



SACRAMENTO
STATE

Course Change Proposal Form A



Academic Group (College): HHS	Academic Organization (Department): Kinesiology	Date: 4-22-09
Type of Course Proposal: New <input type="checkbox"/> Change <input type="checkbox"/> Deletion <input type="checkbox"/>	Department Chair: Dr. Fred Baldini	Submitted by: Harry Theodorides
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	For Catalog Copy: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> CCE (Extension): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Semester Effective: Fall <input type="checkbox"/> Spring <input type="checkbox"/> , 2009 <input type="checkbox"/>

This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):	
If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr.	Yes <input type="checkbox"/> No <input type="checkbox"/>

Change from:

Subject Area (prefix) & Catalog Nbr (course no.): KINS 204	Title: Practical Applications in Strength and Conditioning	Units: 3
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Change to:

Subject Area (prefix) & Catalog Nbr (course no.):	Title:	Units:
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JUSTIFICATION:

Strength and Conditioning will serve as an elective course in the Movement Studies Concentration specifically in the Strength and Conditioning Option. Emphasis is placed upon helping graduate students review literature and develop an understanding of how to develop strength and conditioning programs for individual sports. The development of training programs for the athlete involved in competitive sports will be emphasized.

NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy. See <http://www.csus.edu/umannual/acad.htm> - Guidelines for Catalog Course Description)

The course is designed to provide the graduate student with an opportunity to expand his/her knowledge in the area of strength and conditioning. Emphasis is placed upon helping the graduate students understand the role of the Strength and Conditioning Coach, current issues in strength and conditioning, and how to create strength and conditioning programs. Students will also develop problem-solving skills and examine how to make decisions in the area of strength and conditioning. The development of training programs for the athlete involved in competitive sports will be emphasized.

Note:

Prerequisite: KINS 210 and KINS 203 or with instructor permission

Enforced at Registration: Yes No

Corequisite:

Enforced at Registration: Yes No

Graded: Letter Credit/No Credit

Instructor Approval Required? Yes No

Course Classification (e.g., lecture, lab, seminar, discussion):
05

Title for CMS (not more than 30 characters):
Strength and Conditioning

Cross Listed?
Yes No

If yes, do they meet together and fulfill the same requirement, and what is the other course.

How Many Times Can This Course be Taken for Credit? 1

Can the course be taken for Credit more than once during the same term? Yes No

FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."
See the example at <http://www.csus.edu/acaf/example.htm>

The student will be able to:

- develop and demonstrate problem-solving skills in the Strength and Conditioning.
- examine and demonstrate an understanding of the roles of each individual involved in the area of Strength and Conditioning.
- demonstrate how to make decisions in the area of strength and conditioning.
- examine and demonstrate an understanding of current issues in Strength and Conditioning.
- develop training programs and integrate and expand on uses of technology to enhance the creation and analysis of training programs.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

Four (4) Observations/Projects	9%
Ten (10) Article Reviews	17%
Twelve (12) Written Assignments	26%
Presentation	9%
Class Discussions	4%
Midterm	17%
Final	17%

For whom is this course being developed?

Majors in the Dept Majors of other Depts Minors in the Dept General Education Other

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes No

If yes, identify program(s):

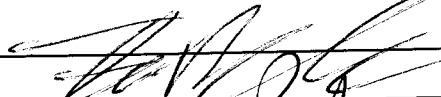
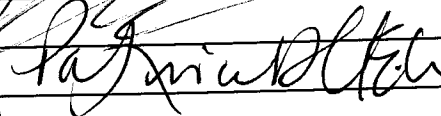
Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes No

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). _____

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

Approvals: If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

Signatures:	Date
Department Chair: 	4/22/09
College Dean or Associate Dean: 	4/24/09
CPSP (for school personnel courses ONLY)	
Associate Vice President and Dean for Academic Programs	

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

9/10/2008

CALIFORNIA STATE UNIVERSITY, SACRAMENTO
Kinesiology & Health Sciences

COURSE OUTLINE

KINS 204- Practical Applications in Strength and Conditioning

3 Unit

I. Course Description

The course is designed to provide the graduate student with an opportunity to expand his/her knowledge in the area of strength and conditioning. Emphasis is placed upon helping the graduate students understand the role of the Strength and Conditioning Coach, current issues in strength and conditioning, and how to create training programs. Students will also develop problem-solving skills and examine how to make decisions in the area of strength and conditioning. The development of training programs for the athlete involved in competitive sports will be emphasized.

