

San José State University
Department of Nutrition, Food Science, & Packaging
Department of Kinesiology
NuFS/KIN 163, Physical Fitness & Nutrition
Fall 2009, 1 & 2

	KIN	NUFS
Faculty	Craig Cisar, Ph.D., FACSM, CSCS, NSCA-CPT, ACSM ETT	Izzie Brown, MS, RD, CSCS
Location	SPX 105	CCB 103
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Website	http://www.sjsu.edu/people/craig.cisar/courses/kin163/	http://www.sjsu.edu/faculty_and_staff/faculty_detail.jsp?id=1651
Hours	M 1045-1400, W 1245-1430	MW 1-1:30, TuTh 8-9, 12:15-1:15
Access Code	Not used	Code: 2533696 Password: "nutrition"
Meeting Time	TuTh 10:30-11:45	
Room	Sec 1: CL 238 Sec 2: MH 526	
Prerequisites	Passing score on the Writing Skills Test (WST) Upper division standing (60 units) Completion of Core General Education For students beginning continuous enrollment Fall 2005 or later, completion of, or co-registration in, a 100W course is required. Courses used to satisfy Areas R, S, and V must be taken from three separate SJSU departments, or other distinct academic units.	
Prerequisites at SJSU	Area R – Earth & Environment	

Web Pages

If the course syllabus and major assignment sheets may be found on the respective faculty web sites.

Craig Cisar's web site is: <http://www.sjsu.edu/people/craig.cisar/courses/kin163/>

Izzie Brown's web site is: http://www.sjsu.edu/faculty_and_staff/faculty_detail.jsp?id=1651

Description and Goals

scientific principles, scientific investigation, and current technological advances to assess the relationship between diet, physical

Student Learning Outcomes (SLOs)

Successful completion of this course, students will be able to:

Demonstrate an understanding of the methods and limits of scientific investigation.

Distinguish science from pseudo-science.

Apply a scientific approach to answer questions about the earth and environment.

Specific Student Learning Outcomes

Successful completion of this course, students will be able to:

Explain how the principles of fitness and nutrition (such as body composition, energy intake and expenditure, acute and chronic changes related to exercise and nutrition) complement each other.

Identify social, cultural, ethnic, and environmental factors that influence food habits and exercise/activity patterns.

Examine the biochemical and physiological effects of exercise and various nutritional practices.

Discuss the physiological relationships of food to health throughout the life span, as well as specific fitness and nutrition considerations during various stages of the life cycle, such as childhood, adolescence, and older age.

Describe the different exercise guidelines and nutritional requirements related to gender and diverse populations.

Apply and improve upon the basic skills of reading, writing, mathematics, speaking, critical thinking, and scientific research learned in core GE courses.

Describe scientific methodology in the fields of nutritional science and exercise science.

Critically evaluate the credibility of current nutrition and exercise information using scientific research.

Critique popular advertisements for a food, food supplement, piece of exercise equipment, or exercise program, differentiating evidence derived from scientific research (based on the student's review of literature) and non-scientific evidence.

Assess the advantages/disadvantages of recent advances in new food formulations and new exercise and fitness testing equipment for the general population.

Deliver oral presentations and written summaries which explain and expand upon course content, using information from appropriate library research and primary sources of scientific investigation.

Identify the scientific principles involved in studying pathophysiology in human populations.

Critically evaluate primary research articles and identify the limitations of scientific investigation in human studies involving nutrition and various modes and levels of physical activity.

Required Texts

McArdle, P. H. (2007). *Nutrition for health, fitness, and sport* (8th ed.). Boston: McGraw-Hill. ISBN:978-0-07-294371-9. This text will be used as "W" in the proposed schedule. Ebook is available at a substantial savings through McGraw-Hill.

DeGroot, L. J. V., Insel, P. M., & Roth, W. T. (2009). *Fit & well* (8th ed.). Boston: McGraw-Hill. ISBN: 978-0-07-352372-9. This text will be used as "R" in the proposed schedule.

Wright, J. B., & Cisar, C.J. (2009). *Physical fitness notebook*. San Jose, CA: Maple Press (481 East San Carlos Street). This notebook will be used as "CC" in the proposed schedule.

