Course Outline for Physical Education Activity PLF1

PLYOMETRICS AND AGILITY TRAINING FOR WOMEN

Catalog Description:

PEAC PLF1 - Plyometrics and Agility Training for Women 0.50 - 2.00 units

This course focuses on physical training for women and is designed to help improve performance and minimize the potential for injury. Training will include progressive plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Health and nutritional issues specific to women will also be addressed. Students will learn about training and prevention of metabolic syndrome through diet and exercise in this course.

Strongly Recommended: Previous athletic experience.

Grading Option: Letter Grade

Discipline:

<table>
<thead>
<tr>
<th>Units (Min)</th>
<th>Units (Max)</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lecture</td>
</tr>
<tr>
<td>0.50</td>
<td>2.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>0.50</td>
<td>2.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Prerequisite Skills:

None

Measurable Objectives:

Upon completion of this course, the student should be able to:
1. demonstrate improved leg strength and knee joint stability with landing;
2. show enhanced jumping and landing technique;
3. apply improved footwork and increased foot speed to their sport-specific environment;
4. perform sport-specific skills with improved neuromuscular control and balance;
5. demonstrate an ability to safely change direction efficiently;
6. exhibit an increased flexibility and range-of-motion, especially in the lower body (important for injury prevention);
7. demonstrate core abdominal strength for better posture, balance, coordination, and agility;
8. analyze exercise technique and modify the technique if flaws noted;
9. discuss the origins and dangers of hypertension and pre-diabetes;
10. recognize the symptoms of hypertension and pre-diabetes;
11. describe specific nutritional, medical and health needs/issues unique to the female-athlete's body and be able to incorporate into their lives.

Course Content:

(Lecture)
1. Role of resistance exercise in overall health and wellness
2. Principles of resistance exercise
3. Identify problem foods as they relate to diabetes and hypertension
4. Ability to identify metabolic syndrome
5. Having essential tests done by a physician to maintain proper health
6. Female-athlete triad
7. ACL injuries
8. Appropriate eating habits and food choices
9. Strength training for women: facts and myths
10. Tracking your blood pressure.
11. Identify problem foods as they relate to diabetes and hypertension.
13. Identifying metabolic syndrome.
14. Getting the essential tests done with your physician.
15. Shopping and eating in a new way to improve your health.

(Lab)

Plyometrics - emphasis on proper technique
1. Basic jump techniques - wall jumps, squat jumps, broad jumps
2. Single-leg techniques
3. Complex techniques - 180 degree turns, 360 degree turns, scissors jumps, triple jump
Agility
1. Basic footwork - line drills, "dot" patterns, agility ladder
2. Change of direction - "wheel", "T" drill
3. Combination and reaction exercises

Flexibility
1. Emphasis on major muscle groups of the lower body
2. Special attention to individual needs

Neuromuscular Control and Balance
1. Progressive development of neuromuscular control (e.g. landing)
2. Progressive development of balance (e.g. single-leg techniques)

Core strengthening
1. Basic elements of core strengthening
2. Intermediate abdominal exercises promoting core control
3. Advanced exercises developing core strength and control

Methods of Presentation
1. Demonstration/Exercise
2. Lecture/Discussion
3. Practice/Demonstration
4. Laboratory exercises
5. Class and group discussions
6. Presentation of audio-visual materials
7. Textbook reading assignments
8. Simulations

Assignments and Methods of Evaluating Student Progress

1. Typical Assignments
   A. Measure blood pressure twice weekly over six weeks. Keep a journal of each day's measure.
   B. Read the journal article on female athletes and ACL injuries. Be prepared to briefly discuss some of the unique factors that make women more susceptible to tearing their ACL.
   C. Observe the video demonstration of the female athlete performing a jumping exercise. Identify specific areas where technique improvement should be focused.
   D. Briefly describe the purpose and potential benefits of plyometric training. How may this training improve your performance in your particular sport?
   E. Demonstrate and be able to describe three important technique concerns when performing wall jumps.

2. Methods of Evaluating Student Progress
   A. Class Participation
   B. Attendance
   C. Lab Activities
   D. Peer student evaluation of student demonstrations
   E. Assigned activities
   F. Final Examination or Project

3. Student Learning Outcomes
   Upon the completion of this course, the student should be able to:
   A. demonstrate improved leg strength and knee joint stability with landing
   B. show enhanced jumping and landing technique
   C. apply improved footwork and increased foot speed to their sport-specific environment

Textbook (Typical):

Special Student Materials

Abbreviated Class Schedule Description:

This course focuses on physical training for women and is designed to help improve performance and minimize the potential for injury. Training will include progressive plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Health and nutritional issues specific to women will also be addressed. Students will learn about training and prevention of metabolic syndrome through diet and exercise in this course.

Strongly Recommended: Previous athletic experience.