II. Prerequisites

1. KINS 210 or with instructor approval.
2. KINS 203 Specificity of Conditioning or with instructor approval.

III. Course Objectives

1. The student will develop and demonstrate problem-solving skills in the Strength and Conditioning.
2. The student will examine and demonstrate an understanding of the roles of each individual involved in the area of Strength and Conditioning.
3. The student will demonstrate how to make decisions in the area of strength and conditioning.
4. The student will examine and demonstrate an understanding of current issues in Strength and Conditioning.
5. The student will develop training programs and integrate and expand on uses of technology to enhance the creation and analysis of training programs.

IV. Required Text:

This course has no set textbook. Much of the pertinent material for the students will come from lectures, research articles, class discussions, and written assignments.

V. Methodology

- A. *Lectures* will provide a method for instructional delivery.
- B. *Video* will be used for some instructional delivery and to analyze team sports and international competition.
- C. *Small Group Projects* will be used for some oral reports and in-class sessions.

- D. *Observations* will be used to enhance student learning by analyzing sports.
- E. *Excel Programming (Computer)*: will be used for instructional delivery. Students will also continue to work on improving their computer skills.
- F. *Oral Reports* will be used for students to present information of analysis and research on competitive sports.
- G. *Testing* will involve two major examinations during the course of the semester.

VI. Evaluation

Four (4) Observations (See handout) 100 points/ 9%
 Student will observe a sport in person and record the movement analysis of a particular position. The paper should include a short summary of the game (introduction, movement analysis, energy systems, specificity), as well as an analysis of what was observed and a suggested training program specific to the position and/or sport observed. An oral presentation to the class will be scheduled.

Article Reviews: Ten (10) Articles (See handout) 200 points/ 17%
 Student will read a total of ten (10) articles and write an abstract. This abstract should include a short summary of the study (introduction, hypothesis or research question, method, results, discussion), as well as an evaluation of the study's method and/or conclusions.

Written Assignments: Twelve (12) Assignments 300 points/ 26%
 Students will engage in the development of an inventory of training exercises and training methods that will be used to develop programs later in the course. Emphasis will be placed on training units that will be used in training competitive athletes. Training units include Core, Speed Development, Plyometrics, Functional Training, Testing, Lateral Speed and Agility. The inventory will be used to design five (4) programs.

Presentation (See handout) 100 points/ 9%
 Students will be required to design and present a program to the class. Students will use technology (digital video, computer, PowerPoint, Excel, and Dartfish) to present, research to support aspects of the program, and provide an explanation of why the program was designed this way and what the programmer used to help create, support, and justify the exercises used.

Class Discussions 50 points/ 4%
 Students will read one (1) discussion article a week. The following week, students will participate in a roundtable discussion format with the class. Emphasis is placed upon participation of the students during the discussion.

Midterm 200 points/ 17%
 Final 200 points/ 17%

VII. Grading
 100%--94% = A
 93%--90% = A-

89%--87% = B+
 86%--84% = B
 83%--80% = B-
 79%--77% = C+
 76%--74% = C
 73%--70% = C-
 69%--67% = D+
 66%--64% = D
 63%--60% = D-
 59%--0% = F

VIII. Academic Honesty

Please read the following CSUS policy regarding Academic Honesty at:

<http://www.csus.edu/admbus/umannual/UMA00150.htm>

(Ref.: PM 90-94, PM 04-01; Policy File Number: UMA00150.htm)

IX. Cell Phone Policy

Cell phones, pagers, computers, and other electronic technologies are not allowed during class time. Please make sure that cell phones are turned off and stored.

References

Discussion Articles

Bennett, S. (2006). Sport specificity: How far do you take it? *Strength and Conditioning Journal*, 28 (4), 29-30.

Craig, B. (2004). What is the scientific basis of speed and agility?. *Strength and Conditioning Journal*, 26 (3), 13-14.

Garhammer, J. (1998). Do you qualify to be a strength and conditioning professional? *Strength and Conditioning*, 20(1), 62-63.

Hedrick, A. (2004). Learning from each other: Resolving conflicts between athletes and assistant coaches. *National Strength and Conditioning Association*, 26 (2), 34-35.

Hedrick, A. (2006). Learning from each other: Warming up. *Strength and Conditioning Journal*, 28 (1), 43-45.

