

San José State University

Departments of Nutrition, Food Science & Packaging and Kinesiology NUFS/KIN 163 Physical Fitness and Nutrition Sections 3 & 4, Spring 2021

Course and Contact Information

Department	KIN	NUFS
Instructor:	Linda D. Wilkin, Ph.D.	Izzie Brown, MS, RDN, CSCS
Office Location:	SPX 156	CCB 202
Telephone:	(408) 924-3010	(408) 924-3373
Email:	linda.wilkin@sjsu.edu	izzie.brown@sjsu.edu
Office Hours:	Thurs 2:00-3:00 p.m. and by email or appointment	Zoom: MW: 11:00-11:30, TuTh: 1:30-2:00 and by appointment
Class Days/Time:	Tuesday/Thursday 12:00-1:15 p.m.	
Classroom:	Online	
Prerequisites:	Passage of the Writing Skills Test (WST) or ENGL/LLD 100A with a C or better (C- not accepted), and completion of Core General Education are prerequisite to all SJSU Studies courses. Students are strongly encouraged to take courses to satisfy GE Areas R, S, and V from departments other than their major department. Completion of, or co-registration in, 100W is strongly recommended. A minimum aggregate GPA of 2.0 in GE Areas R, S, & V shall be required of all students (see University Policy S14-5 at http://www.sjsu.edu/senate/docs/S14-5.pdf .) Not for nutrition majors or minors	
GE/SJSU Studies Category:	Area R – Earth & Environment	

Course Format

This course meets online (Zoom). Access to the internet and Canvas is required.

Faculty Web Page and MYSJSU Messaging

Physical fitness course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvas Learning Management System course login website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through [MySJSU](http://one.sjsu.edu) on [Spartan App Portal](http://one.sjsu.edu) <http://one.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates.

Nutrition course materials such as syllabus, handouts, notes, and assignment instructions can be found on my faculty web page at <http://www.sjsu.edu/people/izzie.brown>. Grades can be found on [Canvas Learning Management System course login website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly

checking with the messaging system through [MySJSU](#) on [Spartan App Portal](#) <http://one.sjsu.edu> and Canvas to learn of any updates.

Course Description and Goals

Use of scientific principles, scientific investigation, and current technological advances to assess the relationship between diet, physical fitness, and disease. Examine scientific literature to evaluate the effects of nutritional intervention on exercise performance. (3 units)

GE Learning Outcomes (GELO)

Upon successful completion of this course, students will be able to:

- GELO 1: Demonstrate an understanding of the methods and limits of scientific investigation. The “Analysis of Scientific Literature” assignment is keyed to this Area R GELO. This assignment requires students to comprehend the objectives/purposes of the study as well as the methods used to examine/study the problem. In addition, students will critically evaluate the strengths and weaknesses of the scientific research (including the research design, methods, and discussion), and see how the research fits into the larger scope of literature on a particular topic.
- GELO 2: Distinguish science from pseudo-science. The assignment keyed to this Area R GELO is the “Consumer Product” paper. Students will critically evaluate the credibility of nutrition and exercise information presented in an advertisement for a food, food supplement, piece of exercise equipment, or exercise program, differentiating between evidence derived from scientific research (based on the student’s review of literature) and non-scientific evidence.
- GELO 3: Apply a scientific approach to answer questions about the earth and environment. The assignment keyed to this Area R GELO is the “Oral Presentation,” which requires students to use primary research to answer questions related to fitness and nutrition.

Course Learning Outcomes (CLO) (Required)

Upon successful completion of this course, students will be able to:

- CLO 1: Explain how the principles of fitness and nutrition (such as body composition, energy intake and expenditure, acute and chronic physical changes related to exercise and nutrition) complement each other.
- CLO 2: Identify social, cultural, ethnic, and environmental factors that influence food habits and exercise/activity patterns.
- CLO 3: Examine the biochemical and physiological effects of exercise and various nutritional practices.
- CLO 4: Describe the different exercise guidelines and nutritional requirements related to gender and diverse populations.
- CLO 5: Assess the advantages/disadvantages of recent advances in new food formulations, and new exercise and fitness equipment for the general population.
- CLO 6: Identify the scientific principles involved in studying pathophysiology in human populations.

