Institution: MSU – BOZEMAN

Course Title: Anatomy and Physiology: Curriculum Design and Best Practices

Course number: BIOH 595

Credits: 3 (Online)

Instructor: Scott Taylor, MS (scott.taylor@montana.edu)

Prerequisites: The course prerequisites are a minimum of 2 years successful science teaching experience, enrolled in MSSE degree, or by instructor approval. Participants must hold a bachelors degree in science, science education or a related area. Participants should have at least a basic understanding of anatomy and physiology principles either through teaching and/or undergraduate work.

Course Catalog Description:

This course is designed for high-school and post-secondary instructors who are either currently teaching an anatomy and physiology course, or are interested in developing one. The goal of the course is to help instructors develop an A&P curriculum that integrates Next Generation Science Standards. Participants from all A&P instructional backgrounds are welcome, and should expect to work in a collaborative environment.

Course Objectives and Goals:

The purpose of this course is to assist participants in applying best practices into an anatomy and physiology curriculum. In most districts, courses in A&P are elective science courses that may or may not count toward science credit graduation requirements, so the instructor often has considerable flexibility in deciding scope and curriculum. This course will help the instructor integrate Next Generation Science Standards into an existing or developing A&P course. The expectation is that participants, through active engagement and collaboration, will be able to create an A&P curriculum that enhances student learning, providing students with the foundation needed for future academic coursework and/or careers that require a significant A&P conceptual framework.

Expected Learner Outcomes:

At the end of this course, students will be able to:

- describe the eight science practices outlined in the Next Generation Science Standards (NGSS).
- describe overarching themes of anatomy and physiology.
- develop learning modules, incorporating available resources, in A&P topics that integrate NGSS.
- evaluate learner outcomes with regard to science competence.

Upon completion of this course, each student will develop a LEARNING MODULE that includes a focus statement, a conceptual framework, a description of learner outcomes, classroom implementation, and evaluation strategies.

Students will be required to participate in individual and collaborative activities that include, but are not limited to:

- discussion forums
- literature review of best practices
- reflective journaling
- curriculum design and implementation

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