CEPS 16-16

Eastern Illinois University
New/Revised Course Proposal Format
(Approved by CAA on 4/3/14 and CGS on 4/15/14, Effective Fall 2014)

Banner/Catalog Information (Coversheet)

1. **____New Course or __X__Revision of Existing Course**

2. **Course prefix and number:** KSS 4340

3. **Short title:** Exercise Physiology

4. **Long title:** Exercise Physiology

5. **Hours per week:** _X_ Class ___ Lab ___ Credit

6. **Terms:** _X_ Fall _X_ Spring ___ Summer _X_ On demand

7. **Initial term**: ___ Fall _X_ Spring ___ Summer Year: _2017__

8. **Catalog course description:** A study of the acute and chronic effects of exercise and physical activity on the function and structure of the human body.

9. **Course attributes:**

   General education component: _____

   ___ Cultural diversity ___ Honors ___ Writing centered ___ Writing intensive ___Writing active

10. **Instructional delivery**
    Type of Course:

    _X_ Lecture ___ Lab ___ Lecture/lab combined ___ Independent study/research

    ___ Internship ___ Performance ___ Practicum/clinical ___ Other, specify: _____

    Mode(s) of Delivery:

    _X_ Face to Face __X_ Online ___ Study Abroad

    ___ Hybrid, specify approximate amount of on-line and face-to-face instruction_____

11. **Course(s) to be deleted from the catalog once this course is approved.** ___NA_____

12. **Equivalent course(s):**
    ____NA_____

    a. **Are students allowed to take equivalent course(s) for credit?** ___ Yes _X_ No

13. Prerequisite(s): (BIO 2210 and BIO 2220), or BIO 2001G.

a. Can prerequisite be taken concurrently? ___ Yes _X_ No

b. Minimum grade required for the prerequisite course(s)? __C_

c. Use Banner coding to enforce prerequisite course(s)? _X_ Yes ___ No

d. Who may waive prerequisite(s)?

___ No one _X_ Chair ___ Instructor ___ Advisor ___ Other (specify)

14. Co-requisite(s): _____

15. Enrollment restrictions

a. Degrees, colleges, majors, levels, classes which <u>may</u> take the course:
_____Any_____

b. Degrees, colleges, majors, levels, classes which may <u>not</u> take the course:
____None_____

16. Repeat status: _X_ May not be repeated ___ May be repeated once with credit

17. Enter the limit, if any, on hours which may be applied to a major or minor: ___

18. Grading methods: _X_ Standard ___ CR/NC __ Audit ___ ABC/NC

19. Special grading provisions:

___ Grade for course will <u>not</u> count in a student's grade point average.

___ Grade for course will <u>not</u> count in hours toward graduation.

___ Grade for course will be removed from GPA if student already has credit for or is registered in: _____

___ Credit hours for course will be removed from student's hours toward graduation if student already has credit for or is registered in: _____

20. Additional costs to students:
Supplemental Materials or Software ____N/A_____

Course Fee __X__No ___Yes, Explain if yes_____

21. Community college transfer:

___ A community college course may be judged equivalent.

_X_ A community college may <u>not</u> be judged equivalent.

Note: Upper division credit (3000+) will not be granted for a community college course, even if the content is judged to be equivalent.

Rationale, Justifications, and Assurances (Part I)

1. _X_Course is required for the major(s) of KSS majors in exercise science concentration, physical education teacher certification, and Athletic Training Majors.

   ___Course is required for the minor(s) of _____

   ___Course is required for the certificate program(s) of _____

   _X_ Course is used as an elective

2. **Rationale for proposal** : To increase the availability of the course to students. Also, students have requested more KSS online courses.

3. **Justifications for (answer N/A if not applicable)**

   Similarity to other courses: N/A

   Prerequisites: (BIO 2210 and BIO 2220) or BIO 2001G.

   Co-requisites: N/A

   Enrollment restrictions: N/A

   Writing active, intensive, centered: N/A

4. **General education assurances (answer N/A if not applicable)**

   General education component: N/A

   Curriculum: N/A

   Instruction: N/A

   Assessment: N/A

5. **Online/Hybrid delivery justification & assurances (answer N/A if not applicable)**

   Online delivery justification: An online version of this course will provide greater scheduling flexibility particularly for non-traditional students and student athletes. On campus students will be allowed to take the course online. There has been an increase interest from students to have the KSS department offer more online classes.

   Instruction: Online deliver will be delivered asynchronously and will include video lectures, online reading with complimentary assignments and discussion, online quizzes, and editing of written assignments. All instructors to teach this course online will have been trained through OCDi or equivalent.

