

San José State University

Departments of Nutrition, Food Science & Packaging and Kinesiology NUFS/KIN 163 Physical Fitness and Nutrition Sections 3 & 4, Spring 2022

Course and Contact Information

Department	KIN	NUFS
Instructor:	Karen Moreno, PhDc, MA	Izzie Brown, MS, RDN, CSCS
Office Location:	SPX 170	CCB 202
Telephone:	NA	(408) 924-3373
Email:	karen.moreno@sjsu.edu	izzie.brown@sjsu.edu
Office Hours:	MW: 11:00 AM – 11:45 AM and by appointment	TuTh: 2:00-2:30 MW: 11:00-11:30 and by appointment
Class Days/Time:	Tuesday/Thursday 12:00-1:15 p.m.	
Classroom:	Section 3: SH 346 Section 4: IS 215	
Prerequisites:	<p>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.</p> <p>Students are strongly encouraged to take courses to satisfy GE Areas R, S, and V from departments other than their major department.</p> <p>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.)</p> <p>Not for nutrition majors or minors</p>	
GE/SJSU Studies Category:	Area R – Earth & Environment	

Course Format

This course meets in person. Access to the internet and Canvas is required.

Faculty Web Page and MYSJSU Messaging

Physical fitness course materials such as syllabus, handouts, notes, articles, assignment instructions, etc. can be found on Canvas. You are responsible for regularly checking with the messaging system through MySJSU and Canvas 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 the instructor's faculty web page at <http://www.sjsu.edu/people/izzie.brown>. Grades can be found on Canvas. 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. For help with using Canvas see [Canvas Student Resources page](#).

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. (2021). Fit & well (14th ed.). Boston: McGraw-Hill. ISBN10: 1264013094. Ebook ISBN 13: 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."
- Office of Graduate and Undergraduate Programs' Syllabus Information web page at [SJSU syllabus policy information](#).
- 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](http://www.sjsu.edu/senate/docs/F13-1.pdf) 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: not cumulative over fitness & nutrition. Nutrition final exam will be given during final exam week. The fitness final will be given on the last day of the class.	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
Group 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. Fitness exams will be given in-class on-line, bring a laptop or tablet. 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 for the nutrition section 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. Assignments for the fitness section are due on the dates specified on the proposed schedule and Canvas. There is a 5% penalty for each workday (M-F), or partial calendar day, that assignments are late. Assignments will not be accepted 1-week past the due date. Emailed assignments for the fitness section will **not be accepted**.

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/>.

Multiple nutrition assessment methods utilize gender-specific values that provide distinct recommendations for males and females. These criteria do not take into account for gender identity or gender expression and no guidelines exist regarding nutrition assessment for transgender or gender non-conforming population.

Written Communication and Information Literacy Assessment Fall 2021

This semester SJSU is assessing written communication and information literacy skills of students pursuing undergraduate degrees. The assessment is used to evaluate effectiveness of our General Education and writing curricula. This class has been selected for collection of student sample work. I will select random samples of work from this class to provide to a team of assessment experts. The work will be anonymized and cannot be traced back to you. The assessment will be done after the semester is over and will not affect your grade. Please let me know if you prefer to have your work excluded from this process.

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 database	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 2022

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
0.5	Th, 1/27	Course Introduction	Syllabus & Canvas	
1	Tu, 2/1	Introduction to Exercise Science Literature (Module 1)	IFIC Article	
1	Th, 2/3	Exercise Science Article Analysis (Module 1)	Article on Canvas Overgaard et al., 2017	
2	Tu, 2/8	Introduction to Wellness, Fitness, and Lifestyle Management Presentation Groups (Module 2)	FIR Ch 1	Analysis of Scientific Lit #1 Due 11:59 PM
2	Th, 2/10	Physical Activity and Quality of Life (Module 2) Consumer Product Introduction	Article on Canvas Gill et al., 2013	
3	Tu, 2/15	Principles of Physical Fitness (Module 3)	FIR Ch 2	Consumer Product Ad Approval
3	Th, 2/17	Cardiorespiratory Fitness (Module 4)	FIR Ch 3 Article on Canvas Bassett et al., 2017	
4	Tu, 2/22	Sedentary Behaviors, Cardiorespiratory Fitness and Disease Risk (Module 4)	Article on Canvas Bailey et al., 2019	
4	Th, 2/24	Exam 1		
5	Tu, 3/1	Muscular Strength and Endurance (Module 5)	FIR Ch 4	Consumer Product Paper Due 11:59 PM
5	Th, 3/3	Body Composition: BMI, Percent Body Fat, and Visceral Adiposity (Module 6)	FIR Ch 6 Article on Canvas Vissers et al. 2013	
6	Tu, 3/8	Groups 1 & 2 Oral Presentations		Analysis of Scientific Literature #2 for those presenting 11:59 PM
6	Th, 3/10	Groups 3 & 4 Oral Presentations		Analysis of Scientific Literature #2 for those presenting 11:59 PM
7	Tu, 3/15	Flexibility, Joint and Low Back Health (Module 7)	FIR Ch 5	
7	Th, 3/17	Exam 2		

