

ATH-913: Plyometric Training for Sports

Independent Study Online Course Syllabus

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Number of Graduate Semester Units: 3

Target Audience: 7th - 14th grade teachers

Course Access: <https://connect.fresno.edu>

Course Description

Plyometrics refers to exercise that enables a muscle to reach maximal strength in as short a time as possible. Such exercises usually involve some form of jumping, but other modes of exist. This course is designed to teach the high school or junior college coach or teacher how plyometrics work, why it is used, and how to integrate it into a complete training program. When sound training principles are used, plyometrics offers the mechanism by which an athlete can start quicker, change direction more rapidly, accelerate faster, and improve overall speed. Participants will discover how male and female athletes can improve quickness, speed, and jumping ability while gaining greater coordination, body control, and balance. This course includes numerous illustrated plyometric exercises and videos that include foundation exercises such as squat jumps, double-leg speed hops, and medicine ball twists and passes; power-building exercises and high-intensity drills.

Course assignments encourage participants to integrate specific national standards for physical education. Objectives for each lesson are modeled around standards-based learning as identified by SHAPE America. Evidence of learning is tied directly to stated objectives and is assessed via analysis and application papers, training programs, testing programs, reflective evaluations and peer learning.

Note: Students are required to acquire the book and video separately.

Required Texts and Course Materials

Book: Radcliffe, J.C. (2025). High-Powered Plyometrics (3rd ed.). ISBN: 978-1718227989.
<https://www.amazon.com/dp/1718227981>

Video: Radcliffe, J.C., & Farentinos, R.C. (2016). High-Powered Plyometrics Video on Demand: Bounding Progression. Champaign, IL: Human Kinetics <https://www.amazon.com/High-Powered-Plyometrics-Progression-Doug-Fink/dp/B06W9J4VMV>

Canvas: This course will be delivered totally online. Canvas is a web-based learning management system (LMS) that provides students access to online resources, documents, videos, assignments, quizzes, forums, etc. Canvas is easy to learn and has a user-friendly interface.

Online Resources: Relevant online resources that support the course content and encourage further investigation will be available throughout the course assignments. Active hyperlinks are utilized throughout the course and will link to the appropriate information when clicked. These include videos, podcasts, worksheets, online activities, journal articles and other resources.

Course Dates

Self-paced; students may enroll at any time and take up to one year, from the date of registration, to complete assignments. Students may complete assignments in no less than three weeks for a 3-unit course (one week per unit).

National Standards Addressed in This Course

National Board for Professional Teaching Standards (NBPTS)

(<http://www.nbpts.org/standards-five-core-propositions/>)

First published in 1989 and updated in 2016, [*What Teachers Should Know and Be Able to Do*](#) articulates the National Board's Five Core Propositions for teaching. The Five Core Propositions - comparable to medicine's Hippocratic Oath — set forth the profession's vision for accomplished teaching. Together, the propositions form the basis of all National Board Standards and the foundation for National Board Certification. Course assignments have been designed so students can demonstrate excellence against these professional teaching standards whenever possible.

- Proposition 1: Teachers are committed to students and their learning
- Proposition 2: Teachers know the subject they teach and how to teach those subjects to students
- Proposition 3: Teachers are responsible for managing and monitoring student learning
- Proposition 4: Teachers think systematically about their practice and learn from experience
- Proposition 5: Teachers are members of learning communities

National Physical Education Standards by SHAPE America

(<https://www.shapeamerica.org/MemberPortal/standards/pe/new-pe-standards.aspx>)

The following content standards defined by SHAPE America specify what students should know and be able to do as result of a quality physical education program. States and local school districts across the country use the National Standards to develop or revise existing standards, frameworks and curricula. Participants are asked to apply these standards in their teaching practices and demonstrate them within their coursework.

- SHAPE 1 - Develops a variety of motor skills.
- SHAPE 2 - Applies knowledge related to movement and fitness concepts.
- SHAPE 3 - Develops social skills through movement.
- SHAPE 4 - Develops personal skills, identifies personal benefits of movement, and chooses to engage in physical activity.