Required Texts/Readings (Required)

Textbook

- Rawson, E. S., Branch, J. D., & Stephenson, T. J. (2020). Williams’ Nutrition for health, fitness, and sport (12th ed.). Boston: McGraw-Hill. ISBN: 978126041398. This text will be known as “RBS” in the proposed schedule. Ebook is available at a substantial savings through McGraw-Hill: ISBN: 9781307437669.
- Fahey, T. D., Insel, P. M., & Roth, W. T. (2019). Fit & well (13th ed.). Boston: McGraw-Hill. Ebook ISBN: 9781307437676. This text will be known as “FIR” in the proposed schedule. There will be no

hard copy available in the bookstore. Ebook can be ordered directly through McGraw-Hill: ISBN: 9781307437676.

Library Liaison

Geetali Basu is the NUFS reference librarian; geetali.basu@sjsu.edu (408) 808-2651.

Adriana Poo is the Health Science, Kinesiology, and Recreation, Liaison Librarian. [408-808-2019](tel:408-808-2019).

Course Requirements and Assignments

- “Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.” The University Policy S16-9, Course Syllabi (<http://www.sjsu.edu/senate/docs/S16-9.pdf>).
- Office of Graduate and Undergraduate Programs’ Syllabus Information web page at <http://www.sjsu.edu/gup/syllabusinfo/>
- Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See University Policy F13-1 at <http://www.sjsu.edu/senate/docs/F13-1.pdf> for more details.

Assignment	Points (%)	GELOs	CLOs
Exam 1	50 (11)		1,2,3,4,5,6
Exam 2	50 (11)		
Exam 3	50 (11)		
Exam 4: given during final exam week (not cumulative over fitness & nutrition)	50 (11)		
Analysis of Scientific Literature #1	50 (11)	1	
Analysis of Scientific Literature #2	50 (11)	1	
Consumer Product: Fitness	50 (11)	2	5
Consumer Product: Nutrition	50 (11)	2	5
Oral Presentation	50 (11)	3	
Total Points	450 (100)		

- Consistent with guidelines for SJSU Studies courses, students will write a minimum of 3,000 words

2 Consumer Product paper @ 3-4 pages each	6-8 pages, 1,500-2,000 words
2 Analyses of Scientific Literature @ 3-4 pages each	6-8 pages, 1,500-2,000 words
Total	12-16 pages (3,000-4,000 words)

Grading Information

- Examination questions will be based on assigned readings, lectures, class discussions, and presentations. Your instructor will indicate which answer sheet or scantron form is needed. Bring a #2 pencil and calculator to all exams. Examinations will be given on the dates scheduled. Make-up exams will be

given only 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 arranging a make-up date prior to the exam. Unless otherwise arranged, the exam must be completed before the next class meeting.

- All assignments written outside of class must be typed and double-spaced. Individual instructors will provide procedures to be used for electronic submission and plagiarism screening via turnitin.com.
- Writing in general education courses is assessed for grammar, content, clarity, conciseness, and coherence.
- Guidelines for the Analysis of Scientific Literature, Consumer Product papers, and Oral Presentation will be discussed in class and available on faculty or course web sites.
- 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 work day (M-F), or partial calendar day, that assignments are late. Assignments will not be accepted 1 week past the due date.

Final Examination

Final Examination is Exam 4, which will be given based on final exam schedule.

“Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment.”

Determination of Grades

97-100% (435-450 pts) = A plus	93-96% (417-434) pts = A	90-92% (403-416 pts) = A minus
87-89% (390-402 pts) = B plus	83-86% (372-389 pts) = B	80-82% (358-371 pts) = B minus
77-79% (345-357 pts) = C plus	73-76% (327-344 pts) = C	70-72% (314-326 pts) = C minus
67-69% (300-313 pts) = D plus	63-66% (282-299 pts) = D	60-62% (268-281 pts) = D minus
Below 60% (0-267 pts) = F		

Classroom Protocol

Students are expected to attend all class meetings, arrive on time and stay until the class ends. Students are expected to treat other students and faculty with respect. Do not distract or disrupt class with electronics or other noises. Be attentive to comments made by fellow students and the faculty. Students are to have read and thought about the assigned reading before coming to class. Be prepared to ask questions about material not understood and to comment on and discuss material found to be provocative. Consider taking notes of questions or thoughts while reading and bring them to class for discussion.

University policy F69-24, “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is

available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>". Make sure to visit this page, review and be familiar with these university policies and resources.

By remaining enrolled in the class, you agree to abide by these course and University policies

Resources

These peer-reviewed journals and on-line resources should be used for your written assignments and oral presentation.