Hedrick, A. (2005). Learning from each other: Missed training days. *Strength and Conditioning Journal*, 27 (6), 87-89.

Hedrick, A. (2005). Learning from each other: In-season training. *Strength and Conditioning Journal*, 27 (4), 75-78.

Hedrick, A. (2005). Learning from each other: Keeping the weight room clean. *Strength and Conditioning Journal*, 27 (3), 88-89.

- Hedrick, A. (2005). College coaches corner: Learning from each other: Summer programs. *Strength and Conditioning Journal*, 27 (2), 75-77.
- Hedrick, A. (2003). College coaches corner: Learning from each other: Summer training programs. *Strength and Conditioning Journal*, 25 (2), 42-44.
- Hedrick, A. (2003). Learning from each other: Plyometric training. *Strength and Conditioning Journal*, 25 (6), 53-54.
- Hedrick, A. (2003). Learning from each other: Flexibility training. *Strength and Conditioning Journal*, 25 (4), 13-15.
- Hedrick, A. (2004). Learning from each other: Training the trunk. *Strength and Conditioning Journal*, 26 (6), 70-71.
- Hedrick, A. (2004). Learning from each other: Reviewing programs. *Strength and Conditioning Journal*, 26 (4), 46-48.
- Hedrick, A. (2004). Learning from each other: Motivating athletes for competition. *Strength and Conditioning Journal*, 26 (3), 34-35.
- Suprak, D. (2004). Bridging the gap between the strength coach and athletic trainer. *National Strength and Conditioning Association*, 26 (2), 30-32.

Squats & Hamstrings

- Ebben, W. P. & Jensen, R. L. (2000). The role of back squats as a hamstring training stimulus. *National Strength & Conditioning Association*, 22 (5), 15-17.
- Escamilla, R. F. (2001). Knee biomechanics of the dynamic squat exercise. *Medicine and Science in Sports and Exercise*, 33 (1), 127-141.
- Escamilla, R.F., Fleisig, G. S., Zheng, N., Barrentine, S. W., Wilk, K. E., Andrews, J. R. (1998). Biomechanics of the knee during closed kinetic chain and open kinetic chain exercises. *Medicine and Science in Sports and Exercise*, 30 (4), 556-569.
- Neitzerl, J. A. & Davies, G. J. (2000). The benefits and controversy of the parallel squat in strength training and rehabilitation. *National Strength & Conditioning Association*, 22 (3), 30-37.
- Ohkoshi, Y., Yasuda, K., Kaneda, K., Wada, T., & Yamanaka, M. (1991). Biomechanical analysis of rehabilitation in the standing position. *The American Journal of Sports Medicine*, 19 (6), 605-611.

ACL/Rehabilitation & Stress

- Colby, S., Francisco, A., Yu, B., Kirkendall, D., Finch, M., & Garrett, W. (2000). Electromyographic and kinematic analysis of cutting maneuvers. *The American Journal of Sports Medicine*, 28(2), 234-240.
- Goradia, V. K., Rochat, M. C., Kida, M. & Grana, W. A. (2000). Natural history of a hamstring tendon autograft used for anterior cruciate ligament reconstruction in a sheep model. *The American Journal of Sports Medicine*, 28 (1), 40-46.
- Palmitier, R. A., An, K., Scott, S. G. & Chao, E. Y.S. (1991). Kinetic chain exercise in knee rehabilitation. *Sports Medicine*, 11(6), 402-413.

Speed Development

- Brown, L.E., Ferrigno, V.A., & Santana, J.C. (2000). *Training for speed, agility and quickness*. Champaign, IL: Human Kinetics.
- Carr, G.A. (1991). *Fundamentals of track and field*. Champaign, IL: Leisure Press.
- Dintiman, G., Ward, B., & Tellez, T. (1997). *Sports speed (2nd ed.)*. Champaign, IL: Human Kinetics.
- Doherty, K. (1985). *Track and field: Omnibook (4th ed.)*. Los Altos, CA: Tafnews Press.
- Foran, B. (2001). *High-performance sports conditioning*. Champaign, IL: Human Kinetics.
- Freeman, W.H. (1996). *Peak when it counts: Periodization for American track and field (3rd ed.)*. Mountain View, CA: Tafnews Press.
- Kraemer, W.J., & Hakkinen, K. (2001). *Strength training for sport*. Osney Mead, Oxford: Blackwell Science.
- Matveyev, L. (1981). *Fundamental of sports training*. Moscow: Progress Publishers.
- Schmolinsky, G. (1996). *Track and Field: The East German textbook of athletics*. Ontario, Canada: Sport Books Publisher.
- Terauds, J., & Dales, G. G. (1978). *Science in athletics*. Del Mar, CA: Academic Publishers.

Conditioning

- Hirvonen, J., Nummela, A., Rusko, H., Rehunen, S., & Harkonen, M. (1992). Fatigue and changes of atp, creatine phosphate, and lactate during the 400-m sprint. *Canadian Journal of Sports Sciences*, 17(2), 141-144.
- Lucia, A., Hoyos, J., Santalla, A, Perez, M., & Chicharro, J.L. (2002). Kinetics of vo₂ in professional cyclists. *Medicine and Science in Sports and Exercise*, 34, 320-325.

- MacDougall, J.D., Hicks, A.L., MacDonald, J.R., McKelvie, R.S., Green, H.J., & Smith, K.M. (1998). Muscle performance and enzymatic adaptations to sprint interval training. *Journal of Applied Physiology*, 84, 2138-2142.
- Medbo, J.I., & Burgers, S. (1990). Effect of training on the anaerobic capacity. *Medicine and Science in Sports and Exercise*, 22, 501-507.
- Parra, J., Cadefau, J.A., Rodas, G., Amigo, N., & Cusso, R. (2000). The distribution of rest periods affect performance and adaptations of energy metabolism induced by high-intensity training in human muscle. *Acta Physiologica Scandinavica*, 169, 157-165.
- Spencer, M.R., & Gatin, P.B. (2001). Energy system contribution during 200- to 1500-m running in highly trained athletes. *Medicine and Science in Sports and Exercise*, 33, 157-162.

Week 1: Introduction and Outline of Course

- Orientation, assignments, handouts, class design
- Lecture: Training Units
- Written Assignment #1: Weight Training Exercises (body area, See Template for Categories)
- Read Article #1: FLECK, F.J. (1999). Periodized Strength Training: A Critical Review. *The Journal of Strength and Conditioning Research*, 13(1), 82–89.

Week 2

- Article Review #1 Due.
- Library Orientation, database, research
- Hand in written Assignment #1. Discuss Written Assignment: Practical in the weight room.
- Written Assignment #2: Weight Training Exercises (total body, See Template for Categories)
- Read Discussion Article #1: Hedrick, A. (2006). Learning from each other: Warming up. *Strength and Conditioning Journal*, 28 (1), 43-45.
- Read Article #2: Danny J. McMillian, Josef H. Moore, Brian S. Hatler and Dean C. Taylor. 2006: Dynamic vs. Static-Stretching Warm Up: The Effect on Power and Agility Performance. *The Journal of Strength and Conditioning Research*, 20(3), pp. 492–499.

Week 3

- Discussion Article #1: Hedrick, A. (2006). (In-class discussion)
- Article Review #2 Due: Danny J. McMillian
- Technology Session: Room TBD
- Hand in written Assignment #2. Discuss Written Assignment: Practical in the weight room.
- Written Assignment #3: Upper Body Plyometrics
- Read Discussion Article #2: Garhammer, J. (1998). Do you qualify to be a strength and conditioning professional? *Strength and Conditioning*, 20(1), 62-63.
- Read Article #3: Warren Young PhD and Damian Farrow PhD. 2006: A Review of Agility: Practical Applications for Strength and Conditioning. *Strength and Conditioning Journal*, 28(5), 24–29.

Week 4

- Discussion Article #2 : Garhammer, J. (1998). (In-class discussion)
- Article Review #3 Due. Warren Young PhD
- Lecture: Periodization
- Hand in written assignment #3. Discuss Written Assignment: Practical in the weight room. Written Assignment #4: Lower Body Plyometrics
- Read Discussion Article #3: Hedrick, A. (2003). Learning from each other: Flexibility training. *Strength and Conditioning Journal*, 25 (4), 13-15.
- Read Article #4: Roland van den Tillaar. 2004: Effect of Different Training Programs on the Velocity of Overarm Throwing: A Brief Review. *The Journal of Strength and Conditioning Research*, 18(2), 388–396.

Week 5

- Discussion Article #3(In-class discussion)
- Article Review #4 Due.
- Lecture: Soccer
- Hand in written assignment #4. (Practical in the weight room)
- Written Assignment #5: Speed Development