CHS 371 Applied Kinesiology
Wintermester 2020

Number of Credits
4

Instructors
Michael Spevak, DPT, OCS, and Parley Anderson, DPT, OCS

Catalog Description
Analysis of movement, structure and function of skeletal muscles, comparison of movement patterns, purposes, relationship to health and psychosocial components. (Formerly HE 270—implemented Fall 2009; CHS 270—implemented Spring 2011).

Prereq(s): CHS 101; CHS 102; CHS 200; CHS 230 or junior or senior standing.

Coreq(s): BIOL 224.

Textbooks/Materials (Optional)
The following texts are optional materials in this course:

Floyd, Manual of Structural Kinesiology

Sokolove, Warrior Girls

Student Learning Outcomes
Upon completion of this course, students will be able to

- understand basic biomechanical principles and how they are applied to human movement;
- identify normal movement patterns of each region of the body, and the body as a whole;
- analyze both simple and complex body movements;
- analyze and describe joint movements and muscle actions during specific body movements; and
- understand how abnormal movement patterns can lead to injuries, pathologies or decreased human performance.

First Week of Lecture and Lab
The following schedule is subject to change:

January 2: Ankle Lecture and Lab
January 3: Knee Lecture and Lab
January 4: Hip Lecture and Lab
**Course Details**

This course is designed to help students gain an understanding of the normal and abnormal function of the human neuromusculoskeletal systems. This course will expand on the student’s knowledge of anatomy and physiology to build your understanding of human movement. This course will focus on the structure, function, mechanical principles influencing the motion of the major body regions. Lecture, interactive class sessions, student lab exercises, student field projects, videos, and a variety of readings will be used to present the material.

**Grade Breakdown**

The point distribution for the course is:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (one worth 200 and two worth 300 points each)</td>
<td>800</td>
</tr>
<tr>
<td>Quizzes (two worth 50 points each)</td>
<td>100</td>
</tr>
<tr>
<td>Labs (ten worth 30 points each)</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1500</strong></td>
</tr>
</tbody>
</table>

Please note that additional assignments may be added prior to and during the semester.

The percentage distribution for the course is:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90–100</td>
</tr>
<tr>
<td>B</td>
<td>80–89</td>
</tr>
<tr>
<td>C</td>
<td>70–79</td>
</tr>
<tr>
<td>D</td>
<td>60–69</td>
</tr>
<tr>
<td>F</td>
<td>below 59</td>
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</table>