Journals (partial list)

American Journal of Clinical Nutrition	Journal of Health, Physical Education, Recreation & Dance
American Journal of Public Health	Journal of Nutrition
American Journal of Sports Medicine	Medicine & Science in Sports & Exercise
International Journal of Sports Medicine	New England Journal of Medicine
Journal of Athletic Training	Nutrition Reviews
Journal of the American Dietetic Association	Physician and Sports Medicine
Journal of the American Medical Association	Research Quarterly for Exercise and Sport
Journal of the Strength and Conditioning Association	Sports Medicine
Journal of Food Science	Strength and Conditioning Journal

On-Line Resources (partial list)

Academy of Nutrition and Dietetics	www.eatright.org
American College of Sports Medicine	www.acsm.org
American Medical Association	www.ama-assn.org
Australian Institute of Sport	www.ais.org.au/sssm/index.asp
Centers for Disease Control	www.cdc.gov
Food and Drug Administration	www.fda.gov
Government Healthfinder	www.healthfinder.gov
International Food Information Council	www.ific.org
Medline: www.sjlibrary.org website for access to datase	https://www.ncbi.nlm.nih.gov/pubmed/
MyPlate.gov	www.myplate.gov
National Institutes of Health	www.nih.gov
New England Journal of Medicine	www.nejm.org
Physician and Sportsmedicine	www.physsportsmed.com
Gatorade Sports Science Exchange	www.gssiweb.com
Sport Science Organization	www.sportsci.org
World Health Organization	www.who.int/en

NUFS/KIN 163 Physical Fitness and Nutrition Spring 2021

Course Schedule

(Subject to change with fair notice – any changes will be announced in class)
If your 1st half of the semester is **NUTRITION**

Course Schedule

Week	Date	Topics	Reading	Assignments & Deadlines
1	Th, 1/28	Course Overview & Introduction Scientific Method		
2	Tu, 2/2	Scientific Method	IFIC article & BMI and Waist Circumference both on web page RSB: pp. 28-31	Watch lecture on Canvas before class
2	Th, 2/4	Scientific Method Supplements	RBS: pp. 21-27, 63-65, 130-133, 238-243, 369, 539-549, 551-554, 562, AND Position paper on web site	
3	Tu, 2/9	Supplements		Analysis of Scientific Literature #1 – article on web page & bring Assignment Packet to class
3	Th, 2/11	Supplements Healthful Nutrition	RBS: pp. 2-3, 13-17, 36-54, 58-62.	Watch Portion Size Guide video on Canvas. Bring Portion Size Guide handout on web page
4	Tu, 2/16	Healthful Nutrition		Bring a food label
4	Th, 2/18	Carbohydrates	RBS: pp. 111-125, 147-153	
5	Tu, 2/23	Exam 1		
5	Th, 2/25	Fats	RBS: pp. 161-176, 186-203	
6	Tu, 3/2	Fats Protein	RBS: pp. 53-57, 210-228	Watch protein lecture on Canvas before class
6	Th, 3/4	Protein		
7	Tu, 3/9	Oral Presentation #1 & #2		Analysis of Scientific Literature #2 for those presenting
7	Th, 3/11	Oral Presentation #3 & #4		Analysis of Scientific Literature #2 for those presenting

Week	Date	Topics	Reading	Assignments & Deadlines
8	Tu, 3/16	Weight & Disordered Eating	RBS: pp. 419-421, 386-389, 403-408, 410-414, 416-419, 437-460	
8	Th, 3/18	Weight & Disordered Eating		Consumer Product: Nutrition; ad provided on Canvas
9	Tu, 3/23	Exam 2		
9	Th, 3/25	Intro to Wellness, Fitness, and Lifestyle Management Principles of Physical Fitness		
10	Tu, 3/30	SPRING BREAK		
10	Th, 4/1	SPRING BREAK		
11	Tu, 4/6	Energy Systems; Metabolism and Metabolic Calculations	RBS: Chap. 3 & 4	
11	Th, 4/8	Scientific Research & Pseudo-Science Analyzing Scientific Research	Read paper on Canvas	
12	Tu, 4/13	Cardiorespiratory Endurance	FIR: Chap. 3	
12	Th, 4/15	Exam 3		
13	Tu, 4/20	Muscular Strength & Endurance	FIR: Chap. 4	
13	Th, 4/22	Flexibility & Low Back Health	FIR: Chap. 5	Consumer Product: Fitness
14	Tu, 4/27	Flexibility & Low Back Health Body Composition	FIR: Chap. 5 & 6	
14	Th, 4/29	Program Design; Physical Activity & Stress	FIR: Chap. 7	
15	Tu, 5/4	Oral Presentation #5 & #6		Analysis of Scientific Literature #2 for those Presenting
15	Th, 5/6	Oral Presentation #7 & #8		Analysis of Scientific Literature #2 for those Presenting
16	Tu, 5/11	Cardiovascular health	FIR: Chap. 11	
16	Th, 5/13	Cancer; review for final	FIR: Chap. 12	
Final Exam	Fri, 5/21	Sec. 3: 9:45 am – 12:00 pm		

