Mayville State University HPER 402 – EXERCISE PHYSIOLOGY (4) – Fall 2018

Professor: Dr. Jeremiah Moen, Ph.D.Phone: 701-788-4623Lecture: FH 142, T & R, Noon-1:15 CSTLab: FH 142, F 10-10:50 CSTOffice: FH 137e-mail: jeremiah.moen@mayvillestate.edu

Office Hours: MW: 10-11 & Noon-1. T&TR: 9-10 & 2-3. F Noon-1 Other times by appointment.

Prerequisite: BIOL 111 or 150 and BIOL 220

Course Description: A study of the effects of muscular activities and training on various organs and systems of the body with attention given to training procedures.

Why Am I Taking This Class?

Purpose of the Course

This course provides the student with a working knowledge and description of the physiological principles involved in human activity. Exercise physiology involves the study of how the body responds to and adjusts to exercise. The main emphasis will be on energy systems, skeletal muscle metabolism, nutrition, and how physical training affects these areas.

Course Objectives:

- 1. Identify the benefits for improving health through exercise. (INTASC 1, 6, 9)
- 2. Distinguish the specific roles of human tissues (e.g. muscle, neurological, connective, etc.) and their roles in producing human movement for performance. (INTASC 1, 6, 9)
- 3. Apply information related to appropriate metabolisms to exercise situations. (INTASC 1, 6, 9)
- 4. Apply the principles learned in class to training and exercise situations. (INTASC 1, 6, 9)
- 5. Differentiate the results of chronic and acute bouts of prescribed exercise for the human body in relation to its structure, function, capacities and limitations. (INTASC 1, 6, 9)
- 6. Evaluate the adaptation process the human body will undergo as a result of specific chronic exercise stimuli. (INTASC 1, 6, 9)
- 7. Relate previous nutritional information to performance benefits and gains. (INTASC 1, 6, 9)

Program Student Learning Outcomes (SLOs) Addressed in This Course

The Academic Program Student Learning Outcomes document can be found in your course shell. It contains all learning outcomes pertaining to Essential Studies courses and all majors and minors. The document has an index so you can quickly find the degree you are pursuing.

As part of Mayville State's effort to demonstrate continuous improvement in achieving student learning outcomes, this course will assess <u>SLO #1, #2, & #3</u> as part of the <u>B.S. – Fitness & Wellness, B.S.Ed. – Health</u> <u>Education & B.S. Heath, & <u>HPER – B.S.Ed. – Physical Education</u> programs through the lab final assessment.</u>

Course Improvements Based on Most Recent Assessment Findings

Covering the necessary information pertaining to exercise physiology in conjunction with time to complete labs created an issue with enough time for students to become familiar with concepts as well as gaining needed beneficial exposure to measurement techniques provided by labs. As a result a dedicated hour of lab each week was added to the course, increasing the credit for this course to 4. This increase of one credit will allow for more learning experiences offered by labs, increase time for content coverage, and provide more points for the course offered from lab activities, all which should facilitate a better learning experience and opportunities for improved grades.

Required/Recommended Materials Textbook:

Kenney, W., Wilmore, J. H., Costill, D. L., & Kenney, W. L. (2012) Physiology of Sport and Exercise

(5rd edition). Champaign: Human Kinetics.

Haff, G. G., & Dumke, C. (2012) Laboratory Manual for Exercise Physiology. Champaign: Human Kinetics.

Instructional Strategies

The following is a list of strategies that can be used in the course for learning:

- ➢ Lecture
- ➢ In class examples
- ➤ Lab work
- Practical experiences
- Written and oral communication
- Quizzes
- ➢ Exams

Learning Experiences

In order to foster familiarity with the course content and learning, students will be required to perform the following:

- Read all assignments prior to class, including chapters as noted, research articles, etc.
- > Complete assignments given via the Detailed Schedule OR in class.
- Submit all assignments in class or Black Board if listed on designated due dates.

Expectations/Protocols EXAMS & QUIZZES:

*Each assessment item may consist of multiple choice, true/false, matching questions, labeling, short answer, long answer, and/or essay questions randomly selected from the sections covered. Questions will require the application of information given during lecture, within the text, and from assigned readings or websites. Quiz material will generally be based on information covered since the previous exam, although some information will be cumulative and therefore included. Exams will be cumulative.

*Exams wills take place during regular class sessions. NO MAKE UPS WILL BE PERMITTED.

*Quizzes Quizzes may be given during class in the LMS (online learning management system, Black Board) and may be given at any time. Each quiz will be worth 10 points. Approximately 8 quizzes will be given during the semester. Quizzes may NOT be made up if absence is unexcused. Quizzes must be made up prior an absence if a quiz is scheduled.