Integrity: Written assignments will be subjected to originality checking software (e.g. Turnitin), students will need to log into an online course management system (e.g. D2L) using network passwords to access the exam. Online quizzes will consist of randomized questions and be delivered through a lock down browser (e.g. Respondus).

Interaction: The instructor and students will communicate through email, discussion boards, and chat functions of the online course management system (e.g. D2L).

Model Syllabus (Part II)

Please include the following information:

1. Course number and title: KSS 4340, Exercise Physiology

2. Catalog description: A study of the acute and chronic effects of exercise and physical activity on the function and structure of the human body. (Prerequisites include (BIO 2210 and BIO 2220) or BIO 2001G)

3. Learning Objectives:

1. Explain and describe the structure and function of the neuromuscular system. (CT 2-3)
2. Analyze the influence of the neuromuscular system on acute exercise (CT 1-3, QR 3)
3. Identify the adaptations within the neuromuscular systems with chronic exercise (CT 1-3, QR 3)
4. Analyze the influence of anaerobic bioenergetics on acute exercise (CT 2-3, QR 3)
5. Analyze the influence of aerobic bioenergetics on acute exercise (CT 2-3, QR 3)
6. Identify the adaptations within the bioenergetics systems from chronic exercise (CT 1-3, QR 3)
7. Explain and describe the structure and function of the cardiopulmonary system (CT 2-3)
8. Analyze the influence the cardiopulmonary system on acute exercise (CT 1-3, QR 3)
9. Identify the adaptations within the cardiopulmonary system from chronic exercise (CT 1-3, QR 3)
10. Analyze the various means for assessing body composition (CT 1-3)
11. Analyze how acute and chronic exercise impacts body composition (CT 1-3, QR 3)
12. Analyze how various nutrients impact exercise (CT 1-3, QR 3)

4. Course Material: Textbook - Kenney, Willmore and Costell, (2015) *Physiology of Sport and Exercise, 6th ed.* Human Kinetics

5. Weekly outline of content

Face-to-face: Each week consists of 150 minutes of class time with the expectation of 300 minutes of out-of-class work on the part of the students.

Online: Each week will be constructed on the assumption of a minimum of 150 minutes for synchronous and asynchronous online interaction with students and for reading/module review/instruction in addition to 300 minutes of additional work on the part of the students.

1. Neuromuscular Function
    a. Week 1 - Neural function (Objective 1)
    b. Week 2 - Muscle structure and contraction (Objective 1)
    c. Week 3 - Responses of the neuromuscular system during acute exercise (Objective 2)
    d. Week 4 - Adaptations of the neuromuscular system to chronic exercise training (Objective 3)
2. Exercise Metabolism
    a. Week 5 – ATP, Phosphocreatine and Glycolysis (Objective 4)
    b. Week 6 - Aerobic metabolism (Objective 5)
    c. Week 7 - Exercise Metabolism During Acute Exercise (Objective 5)
    d. Week 8 - Metabolic adaptations to chronic exercise training (Objective 6)
3. Cardiopulmonary Function
    a. Week 9 - Cardiopulmonary function (Objective 7)
    b. Week 10 - Cardiopulmonary function (Objective 7)
    c. Week 11 - Cardiopulmonary response during acute exercise (Objective 8)
    d. Week 12 - Adaptations of the cardiopulmonary system to chronic exercise training (Objective 9)
4. Body Composition and Exercise Nutrition
    a. Week 13 - Body composition assessment. (Objective 10)
    b. Week 14 – Exercise, weight loss and weight gain (Objective 11)
    c. Week 15 – Exercise nutrition. (Objective 12)
    d. Week 16 – Final examination

6. **Assignments and evaluations, including weights for final course grade:**

Assignments may include the following: developing a teaching tool or model around a particular concept, writing a paper that compares and contrasts the different muscle fiber types and/or energy systems during exercise, develop a flow chart of the mechanisms responsible for increasing cardiac output during exercise, compare findings in current literature with position stand statements from professional organizations, etc.

Quizzes	20%	Objectives (1-12)
Assignments*	20%	Objectives (1-12)
Exams	60%	Objectives (1-12)

---

7. Grading Policy:

A 90-100% of total points.
B 80-89% of total points.

C 70-79% of total points.
D 60-69% of total points.
F < 60% of total points.

8. Correlation of learning objectives to assignments and evaluations:

Objective	Quizzes	Written Assignments	Exams
1.	X		X
2.	X		X
3.	X	X	X
4.	X		X
5.	X		X
6.	X	X	X
7.	X		X
8.	X		X
9.	X	X	X
10.	X		X
11.	X		X
12.	X		X

Date approved by the department or school: 10/21/16
Date approved by the college curriculum committee:
Date approved by the Honors Council *(if this is an honors course):*
Date approved by CAA: CGS: