COLLEGE OF EDUCATION AND HUMAN SERVICES
MASTER COURSE SYLLABUS

Department: Health, Physical Education and Recreation

Course Number: KNH 2500

Course Title for the Catalog: Basic Anatomy & Physiology

Course Title for Student Record (24 letters): Basic Anatomy & Phys

Variable Title?: ☐Yes ☒No

Credit Hours: ___4.0___ Repeat Hours?: ☐Yes ☒No # of Repeat Hours: _____

Course Cross Listing(s)?: ☐Yes ☐No _____

Grading System (Check one):

☒ABCDFXI ☐PU ☐ABCDFX/PU

Prerequisite Course(s):

Corequisite Course(s):

Enrollment Restriction(s): Must be enrolled in the College of Ed & Human Services

Other: (e.g., licensure program for which the course is required)

Class Type (Check one): ☒Lecture ☐Lecture/Lab ☒Lab ☐Seminar ☐Internship ☐Independent Study

Check ("x") all applicable: ☒Wright State Core Course ☒Integrated Writing Course ☐Service Learning Course ☐Multicultural Competence Course ☐Honors Course ☐Laboratory Course ☐Ohio TAG Course ☐Ohio Transfer Module Course ☐Program Benchmark/Transition Course ☐Other (specify) _____

Catalog Description (34 words):
A study of anatomy and physiology correlating both structure and function of the human body. All systems of the body will be covered.

Date Course Modified: **Effective Term: Fall 2012**
Date Course Created/Approved:

Student Learning Outcomes:

University Learning Objectives:

- Communicate effectively
- Demonstrate mathematical literacy
- Evaluate arguments and evidence critically
- Apply the methods of inquiry of the natural sciences, social sciences, and the arts and humanities
- Demonstrate global and multicultural competence
- Participate in democratic society as informed civically engaged citizens

GE Element Six Learning Outcomes:

- Understand the nature of scientific inquiry
- Critically apply knowledge of scientific theory and methods.
- Distinguish between science and technology and recognize their roles in society
- Demonstrate an awareness of theoretical, practical, creative and cultural dimensions of scientific inquiry
- Discuss fundamental theories underlying modern science

Knowledge

1. Name and locate surface bony landmarks in the human body.
2. Name and locate major superficial muscles causing surface body contours.
3. Name and locate individual bones of the human skeleton.
4. Name and locate the various parts of the human systemic and pulmonary circulations.
5. Name, locate, and classify articulations, and distinguish among types.
6. Name and demonstrate movements possible in major joints when these movements are started from the anatomical standing position.
7. Name and locate muscle groups important in human motion and identify their primary actions.
8. Name and describe the general organization of the nervous system.
9. Name and locate the parts of the human heart, including the nodes, chambers, valves, and blood vessels entering and leaving it.
10. Define and describe the motor unit.
11. Define cardiac output, heart rate, and stroke volume.
12. Define and explain the function of blood pressure.
13. Define acid-base balance and its effects on the body.

Skills

1. Describe the basic formation and structure of bone and the changes which occur in growth and development.
2. Describe the neuron and distinguish among the types of neurons.
3. Describe basic muscle structure including organization of fibers, connective tissue, and the spatial relationship of muscles to joints.
4. Describe the structure of the respiratory passageways and the lungs.
5. Describe the structure and function of arteries, veins, and capillaries.
6. Describe and explain the principles of gaseous exchange between the blood and the lung alveoli.
7. Describe and explain the basic structure and function of the kidney.
8. Describe the gross structure of carbohydrates and lipids.
9. Describe the structure and function of the urinary bladder.
10. Identify and describe the basic segments of the cardiac cycle.
11. Identify the fluid compartments of the body.

12. Identify the basic components of the blood and explain their functions.
13. Identify the external and internal gross anatomical features of the kidney.

Dispositions

1. Explain the sliding filament model of muscle contraction.
2. Explain the gross structure and function of adenosine-triphosphate and phosphocreatine.
3. Explain the mechanics of lung ventilation, control of breathing, and the nervous and chemical factors involved.
4. Demonstrate a general understanding of aerobic and anaerobic metabolism.
5. Demonstrate knowledge of the basic gas laws.

