuition, lodging, field trip transportation, textbook, and the majority of your summer course food paid for...

Required Items that you need to bring =

One pair of close-toed shoes, water bottle, appropriate water/river clothing, one long sleeved shirt notebook, about 15 pages of loose-leaf/lined paper, pencils...

Suggested items

Personal snacks, sun hat, sunscreen, bug/tick spray, portable coffee mug if you like to drink coffee during the day.

We will go over recommended items to bring, later in the spring.