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

RBS = Rawson, Branch, & Stephenson, *Williams' Nutrition for health, fitness, and sport*

FIR = Fahey, Insel, & Roth, *Fit and well (e-book)*

NUFS/KIN 163 Physical Fitness and Nutrition

Spring 2021

Course Schedule

(Subject to change with fair notice – any changes will be announced in class)
If your 1st half of the semester is **FITNESS**

Course schedule

Week	Date	Topics	Reading	Assignments & Deadlines
1	Th, 1/28	Intro to Wellness, Fitness, and Lifestyle Management Principles of Physical Fitness	FIR: Chaps. 1 & 2	
2	Tu, 2/2	Scientific Research & Pseudo-Science Analyzing Scientific Research	Article to review provided on Canvas	
2	Th, 2/4	Energy Systems	RBS: Chap. 3	
3	Tu, 2/9	Metabolism	RBS: Chap. 4	
3	Th, 2/11	Metabolic Calculations		Analysis of Scientific Literature #1 Article on Canvas
4	Tu, 2/16	Cardiorespiratory Endurance	FIR: Chap. 3	
4	Th, 2/18	Exam 1		
5	Tu, 2/23	Muscular Strength & Endurance	FIR: Chap. 4	
5	Th, 2/25	Flexibility & Low Back Health Body Composition	FIR: Chap. 5 & 6	Consumer Product: Fitness
6	Tu, 3/2	Program Design Physical Activity & Stress	FIR: Chap. 7 & 10	
6	Th, 3/4	Cardiovascular Health		
7	Tu, 3/9	Oral Presentation #1 & #2		Analysis of Scientific Literature #2 for those presenting
7	Th, 3/11	Oral Presentation #3 & #4		Analysis of Scientific Literature #2 for those presenting
8	Tu, 3/16	Cancer	FIR: Chap. 11	
8	Th, 3/18	Review for exam		
9	Tu, 3/23	Exam 2		
9	Th, 3/25	Scientific Method Supplements	RSB: pp. 28-31 RBS: pp. 21-27, 63-65, 130-133, 238-243, 369, 539-549, 551-554, 562, AND	Watch Scientific Method lecture on Canvas before class

Week	Date	Topics	Reading	Assignments & Deadlines
			Position paper on web site	
10	Tu, 3/30	Spring Break		
10	Th, 4/1	Spring Break		
11	Tu, 4/6	Supplements		
11	Th, 4/8	Supplements Healthful Nutrition	RBS: pp. 2-3, 13-17, 36-54, 58-62.	Watch Portion Size Guide video on Canvas. Bring Portion Size Guide handout on web page
12	Tu, 4/13	Healthful Nutrition		Bring a food label
12	Th, 4/15	Carbohydrates	RBS: pp. 111-125, 147-153	
13	Tu, 4/20	Exam 3		
13	Th, 4/22	Fats	RBS: pp. 161-176, 186-203	
14	Tu, 4/27	Fats Protein	RBS: pp. 53-57, 210-228	Watch Protein lecture on Canvas before class
14	Th, 4/29	Protein		Consumer Product: Nutrition; ad provided on Canvas
15	Tu, 5/4	Weight & Disordered Eating	RBS: pp. 419-421, 386-389, 403-408, 410-414, 416-419, 437-460	
15	Th, 5/6	Oral Presentation #5 & #6		Analysis of Scientific Literature #2 for those presenting
16	Tu, 5/11	Oral Presentation #7 & #8		Analysis of Scientific Literature #2 for those presenting
16	Th, 5/13	Weight & Disordered Eating		
Final Exam	Fri, 5/21	Sec. 4: 9:45 am – 12:00 pm		

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

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