

Moravian College  
HLTH 291 Kinesiology – Applied Anatomy  
Spring 2014

Instructor: Gerard D. Rozea, PhD, LAT, ATC  
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Office Hours: 5:30 – 6:30 pm            Tuesday            303 Collier Hall

Class Meets: 6:30 – 9:30 pm            Tuesday            303 Collier Hall

**Required Texts:**

Marieb EN & Hoehn K. (2013). Human Anatomy & Physiology. 9th Edition  
Floyd, R. T. (2012). Manual of structural kinesiology. 18th Edition  
Lab Worksheets – Available online  
Manual of Structural Kinesiology Website

**Course Description:**

Upon completion of this course, a student should be able to identify the structural characteristics, movements, and muscles acting as the major joints of the body. The student will be able to select movements or exercises which utilize specific muscle groups and analyze the joint actions, muscle actions, and mechanical principles which apply to the performance of a specific movement.

**Course Objectives:**

The student will acquire the ability to:

- Describe human movement using technical terminology of kinesiology.
- Describe the structure, movements, and limitations of the major joints of the upper and lower extremities and trunk, and to describe the structures, locations, and actions of the major muscles which act upon these joints.
- Differentiate between the types of contraction a muscle can make and identify the movements in which these different types of contractions occur.
- Describe and understand selected mechanical principles which underlie specific movements and/or exercises.
- Recognize the structural characteristics of the human body and their relationship to performance in various sport activities.
- Apply knowledge of kinesiology and the musculoskeletal system to the analysis of simple and complex skills using an evidence based approach.
- Become familiar with methods used to record and analyze (e.g., cinema/video, EMG, computers software, etc.) biomechanical/kinesiological phenomena during human performance using an evidence based approach.

<b>Grading:</b>	Exams (4) and Quizzes	<b>60%</b>
	Lab grade	<b>40%</b>
	Lab Write-up	
	Quizzes	
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	<b>Total</b>	<b>100%</b>

Modules and all activities associated with the module must be completed and submitted as indicated by the professor.

<b>Grading</b>	100-93	A	82-80	B-	69-68	D+
<b>Scale</b>	92-90	A-	79-78	C+	67-60	D
	89-88	B+	77-73	C	59- 0	E
	87-83	B	72-70	C-		

**Class Participation:** All students are expected to attend and participate in class activities, discussions and practice sessions. Any student that does not attend or participate in class activities will lose points toward their final grade.

**Attendance:** Attendance in class will be taken, and is expected. Students are also expected to complete assigned readings **prior to** class to be ready for in class discussions. If you will be missing a class for any reason, please let me know **in advance** so that I can help you get any materials or information that you will be missing. The student is responsible for the material which was covered. If you have an extended absence, you must have it on file with the Office of Academic and Disability Support or the Academic Affairs Office. Resolutions for these problems will be made on an individual basis. The maximum allowable **hours of lecture** missed for any reason, excused or unexcused, is **three (3)**. When that number is exceeded, then the final grade shall be lowered with each additional absence. If the number of absences exceeds **six**, the student will have only the option to drop or fail.

**Attendance in lab:** Only an absence approved by the lab instructor will result in the student being allowed to make up the weekly quiz. Please refer to your Student Handbook for additional information. **If students miss more than one (1) lab for any reason, they will either be dropped from the class or receive a failing grade.** Please refer to your Student Handbook for additional information.

**Attendance at Exams:** Attendance at all exams and quizzes is mandatory. If for some reason you cannot make an exam you must notify the instructor **prior** to the exam or quiz period. If this is not done a **ZERO** will be given for that exam or quiz. **\*Note: Make-up exams or re-tests will not be given without a written excuse or other arrangement made with the professor.**

**Academic Honesty:** Academic dishonesty will not be tolerated!! Anyone cheating in any way will be excused from the course and receive an "E" for their final grade. Please refer to the Academic Honesty policy in the Moravian College Student Handbook.

**Civility and Common Courtesy:** Our university community is committed to diversity and personal respect for the individual and collective rights of our colleagues. As such, it is expected that you will treat your professor and fellow students with courtesy. Thoughts and opinions contrary to your own are not to be personally ridiculed.

**Disclaimer:** It is within the instructor's purview to apply qualitative judgment in determining grades for an assignment or for a course. This syllabus is subject to change. "Students who wish to request accommodations in this class for a disability should contact the assistant director of learning services for academic and disability support in the Academic Support Center, Monocacy Hall, lower level (extension 7625). Accommodations cannot be provided until authorization is received from the Academic Support Center."