Common Core State Standards (CCSS) (www.corestandards.org)

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

Continuing Education Student Learning Outcomes (CE-SLO)

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| CE-SLO 1 | Demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to inform and persuade others, and present information applicable to targeted use. |
| CE-SLO 2 | Demonstrate comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts. |
| CE-SLO 3 | Reflect on their personal and professional growth and provide evidence of how such reflection is utilized to manage personal and professional improvement. |
| CE-SLO 4 | Apply critical thinking competencies by generating probing questions, recognizing underlying assumptions, interpreting and evaluating relevant information, and applying their understandings to the professional setting. |
| CE-SLO 5 | Reflect on values that inspire high standards of professional and ethical behavior as they pursue excellence in applying new learning to their chosen field. |
| CE-SLO 6 | Identify information needed in order to fully understand a topic or task, organize that information, identify the best sources of information for a given enquiry, locate and critically evaluate sources, and accurately and effectively share that information. |

Course Student Learning Outcomes (C-SLO)

| Student Learning Outcomes for This Course By the end of this course student will be able to: | National Standards Addressed* | CE-SLO Addressed** |
|---|--------------------------------------|---------------------------|
| 1. Identify and integrate standards into many aspects of their teaching and coaching as demonstrated through their coursework | 2, 3, 4 | 1, 2, 3, 4, 5 |
| 2. Describe their role in shaping their student athletes to become “physically educated students”. | 1, 2, 3, 4, 5 | 1, 2, 5 |
| 3. Understand the physiology of muscles and plyometrics. | 2, 3, 4, 5 | 1, 2, 3, 4, 5 |
| 4. Understand the different categories of plyometric exercises and the relative demands they place on the athlete. | 1, 2, 3 | 2, 3, 4, 6 |

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| 5. Comprehend the most important considerations in implementing and administering a plyometric training program. | 2, 3, 4, 5 | 1, 2, 3, 4, 5 |
| 6. Assess and test the vertical and linear jumping ability of your student athletes | 1, 2, 3 | 2, 4, 6 |
| 7. Apply the steps and principles to develop a sport-specific plyometric training program for a student athlete. | 2, 3 | 1, 2, 4, 6 |
| 8. Appreciate the human body and its ability to perform physical activity. | 1, 2, 3, 4, 5 | 2, 3, 4, 5 |

* Please refer to the section on **National Standards Addressed in This Course**

** Please refer to the section on **Continuing Education Program Student Learning Outcomes**

Topics, Assignments, and Activities

| Module Title | Module Assignments and Activities | Assignment Credit |
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| Home Page | <ul style="list-style-type: none"> Welcome Video Course Syllabus Policies and Procedures Introduce Yourself Forum | |
| Module 1 – Analysis and Application Papers | <ul style="list-style-type: none"> The “Analysis and Application” papers address the various chapters and issues covered in the High-Powered Plyometrics text. Each paper will be 3 to 4 pages and include two sections: analysis (discussing the major points presented in the chapter) and application (applying the major points to a training program). Discussion Forum (post, read, respond) | A mark of “Complete” is required for each Assignment |
| Module 2 – Video Analysis and Program Design | <ul style="list-style-type: none"> To develop a working understanding of the principles and applications for plyometric training. In addition, the participant will have the opportunity to develop an actual plyometric workout program that he/she can use with student athletes. The participant will also be encouraged to design the plyometric training program reflecting any unique demands required for a specific sport. Discussion Forum (post, read, respond) | A mark of “Complete” is required for each Assignment |
| Module 3 – Training Program Reflection | <ul style="list-style-type: none"> Implement the Plyometric Training Program you designed above for at least four (4) weeks. After four (4) weeks, write a brief reflection addressing positive and negative aspects of the program. Discussion Forum (post, read, respond) | A mark of “Complete” is required for each Assignment |
| Module 4 – Plyometric Lesson Plan | <ul style="list-style-type: none"> Using the textbook and the references provided, create a classroom lesson plan or a workshop outline/script on Plyometric Training. Discussion Forum (post, read, respond) | A mark of “Complete” is required for each Assignment |

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| Module 5 – Coach’s Interview | <ul style="list-style-type: none"> Interview an active coach focusing on his/her current training program. You will develop a list of questions that will address his/her current training program and his/her interest in integrating some of the plyometric training principles covered in this course into his/her own training program. | A mark of “Complete” is required for each Assignment |
| Course Wrap-up – Grading and Evaluation | <ul style="list-style-type: none"> Final Reflection Forum Course Evaluation Course Completion Checklist Grade Request / Transcript Request | |

Grading Policies, Rubrics, and Requirements for Assignments

Grading Policies

- Assignments will be graded per criteria presented in the course rubrics.
- A = 90-100% and B = 80-89%, (anything below 80% will not receive credit.)
- The discernment between an A or a B letter grade is at the discretion of the instructor based on the quality of work submitted (see course rubrics).
- Coursework falling below a B grade will be returned with further instructions.
- All assignments must be completed to receive a grade and are expected to reflect the quality that teacher-training institutions require of professional educators. If completed assignments do not meet this standard, students will be notified with further instructions from the instructor.

Grading Rubrics

| Grade | Percent | Description | Rubric |
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| A | 90-100% | Excellent | Meets all course / assignment requirements with significant evidence of subject mastery and demonstration of excellent graduate level professional development scholarship. |
| B | 80-89% | Very Good | Adequately meets criteria for all course/assignment requirements - demonstrates subject competency with very good graduate level professional development scholarship. |
| NC | Below 80% | Unacceptable | Does not meet the minimum criteria for all course/assignment requirements and demonstrated little, if any, evidence of acceptable graduate level professional development scholarship. |

Writing Requirements

- Superior:** Writing is clear, succinct, and reflects graduate level expectations. Clearly addresses all parts of the writing task. Maintains a consistent point of view and organizational structure. Includes relevant facts, details, and explanations.
- Standard:** Writing is acceptable with very few mistakes in grammar and spelling. Addresses most parts of the writing task. Maintains a mostly consistent point of view and organizational structure. Includes mostly relevant facts, details, and explanations.
- Sub-standard:** Writing contains noticeable mistakes in grammar and spelling. Does not address all parts of the writing task. Lacks a consistent point of view and organizational structure. May include marginally relevant facts, details, and explanations.

Lesson Plan Requirements

- **Superior:** Instructional goals and objectives clearly stated. Instructional strategies appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is clearly delineated and authentic. All materials necessary for student and teacher to complete lesson clearly listed.
- **Standard:** Instructional goals and objectives are stated but are not easy to understand. Some instructional strategies are appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is present. Most materials necessary for student and teacher to complete lesson are listed.
- **Sub-standard:** Instructional goals and objectives are not stated. Learners cannot tell what is expected of them. Instructional strategies are missing or strategies used are inappropriate. Method for assessing student learning and evaluating instruction is missing. Materials necessary for student and teacher to complete lesson are missing.

Instructor/Student Contact Information

Throughout the course participants will be communicating with the instructor and their classmates on a regular basis using asynchronous discussion forums. Students are provided with instructor contact information in the event they want to make email or phone contact. In addition, students are encouraged to email or phone the instructor at any time. Students will also receive feedback on the required assignments as they are submitted.

Forums

Participation is an important expectation of this course and all online courses. Online discussions promote reflection and analysis while allowing students to appreciate and evaluate positions that others express. While students may not be engaging with the same students throughout this course, they will be expected to offer comments, questions, and replies to the discussion question whenever possible. The faculty role in the discussion forum is that of an observer and facilitator.

Coursework Hours

Based on the Carnegie Unit standard, a unit of graduate credit measures academic credit based on the number of hours the student is engaged in learning. This includes all time spent on the course: reading the textbook, watching videos, listening to audio lessons, researching topics, writing papers, creating projects, developing lesson plans, posting to discussion boards, etc. Coursework offered for FPU Continuing Education graduate credit adheres to 45 hours per semester unit for the 900-level courses. Therefore, a student will spend approximately 135 hours on a typical 3-unit course.

Services for Students with Disabilities

Students with disabilities are eligible for reasonable accommodations in their academic work in all classes. In order to receive assistance, the student with a disability must provide the Academic Support Center with documentation, which describes the specific disability. The documentation must be from a qualified professional in the area of the disability (i.e. psychologist, physician or educational diagnostician). Once documentation is on file, arrangements for reasonable accommodations can be made. For more information and for downloadable forms, please go to <https://www.fresno.edu/departments/disability-access-education>.

Plagiarism and Academic Honesty

All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled per the procedures set forth in the Fresno Pacific University Catalogue and Handbook - <https://handbook.fresno.edu/graduate/academic-policies>

Technology Requirements

To successfully complete the course requirements, course participants will need Internet access, can send and receive email, know how to manage simple files in a word processing program, and have a basic understanding of the Internet. Please remember that the instructor is not able to offer technical support. If you need technical support, please contact your Internet Service Provider.

Getting Help with Canvas: If you need help with Canvas, please contact the FPU Help Desk by phone: (559) 453-3410 or email: helpdesk@fresno.edu. Help is available Mon-Fri 8:00 am to 7:00 pm.

Final Course Grade and Transcripts

When all work for the course has been completed, students will need to logon to the Continuing Education website (<https://ce.fresno.edu/my-account>) and “Request Final Grade”. Once the instructor receives the requests and submits the grade online, students may log back in to view their Final Grade Report or order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information, see the Continuing Education Policies and Procedures at <https://ce.fresno.edu/ce-policies-and-procedures>.

University Policies and Procedures

Students are responsible for becoming familiar with the information presented in the Academic Catalog and for knowing and observing all policies and procedures related to their participation in the university community. A summary of university policies may be found on the university website at <https://www.fresno.edu/departments/registrars-office/academic-catalogs>.

Fresno Pacific University Student Learning Outcomes (FPU-SLO)

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| FPU-SLO 1 | Oral Communication: Students will <i>exhibit</i> clear, engaging, and confident oral communication – in both individual and group settings – and will critically <i>evaluate</i> content and delivery components. |
| FPU-SLO 2 | Written Communication: Students will <i>demonstrate</i> proficient written communication by <i>articulating</i> a clear focus, <i>synthesizing</i> arguments, and utilizing standard formats in order to <i>inform</i> and <i>persuade</i> others. |
| FPU-SLO 3 | Content Knowledge: Students will <i>demonstrate</i> comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts. |
| FPU-SLO 4 | Reflection: Students will <i>reflect</i> on their personal and professional growth and <i>provide evidence</i> of how such reflection is utilized to manage personal and vocational improvement. |

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| FPU-SLO 5 | Critical Thinking: Students will <i>apply</i> critical thinking competencies by <i>generating</i> probing questions, <i>recognizing</i> underlying assumptions, <i>interpreting</i> and <i>evaluating</i> relevant information, and <i>applying</i> their understandings to new situations. |
| FPU-SLO 6 | Moral Reasoning: Students will <i>identify</i> and <i>apply</i> moral reasoning and ethical decision-making skills, and <i>articulate</i> the norms and principles underlying a Christian worldview. |
| FPU-SLO 7 | Service: Students will <i>demonstrate</i> service and reconciliation as a way of leadership. |
| FPU-SLO 8 | Cultural and Global Perspective: Students will <i>identify</i> personal, cultural, and global perspectives and will employ these perspectives to <i>evaluate</i> complex systems. |
| FPU-SLO 9 | Quantitative Reasoning: Students will accurately <i>compute</i> calculations and symbolic operations and <i>explain</i> their use in a field of study. |
| FPU-SLO 10 | Information Literacy: Students will <i>identify</i> information needed in order to fully understand a topic or task, <i>explain</i> how that information is organized, <i>identify</i> the best sources of information for a given enquiry, <i>locate</i> and critically <i>evaluate</i> sources, and accurately and effectively <i>share</i> that information. |