Here is a brief description of the courses:

<u>Natural History of the Pacific Northwest</u> (for HNU School of the Environmental Cohort)

The objectives of this course are to introduce students to plants and animals that live within the major ecosystems of the Pacific Northwest (including marine coastlines, streams, lakes, wetlands, forests, and alpine) and to help students gain an understanding of the processes working to shape these ecosystems (climate, geology, hydrology, ecology, biology). This is a field-based course where students are expected to be actively engaged in their own learning. This means that each student will use his/her own observations to develop inferences about the structure, function, and composition of local Pacific Northwest ecosystems. Upon successful completion of this course, students will be able to: 1) Identify several common plant and animal species found in the Pacific Northwest, and understand how the life-history strategy of each organism helps it thrive within its particular niche; 2) Recognize the major ecosystems of the Pacific Northwest, as well as speak to their structure, function, composition, and distribution; 3) Recognize and identify important ecological, climatological, hydrological, and geological patterns within and among ecosystems; 4) Describe past and present anthropogenic impacts on the local environment; 5) Identify the important biotic and abiotic components of any ecosystem, such that the student's skills are sufficient to walk into an unfamiliar area in the Pacific Northwest and determine what processes have shaped it, and; 6) Use basic field ecology sampling equipment. The course will include eight field trips to spectacular natural environments within a 2-hour drive of WWU.

## Student-based STEM Teaching Methods (for HNU School of Science Cohort)

The objective of this course is to introduce future Science and Math teachers to student-centered learning pedagogy and teaching methods. We understand that HNU is very interested in their student's acquiring expertise in these experiential, hands on, inquiry-based science and math teaching methods. Acquiring these teaching skills would help these future teachers be on the cutting edge of the student-centered learning movement. The course will use an evidence-based teaching and learning framework, where students learn about what the research shows regarding the effectiveness of student-centered learning. The course will include approximately four field trips to K-12 schools to observe student-based STEM teaching in action.

## American Culture, Language, and History (for both Cohorts)

The objective of this course is to provide the students with an introductory, experiential exposure to American Culture and History. This course will be linked to the other two courses in order to help debrief, synthesize, and make sense of the things they are learning in those courses. The instructors in this course will be imbedded in the other courses in order to help students understand what they are learning. Focus will be on improving their English comprehension, speaking, and writing. Weekend field trips will also be organized to iconic Northwest places and organizations, such as downtown Seattle, Boeing, Vancouver BC (visas permitting), the San Juan Islands, etc.