Liaisons

For help using library resources, Valeria Molteni is the Nutrition, Food Science, & Packaging reference librarian. Contact her directly at molteni@sjsu.edu or (408) 808-2023. Peggy Cabrera is the Kinesiology reference librarian. Contact her directly at pcabrera@sjsu.edu or (408) 808-2034.

Adding and Dropping

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Refer to the current semester's [policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html> for add/drop deadlines, policies, procedures, and specific registration information. The [late drop policy](http://www.sjsu.edu/aars/policies/latedrops/policy) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy>.

Assignments and Grading Policy

Assignment	Points	SLOs
Exam 1	50	4, 5, 6, 7, 8, 15
Exam 2	50	4, 5, 6, 7, 8, 15
Exam 3	50	4, 5, 6, 7, 8, 15
Exam 4	50	4, 5, 6, 7, 8, 15
Research Analysis of Scientific Literature #1	50	1, 9, 10, 16
Research Analysis of Scientific Literature #2	50	1, 9, 10, 16
Critical Evaluation of Consumer Product #1	50	2, 9, 11, 12, 13
Critical Evaluation of Consumer Product #2	50	2, 9, 11, 12, 13
Oral Presentation	50	3, 9, 11, 14
Total Points	450	

Examination questions will be based on assigned readings, lectures, class discussions and presentations. Bring a T&E 200 answer sheet, #2 pencil, and calculator to all exams. Examinations will be given only on the dates scheduled. Make-up exams will be given in cases of serious illness or emergencies, and requests for make-up exams will be evaluated on an individual basis. The student is responsible for notifying the instructor and making arrangements prior to the exam. Unless otherwise arranged, the exam must be completed prior to the next class meeting.

Written assignments are due at the beginning of the class session on the due date. Assignments handed in after class has begun, unless otherwise specified, will be considered late. There is a 5 point penalty for each calendar day (not class day), or partial calendar day assignments are late. They will not be accepted 1 week past the due date.

All assignments written outside of class must be typed, double spaced, and submitted to turnitin.com before turning in a hard copy at the start of class on the due date. You will receive a turnitin.com code and password for each half of the course.

The [SJSU Writing Center](http://www.sjsu.edu/writingcenter/about) (<http://www.sjsu.edu/writingcenter/about>) is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. The staff can assist students at all levels to become better writers.

Writing in general education courses is assessed for grammar, content, clarity, conciseness, and coherence.

Guidelines for the Research Analyses of Scientific Literature, Critical Evaluations of Consumer Products, and Oral Presentation are discussed in class and available on faculty web sites.

Determination of Grades

100% (435-450 pts) = A+	93-96% (417-434) pts = A	90-92% (403-416 pts) = A-
90% (390-402 pts) = B+	83-86% (372-389 pts) = B	80-82% (358-371 pts) = B-
80% (345-357 pts) = C+	73-76% (327-344 pts) = C	70-72% (314-326 pts) = C-
70% (300-313 pts) = D+	63-66% (282-299 pts) = D	60-62% (268-281 pts) = D-
Below 60% (0-267 pts) = F		

Total	8-12 pages
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Integrity Policies

Academic Integrity

University's [Academic Integrity Policy](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html) is available at http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html. Commitment to learning, as evidenced by your enrollment at San José State University and the University's integrity policy, requires that you complete all your academic course work. Faculty members are required to report all infractions to the office of [Student Conduct and Ethics](http://www.sa.sjsu.edu/judicial_affairs/index.html) located at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Acts of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or using another person's ideas without giving proper credit) will result in a score of 0. For this class, all assignments are to be completed by the student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for this class, please note that SJSU's Academic Policy F06-1 requires approval of instructors. Information about plagiarism can be obtained at the following web site at <http://tutorials.sjlibrary.org/tutorial>. (See the plagiarism tutorial for more information.)

Policy in Compliance with the American Disabilities Act

Request for course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building is evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-118 states that students with disabilities requesting accommodations must register with the [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at www.drc.sjsu.edu/ to establish a record of their disability. The DRC is located in ADM 110 (408-924-6000 [voice] or 408-924-5990 [TDD]).

References

Peer-reviewed journals and on-line resources should be used for your written assignments and oral presentation. They are well respected, peer-reviewed, and available in the areas of nutrition and fitness.

