TEACHING PLAN

1. IDENTIFICATION

Course: Special Topic: Assessment for sports performance and physical training models
Code: DEF410046
Number of Credits: 2 Theoretical Credits
Workload: 30 hours/class
Level: Master’s and PhD
Professor(s):
Profa. Dra. Daniele Detanico (UFSC)
Prof. Dr. David Hideyoshi Fukuda (University of Central Florida – EUA)

2. SYLLABUS


3. OBJECTIVES

Provide a view of physiological and neuromuscular aspects related to sports performance, as well as to test and monitor physical training responses.

4. CONTENT

4.1. UNIT I - Practical implementation of assessments for sport and athletic performance.
4.1.1. Basics of assessment
4.1.2. Selection and implementation
4.1.3. Assessment protocols
4.1.4. Examples from the literature
4.1.5. Monitoring training
4.1.6. Authorship experiences

4.2. UNIT II - An examination of the critical power model applied to high-intensity intermittent exercise
4.2.1. Overview of the work-time relationship
4.2.2. Definitions
4.2.3. Intermittent critical power
4.2.4. Critical rest interval
4.2.5. Critical stroke rate/frequency
4.2.6. Additional utility of critical power
4.3. UNIT III - Body composition implications for strength and speed/power athletes
4.3.1. Body composition overview
4.3.2. Strength athletes
4.3.3. Sprint athletes
4.3.4. Jumping and throwing athletes
4.3.5. Examples from team sports
4.3.6. Other examples

4.4. UNIT IV - Developing young athletes in combat sports
4.4.1. Talent development
4.4.2. Relative age effects
4.4.3. Nutritional development
4.4.3. Weight category considerations
4.4.4. Progression of combat sport activities
4.4.5. Contemporary research

5. TEACHING STRATEGIES

The subject will be developed using expositive-dialogued classes (English), review of classical literature in each field and critical analysis of recent scientific papers, individual studies and seminars.

6. ASSESSMENT

Project presentation about a topic previously discussed during the classes.

7. SCHEDULE OF CLASSES

<table>
<thead>
<tr>
<th>SESSION</th>
<th>DATE</th>
<th>HOUR</th>
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<tr>
<td>1</td>
<td>November 18</td>
<td>09h - 12h</td>
<td>Classroom 112 (PPGEF)</td>
<td>David Fukuda</td>
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<td>November 19</td>
<td>09h - 12h</td>
<td>Classroom 112 (PPGEF)</td>
<td>David Fukuda</td>
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<td>3</td>
<td>November 19</td>
<td>14h - 18h</td>
<td>Classroom 112 (PPGEF)</td>
<td>Valéria Panissa</td>
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<td>09h - 12h</td>
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<td>David Fukuda</td>
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<td>5</td>
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<td>14h - 18h</td>
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<td>09h - 12h</td>
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<td>David Fukuda</td>
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<td>7</td>
<td>November 21</td>
<td>14h - 17h</td>
<td>Biomechanics Lab Research support</td>
<td>David Fukuda/ Valéria Panissa</td>
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<td>09h - 12h</td>
<td>Classroom 112 (PPGEF) Individuals studies</td>
<td>Daniele Detanico</td>
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<td>09h - 12h</td>
<td>Classroom 112 (PPGEF) Assessment</td>
<td>Daniele Detanico</td>
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8. REFERENCES