**HLTH 291 Kinesiology – Applied Anatomy  
Tentative Course Outline (Subject to Change)**

Week 1 (1/13 – 1/17)	Introduction ( <b>Marieb and Hoehn:</b> Ch 1) ( <b>Floyd:</b> Ch 1)
Week 2 (1/20 – 1/24)	Introduction and Osteology ( <b>Marieb and Hoehn:</b> Ch 6 and Ch 7) ( <b>Floyd:</b> Ch 1)
Week 3 (1/27 – 1/31)	Introduction and Osteology and The Muscular System ( <b>Marieb and Hoehn:</b> Ch.9 and Ch 10) ( <b>Floyd:</b> Ch 2)
Week 4 (2/3 – 2/7)	<b>**EXAM 1**</b> The Muscular System
Week 5 (2/10 – 2/14)	The Muscular System and General Arthrology and Motion Description ( <b>Marieb and Hoehn:</b> Ch 8) ( <b>Floyd:</b> Ch 3)
Week 6 (2/17 – 2/21)	General Arthrology and Motion Description
Week 7 (2/24 – 2/28)	<b>**EXAM 2**</b> General Arthrology and Motion Description Shoulder Girdle and Shoulder Joint ( <b>Floyd:</b> Ch 4 & 5)
<b>March 3 – March 7</b>	<b>SPRING RECESS</b>
Week 8 (3/10 – 3/14)	Shoulder Girdle and Shoulder Joint
Week 9 (3/17 – 3/21)	Elbow, Forearm, Wrist, & Hand ( <b>Floyd:</b> Ch 6, 7 & 8)
Week 10 (3/24 – 3/28)	Elbow, Forearm, Wrist, & Hand and Pelvic Girdle and Hip Joint ( <b>Floyd:</b> Ch 9)
Week 11 (3/31 – 4/4)	<b>**EXAM 3**</b> Pelvic Girdle and Hip Joint and Knee Joint ( <b>Floyd:</b> Ch 10)
Week 12 (4/7 – 4/11)	Knee Joint

- Week 13 (4/14 – 4/18) Ankle and Foot  
(Floyd: Ch 11)
- Week 14 (4/21 – 4/25) Ankle and Foot and  
Trunk (Thorax/Abdomen)  
Kinesiology of Posture\*  
Fitness and Training Principles\*  
(Floyd: Ch 8, 12 & 13)

**Tuesday, April 29                   \*\*FINAL EXAM\*\***

\*Time Permitting.

### **Laboratories**

- Week 1 (1/13 – 1/17) Lab 1. Skeleton - Anatomical Landmarks - Directional Terminology
- Week 2 (1/20 – 1/24) Lab 1. Skeleton - Anatomical Landmarks - Directional Terminology
- Week 3 (1/27 – 1/31) Lab 2. Joint Structure & Motion; Planes, Axes, Motion Description
- Week 4 (2/3 – 2/7) Lab 2. Joint Structure & Motion; Planes, Axes, Motion Description
- Week 5 (2/10 – 2/14) Lab 3. Functional Anatomy of Muscles
- Week 6 (2/17 – 2/21) Lab 4. Joint Torques and Lever Systems
- Week 7 (2/24 – 2/28) Lab 4. Joint Torques and Lever Systems
- SPRING RECESS MARCH 3 – MARCH 7 NO CLASSES**
- Week 8 (3/10 – 3/14) Lab 5. Shoulder Girdle and Shoulder Joint
- Week 9 (3/17 – 3/21) Lab 6. Elbow, Forearm, Wrist, and Hand
- Week 10 (3/24 – 3/28) Lab 7. Movement Analysis of Upper Extremity
- Week 11 (3/31 – 4/4) Lab 8. The Pelvic Girdle and Hip
- Week 12 (4/7 – 4/11) Lab 9. The Knee Joint
- Week 13 (4/14 – 4/18) Lab 10. The Ankle and Foot
- Week 14 (4/21 – 4/25) Lab 10. The Ankle and Foot  
Lab 11. The Trunk and Spine (Thorax and Abdomen)
- Finals Week (4/28 – 5/2) Lab 11. The Trunk and Spine (Thorax and Abdomen)  
Lab 12. Assessment of Posture\*

\*Time Permitting.