Week	Date	Topics	Reading*	Assignments & Deadlines
8	Tu, 3/21	Scientific Method	IFIC article & RSB: pp. 28-31	Watch lecture on Canvas before class
8	Th, 3/23	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	
	3/29-31	Spring Break		
9	Tu, 4/5	Supplements		
9	Th, 4/7	Supplements Healthful Nutrition	RBS: pp. 2-3, 13-17, 36-54, 58-62.	View Portion Size Guide video lecture under Modules in Canvas. Bring Portion Size Guide handout on web page
10	Tu, 4/12	Healthful Nutrition		Bring a food label
10	Th, 4/14	Carbohydrates	RBS: pp. 111-125, 147-153	
11	Tu, 4/19	Exam 3		
11	Th, 4/21	Fats	RBS: pp. 161-176, 186-203	
12	Tu, 4/26	Fats Protein	RBS: pp. 53-57, 210- 228	
12	Th, 4/28	Protein		
13	Tu, 5/3	Weight & Disordered Eating	RBS: pp. 419-421, 386-389, 403-408, 410-414, 416-419, 437-460	
13	Th, 5/5	Weight & Disordered Eating		Consumer Product: Nutrition; URL for ad provided on Canvas
14	Tu, 5/10	Oral Presentation #5 & #6		Analysis of Scientific Literature #2 for those presenting
14	Th, 5/12	Oral Presentation #7 & #8		Analysis of Scientific Literature #2 for those presenting
Final Exam	Tu, 5/24	Sec. 4: 9:45 am		

* 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 2022

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
0.5	Th, 1/27	Course Overview & Introduction Scientific Method		
1	Tu, 2/1	Scientific Method	IFIC article & BMI and Waist Circumference both on web page RSB: pp. 28-31	Watch lecture on Canvas before class
1	Th, 2/3	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	
2	Tu, 2/8	Supplements		Analysis of Scientific Literature #1 – article on web page & bring Assignment Packet to class
2	Th, 2/10	Supplements Healthful Nutrition	RBS: pp. 2-3, 13-17, 36-54, 58-62.	View Portion Size Guide video lecture under Modules in Canvas. Bring Portion Size Guide handout on web page.
3	Tu, 2/15	Healthful Nutrition		Bring a food label
3	Th, 2/17	Carbohydrates	RBS: pp. 111-125, 147-153	
4	Tu, 2/22	Exam 1		
4	Th, 2/24	Fats	RBS: pp. 161-176, 186-203	
5	Tu, 3/1	Fats Protein	RBS: pp. 53-57, 210- 228	
5	Th, 3/3	Protein		
6	Tu, 3/8	Oral Presentation #1 & #2		Analysis of Scientific Literature #2 for those presenting
6	Th, 3/10	Oral Presentation #3 & #4		Analysis of Scientific Literature #2 for those presenting

Week	Date	Topics	Reading*	Assignments & Deadlines
7	Tu, 3/15	Weight & Disordered Eating	RBS: pp. 419-421, 386-389, 403-408, 410-414, 416-419, 437-460	Consumer Product: Nutrition; URL for ad provided on Canvas
7	Th, 3/17	Exam 2		
8	Tu, 3/22	Introduction to the Fitness Section and Exercise Literature (Module 1)	Review IFIC Article	
8	Th, 3/24	Exercise Science Article Analysis (Module 1)	Article: Overgaard et al.	
	3/29-31	Spring Break		
9	Tu, 4/5	Introduction to Wellness, Fitness, and Lifestyle Management. Presentation Groups (Module 2)	FIR Ch 1	
9	Th, 4/7	Physical Activity and Quality of Life. (Module 2) Consumer Product Introduction	Article: Gill et al.	
10	Tu, 4/12	Principles of Physical Fitness (Module 3)	FIR Ch 2	Consumer Product Ad Approval Due 11:59 PM
10	Th, 4/14	Cardiorespiratory Fitness (Module 4)	FIR Ch 3 Article: Bassett et al.	
11	Tu, 4/19	Sedentary Behaviors, Cardiorespiratory Fitness and Disease Risk (Module 4)	Article on Canvas Bailey et al.	
11	Th, 4/21	Exam 3		
12	Tu, 4/26	Muscular Strength & Endurance (Module 5)	FIR Ch 4	Consumer Product Paper Due 11:59 PM
12	Th, 4/28	Body Composition: BMI, Percent Body Fat, and Visceral Adiposity (Module 6)	FIR Ch 6 Article: Vissers et al.	
13	Tu, 5/3	Groups 5 & 6 Oral Presentations		Analysis of Scientific Literature presenting 11:59 PM
13	Th, 5/5	Groups 7 & 8 Oral Presentations		Analysis of Scientific Literature presenting 11:59 PM
14	Tu, 5/10	Flexibility, Joint and Low Back Health (Module 7)	FIR Ch 5	
14	Th, 5/12	Wrap up		
	Tu, 5/24	Final Exam 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)*