References (partial list)

Journal of Clinical Nutrition

Journal of Public Health

Journal of Sports Medicine

International Journal of Sports Medicine

International Journal of Sports Nutrition

Journal of Applied Physiology

Journal of Athletic Training

Journal of the American Dietetic Association

Journal of the American Medical Association

Journal of the Strength and Conditioning Association

Journal of Food Science

Journal of Nutrition

Journal of Health, Physical Education, Recreation, and Dance

Journal of Science in Sports and Exercise

Journal of the American College of Sports Medicine

Journal of Sports Sciences

Journal of Sports and Exercise

Journal of Strength and Conditioning Research

Journal of Sports Medicine

Journal of Strength and Conditioning Journal

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www.ncbi.nlm.nih.gov/pubmed/
www.mypyramid.gov
www.nih.gov
www.nejm.org
www.physsportsmed.com
www.gssiweb.com
www.sportsci.org
www.fda.gov
www.who.int

Proposed Course Schedule

(Subject to change with fair notice – any changes will be announced in class)

If your 1st half of the semester is **NUTRITION**

DATE	TOPIC	READING ASSIGNMENTS	DUE
Tu, 8/25	Course Overview & Introduction		
Th, 8/27	Scientific Method	IFIC Article on web site W: pp. 25-28	
Tu, 9/1	Scientific Method		
Th, 9/3	Supplements	W: pp. 17-25, 66-68, 294-299, 382-383, 240-245, 533-539, 544-554, ADA handout on web site	
Tu, 9/8	Supplements		Analysis of Scientific Literature #1 – article on web page
Th, 9/10	Guidelines for Sound Nutrition & Health	W: pp. 1-3, 11-19, 35-53, 60-65.	Bring a food label
Tu, 9/15	Guidelines for Sound Nutrition & Health Carbohydrates	W: Chap. 4	
Th, 9/17	Carbohydrates Lipids	W: Chap. 5	
Tu, 9/22	Lipids Furlough Day: no class		
Th, 9/24	Exam 1: Through Carbs only		
Tu, 9/29	Oral Presentations 1 & 2		Analysis of Scientific Literature #2 for those presenting
Th, 10/1	Oral Presentations 3 & 4		Analysis of Scientific Literature #2 for those presenting
Tu, 10/6	Protein	W: Chap. 6, pp. 53-59.	
Th, 10/8	Weight & Disordered Eating	Chap. 11 & 12	
Tu, 10/13	Weight & Disordered Eating		Consumer Product Analysis #1; ad provided in class
Th, 10/15	Exam 2: Lipids through Disordered Eating		
Tu, 10/20	Scientific Research & Pseudo-Science Analyzing Scientific Research	CC: Sec. 12 Consumer Ad to review provided in class	
Tu, 10/27	Muscle Fiber Type, Energy, & Metabolism	W: Chap. 3; CC: Sec. 2	

DATE	TOPIC	READING ASSIGNMENTS	DUE
Th, 10/29	No Class		
Tu, 11/3	Cardiorespiratory Endurance	FIR: Chap. 3; CC: Sec. 3	Consumer Product Analysis #2, ad provided in class
Tu, 11/3	Cardiorespiratory Endurance	FIR: Chap. 3; CC: Sec. 3	Consumer Product Analysis #2, ad provided in class
Th, 11/5	Flexibility & Low Back Health	FIR: Chap. 5; CC: Sec. 5	
Tu, 11/10	Oral Presentation #5 & #6		Analysis of Scientific Literature #2 for those presenting
Th, 11/12	Exam 3		
Tu, 11/17	Muscular Strength & Endurance	FIR: Chap. 4; CC: Sec. 4	
Th, 11/19	Body Composition	FIR: Chap. 6; CC: Sec. 6	
Tu, 11/24	Physical Activity, Health, Disease, & Aging	FIR: Chaps. 11 & 12; CC: Sec. 8	
Th, 11/26	No Class		
Tu, 12/1	Thermoregulation and Environmental Stress Associated with Exercise During Heat, Cold, and High Altitude	CC: Sec. 13	
Th, 12/3	Oral Presentation #7 & #8		Analysis of Scientific Literature #2 for those presenting
Tu, 12/8	Determinants of Participation Behavior In Physical Activity and Motivation for A Physically Active Lifestyle	CC: Sec. 1 & 11	
M, 12/14	Final Exam M 12-14 0945-1200		

* Reading assignments should be completed before the class period in which they will be discussed.

