IPE3103 ANATOMICAL & BIOMECHANICAL FOUNDATIONS OF PHYSICAL ACTIVITY

COURSE DESCRIPTION
This course enables student teachers to relate human anatomy to physical activities and to apply the principles of biomechanics to the teaching physical skills.

Structural anatomy deals with the knowledge and an understanding of the bones, joints and muscle structure that produces movement. Biomechanics is the study of a biological system by means of mechanics. This course introduces the basic mechanical concepts and principles that govern human movement. Student teachers will be exposed to analysis of sports using basic concepts of mechanics and anatomy.

COURSE OBJECTIVES
At the completion of this course, student teachers will be able to:

1. Demonstrate an understanding of basic human anatomy and the principles of mechanics in relation to producing movement.
2. Demonstrate the ability to effectively analyse selected motor patterns.
3. Demonstrate the knowledge and ability to apply course content to the teaching and coaching of human movement.

COURSE CONTENT
1. Introduction to Human Anatomy
2. Skeletal System
3. Muscular System
4. Introduction to Biomechanics
5. Basic Mechanical Principles
6. Qualitative Analysis
7. Quantitative Analysis
COURSE ASSESSMENT

<table>
<thead>
<tr>
<th>Component</th>
<th>Component weightage</th>
<th>Due Dates</th>
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<tbody>
<tr>
<td>Anatomy Test</td>
<td>20 %</td>
<td>dd-mm-yr</td>
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<tr>
<td>Biomechanics Lab Report</td>
<td>40 %</td>
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<tr>
<td>Class Tests/Quizzes</td>
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Attendance at and participation in all classes are compulsory.

COURSE REFERENCES

Required/Recommended Text(s)

Additional References