Texas A&M University
Core Curriculum

Initial Request for a Course Addition to the Fall 2014 Core Curriculum

Foundational Component Area: Life and Physical Sciences

In the box below, describe how this course meets the Foundational Component Area description for Life and Physical Sciences. Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

How does the proposed course specifically address the Foundational Component Area definition above?

As a Life Science course, KINE 120 exceeds the foundational component objectives and provides an interdisciplinary learning experience. Objectives focus on the natural phenomena of longevity and human disease. Discussion centers on the basic scientific principles of health and disease and its impact on the human experience. Additional dialogue examines the impact of wellness choices on society and the role of personal and social responsibility. Students investigate the scientific method, discuss current research, and analyze controversial health recommendations. The course incorporates a fitness experiment and research analysis to describe, explain, and predict natural phenomena. In addition to intellectual and practical knowledge, the course incorporates applied skills such as demonstrating proper exercise form and technique and incorporating appropriate goal setting strategies.

Over the course of the semester, students accumulate 21 hours of in-class instruction which is slightly over the 19 hour minimum for a 3 credit course. In order to blend the cognitive (knowledge) domain with the affective (attitude) and psychomotor (skill) domain of learning, extra class time is necessary to connect weekly lecture material with a weekly fitness session.

Core Objectives

Describe how the proposed course develops the required core objectives below by indicating how each learning objective will be addressed, what specific strategies will be used for each objective and how student learning of each objective will be evaluated.

Critical Thinking (to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information):

Students develop critical thinking skills to analyze and to evaluate health recommendations and training methods. Teaching strategies include lecture discussion of current research in health and conditioning, basic scientific principles of health and disease, experiential course work, and kinesthetic lessons. In a written report, the learner identifies a controversial health recommendation, analyzes the current scientific research, identifies the benefits and drawbacks of the treatment and synthesizes implications based on their findings. Student dialogue regarding controversial health recommendations fosters curiosity and inquiry, allowing students to become an advocate for their wellness. Other assessments include a video analysis to evaluate training methods and a fitness experiment to examine data.

Communication (to include affective development, interpretation and expression of ideas through written, oral and visual communication):

Students enhance communication skills by connecting with peers in a weekly kinesthetic lesson, discussing wellness choices, and generating discussion regarding scientific principles of health and disease. Formal assessment includes a written report interpreting data from a class experiment, a written critique expressing ideas surrounding a health recommendation and a video analysis of an applied skill. During video analysis, students
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utilize oral and visual communication skills to offer feedback concerning safety and technique of a training method.

Empirical and Quantitative Skills (to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions):

Students develop quantitative skills to diagnose problems with training methods and offer feedback concerning safety and technique. Each week the learner participates in a kinesthetic lesson to learn an applied skill. Teaching methods include in-class and/or video demonstrations to evaluate training methods and observe trends in performance. During a formal video analysis, the learner observes the problem, identifies a treatment and evaluates the outcome. To foster empirical skills, students participate in a fitness experiment to collect, process, and analyze data. Students analyze data in order to make an informed and educated conclusion.

Teamwork (to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal):

Students apply teamwork capabilities when considering different points of view regarding controversial health recommendations, participating in weekly kinesthetic lesson to learn an applied skill, and working in small groups to evaluate training methods. Tremendous cooperation and support are needed by team members to complete a thorough evaluation. Formal assessment includes small groups of three to four students conducting a movement analysis.

Please be aware that instructors should be prepared to submit samples/examples of student work as part of the future course recertification process.