W = Williams, *Nutrition for health, fitness, and sport*

FIR = Fahey, Insel, & Roth, *Fit and well*

CC = Cisar & Cisar, *Physical Fitness Notebook*

Proposed Course Schedule

(Subject to change with fair notice – any changes will be announced in class)

If your 1st half of the semester is **FITNESS**

DATE	TOPIC	READING ASSIGNMENTS	DUE
Tu, 8/25	Course Introduction		
Th, 8/27	Scientific Research & Pseudo-Science, Analyzing Scientific Research	CC: Sec. 12 Article to review provided in class	
Tu, 9/1	Physical Fitness, Health & Wellness Fitness Components, Principles of Fitness	FIR: Chaps. 1 & 2 CC: Sec. 1	
Th, 9/3	Muscle Fiber Type, Energy, & Metabolism	W: Chap. 3; CC: Sec. 2	Analysis of Scientific Research #1, article provided in class
Tu, 9/8	Cardiorespiratory Endurance	FIR: Chap. 3; CC: Sec. 3	
Th, 9/10	Oral Presentation #1 & #2		Analysis of Scientific Literature #2 for those presenting
Tu, 9/15	Flexibility & Low Back Health Consumer Ad to review provided in class	FIR: Chap. 5; CC: Sec. 5	
Th, 9/17	Exam 1		
Tu, 9/22	No Class		
Th, 9/24	Muscular Strength & Endurance	FIR: Chap. 4; CC: Sec. 4	Consumer Product Analysis #1, ad provided in class
Tu, 9/29	Body Composition	FIR: Chap. 6; CC: Sec. 6	
Th, 10/1	Physical Activity, Health, Disease, & Aging	FIR: Chaps. 11 & 12; CC: Sec. 8	
Tu, 10/6	Thermoregulation and Environmental Stress Associated with Exercise During Heat, Cold, and High Altitude	CC: Sec. 13	
Th, 10/8	Oral Presentation #3 & #4		Analysis of Scientific Literature #2 for those presenting

DATE	TOPIC	READING ASSIGNMENTS	DUE
Tu, 10/13	Determinants of Participation Behavior In Physical Activity and Motivation for A Physically Active Lifestyle	CC: Sec. 1 & 11	
Th, 10/15	Exam 2		
Tu, 10/20	Scientific Method	IFIC Article on web site W: pp. 25-28	
Th, 10/22	Scientific Method		
	Supplements	W: pp. 17-25, 66-68, 294- 299, 382-383, 240-245, 533-539, 544-554, ADA handout on web site	
Tu, 10/27	Supplements		Analysis of Scientific Research #1 – article on web page
Th, 10/29	Guidelines for Sound Nutrition & Health	W: pp. 1-3, 11-19, 35-53, 60-65.	Bring a food label
Tu, 11/3	Guidelines for Sound Nutrition & Health Carbohydrates	W: Chap. 4	
Th, 11/5	Carbohydrates		
Tu, 11/10	Exam 3		
Th, 11/12	Lipids	W: Chap. 5	
Tu, 11/17	Lipids		
Th, 11/19	Oral Presentations 5 & 6		Analysis of Scientific Literature #2 for those presenting
Tu, 11/24	Oral Presentations 7 & 8		Analysis of Scientific Literature #2 for those presenting
Tu, 12/1	Protein	W: Chap. 6	
Th, 12/3	Weight Control & Energy Balance	W: pp. 364-366, 370-385, 400-422, 441-444, Chap. 11	Consumer Product Analysis #2 – ad provided in class
Tu, 12/8	Weight Control & Energy Balance Eating Disorders	W: pp. 385-390	
M, 12/14	Final Exam M 12-14 0945-1200		

* Reading assignments should be completed before the class period in which they will be discussed.

W = Williams, *Nutrition for health, fitness, and sport*

FIR = Fahey, Insel, & Roth, *Fit and well*

CC = Cisar & Cisar, *Physical Fitness Notebook*