*Lab projects are due as assigned. There will be 8 Labs worth 20 pts each. Late assignments and work will NOT accepted past due date, period. Students will be expected to dress appropriately for any labs to be conducted. Any and all work submitted must be of upper level college quality to be acceptable for grading. Any lab requiring calculations or graphs must be completed using excel or appropriate substitute spreadsheet application and be able to show where the data came from in the calculations and graphs (you must be able to click on the calculation or graph and it shows where you selected the data). Failure to do so will result in an automatic 0 for the lab. ** You, the student, are fully responsible for ALL information in this syllabus. This is a contract between the Instructor and the student. All rules will be closely adhered to and there will be no exceptions. If you fail to follow the guidelines, or simply are unaware, you will be responsible for the consequences. **Please note:** <u>*This syllabus is subject to change. Any changes will be announced and revisions will be provided.*</u>

Student Classroom Computer Usage:

Students have the privilege to use a Tablet PC or computer in the classroom for academic purposes. The privilege can be revoked as deemed appropriate by the professor teaching the course. On occasion, the professor may require the use of the computer to cease based on course content for the instructional period.

Evaluation/Grading Grading:

*Final course grades will be determined using the scale below. There will be no rounding off or extra points granted. No exceptions. There will be no adjustments to this policy, and there <u>may or may not</u> be any extracredit opportunities in class, therefore all grades will stand as marked. The grade you receive is the grade you earned. Typical turnaround time for grading is typically one week, with larger projects requiring more time.

> "A" (≥90%) "B" (80-89.9%) "C"(70-79.9%) "D" (60-69.9%) "F" (≤59.9%)

Instructor/Student Communication

- Students are accountable for all academic communications sent to their Mayville State University email address.
- Students will be expected to check their Mayville State University e-mail account on a regular basis, especially the day of a class taking place (everyday would be preferable).
- Email is the preferred method of communication, but office visits are always welcome. Students can typically expect an email response within 24 hours during a school week, or 48 hours if over a weekend.
- Please make use of my office hours or appointments for in person visits and phone calls.

Important Student Information

In the course shell, you will find a document entitled, "Important Student Information," which includes information about:

- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ Starfish Student Success System
- ✓ Students with Documented Disabilities
- ✓ Academic Honesty
- ✓ Emergency Notification
- \checkmark Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement

TENTATIVE COURSE SCHEDULE: This schedule is subject to change in order to meet the needs of the course. You will receive notification of any changes in class or by your MaSU email account.

Week	Tuesday	Thursday	Friday	Homework & Assignments Due
Aug. 20-26	Course Intro/Ch1	Ch1	Laboratory 1.1-1.3	
Aug. 27-Sept. 2	Ch1	Ch1	Laboratory 3.1-3.4	Friday: All Lab 1s Due 10 am
Sept. 3-9	Ch3	Ch3	Laboratory 7.1-7.3	Friday: All Lab 3s Due 10 am
Sept. 10-16	Ch3	Ch2	Laboratory 8.1-3	Friday: All Lab 7s Due 10am
				Thursday: Quiz #1 (Ch 1&3 10pt)
Sept. 17-23	Ch2	Ch2	Laboratory 12.1 & 12.2	Friday: All Lab 8s Due 10am
Sept. 24-30	Ch4	Ch4	Laboratory 12.5 & 12.6	
Oct. 1-7	Ch5	Ch5	Laboratory 12.5 & 12.6	Tuesday: Quiz #2 (Ch 2,4& 5)10pts)
Oct. 8-14	Ch6	Ch6	Laboratory 4.1 + HR	Friday: All Labs 12s Due 10am
Oct. 15-23	Exam #1 (80pts)	Ch7	Laboratory 13.1& 13.2	Friday: Lab 4.1+HR Due 10am
Oct. 22-28	Ch8	Ch9	Laboratory 11.1-11.7	Tuesday: Quiz #3 (Ch 7 10pts) Friday: All Lab 13s Due 10am
Oct. 29-Nov. 4	Ch9	Ch10	Laboratory 11.1-11.7	Tuesday: Quiz #4 (Ch 8 10pts)
Nov. 5-11	Ch10	Ch11	Laboratory 14.1-14.3	Friday: All Lab 11s Due 10am
Nov. 12-18	Ch11	Exam #2 (90pts)	Laboratory 14.1-14.3	Tuesday Quiz #5 (Ch 9 10pts)
Nov. 19-25	Ch14	<mark>No Class</mark>	<mark>No Class</mark>	Tuesday: Quiz #6 (Ch 10 10pts)
Nov. 26-Dec. 2	Ch15	Ch15	Lab Final	Friday: All Lab 14s Due 10am
Dec. 3-9	Ch16	Ch16	Lab Final	Thursday: Quiz #7 (Ch 15 10pts)
Dec. 10-16	Wed., 12/12 th	No Class	No Class	
	Final Exam (100pts)Noon-2pm.			