Suggested Course Materials:

Thibodeau, Gary A., and Kevin T. Patton. Structure and Function of the Body (13th ed). Mosby, 2008.

Linda Swisher. Study Guide to Accompany Structure and Function of the Body (13th ed). Mosby, 2008.

Suggested Method of Instruction: (e.g., Lecture, Distance Learning, Web-Based)

Lecture

Suggested Evaluation and Policy

☒ **CEHS Conceptual Framework "**The CEHS conceptual framework **Developing the Art and Science of Teaching** forms the basis for professional preparation in the College of Education and Human Services. This conceptual framework consists of six strands—content knowledge, pedagogical content knowledge or contextualized practice, diversity, technology, professionalism, and emotional intelligence—which are supported by clearly delineated objectives and deliberately designed learning experiences"

☒ **Attention to Diversity** The Department of Health, Physical Education and Recreation is committed to preparing teacher candidates to facilitate the learning experience for students with diverse needs and from diverse communities and family backgrounds. Presentations, course activities, course assignments, and supplemental materials provide examples of ways to adapt instruction for students and to collaborate with diverse families and communities.

☒ **Academic Integrity** "It is the policy of Wright State University to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth. Furthermore, it is the policy of the university to enforce these standards through fair and objective procedures governing instances of alleged dishonesty, cheating, and other academic misconduct"

☒ **Integration of Technology** Use of Web technology and distance education software, interactive video, E-mail, presentation/multimedia software, video/audio recording, use of the Web for course-related materials and resources.

☒ **Accommodation for Disabilities** Teacher candidates with a disability who may need accommodations to complete the requirements of this class, must register with the Office of Disabilities Services (main Campus) or Academic Instructional Services (Lake campus) and arrange to meet with his or her professor during the first week of the quarter.

Suggested Grading Policy: (Final course letter grade earned in relation to evaluation and policy; writing requirements in relation to final Writing Intensive (WI) grade earned)

Grades are based upon the following:

1.	Test 1	20%
2.	Test 2	20%
3.	Quizzes	20%
4.	Lab Exam I	20%
5.	Lab Exam II	20%

Grading Policy

Grade Assignment:

Grades will be assigned as follows:

Grade	Scale
A	93-100%
B	85-92%
C	77-84%
D	69-76%
F	Below 68%

Suggested Assignments and Course Outline: (Topics and typical assignments, organized by week)

Date	**Topic**
Week 1	Introduction/The Cell
Week 2	Cell Metabolism/Tissues
Week 3	Skeletal System
Week 4	Insertions and Origins
Week 5	Muscular System
Week 6	Muscular System
Week 7	Nervous system
Week 8	Cardiovascular System
Week 9	Cardiovascular System
Week 10	Respiratory system
Week 11	Renal System/Gastrointestinal System

Week 12	Endocrine System
Week 13	Metabolism
Week 14	Temperature Regulation

Laboratory Course Outline

Date	**Topic**
Week 2	Cells & Tissues
Week 4	Skeleton/ Insertions and Origins
Week 6	Muscular System/EMG, Electrical Stimulation
Week 8	Nervous System
Week 10	Cardiovascular system ECG
Week 12	Respiratory System Lung Volumes VO2
Week 14	Temperature Regulation

Other Information: (e.g., for Writing Across the Curriculum Program courses, statement of writing across the curriculum goals, criteria for evaluating writing assignments, and how writing assignments relate to the final course grade; for combined undergraduate/graduate courses, identify throughout the above or separately, additional work/responsibilities/grading applied to graduate students.)

Students will be expected to produce writing that

> · Demonstrates their understanding of course content,

> · Is appropriate for the audience and purpose of a particular writing task,

> · Demonstrates the degree of mastery of disciplinary writing conventions appropriate to the course (including documentation conventions), and

> · Shows competency in standard edited American English.