

**San José State University**  
**College of Health and Human Sciences/Kinesiology**  
**KIN187 01, Clinical Exercise Physiology, Fall, 2018**

**Course and Contact Information**

Instructor:	Linda D. Wilkin, Ph.D.
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Office Hours:	Tuesday 9 until 10 am or by email or appointment
Class Days/Time:	Tuesday and Thursday 10:30 until 11:45 am
Classroom:	SPX 151
Prerequisites:	KIN 70 & KIN 155 (or equivalent courses) with grades of C- or better. (Note: GE Math, Introductory Chemistry, and Human Physiology are prereqs for KIN 155)

**Course Format**

**Faculty Web Page and MYSJSU Messaging (Optional)**

Copies of the course materials such as the syllabus, major assignment handouts, etc. may be found on Canvas. You are responsible for regularly checking with the messaging system through MySJSU and Canvas.

**Course Description**

Physiological principles applied to the prevention, management, and treatment of chronic health conditions. Focus on the pathophysiology, acute response to exercise, chronic training effects, and development of appropriate conditioning and training programs for chronic conditions.

**Student Learning Objectives (SLOs)**

Upon successful completion of the course requirements, the student will be able to:

- SLO#1 Evaluate the capacities and limitations for physical activity in clinical populations, taking into consideration disease processes and methods to assess functional capacity.
- SLO#2 Identify commonly used medications for specific clinical conditions and their effects on exercise capacity.
- SLO#3 Apply concepts of exercise physiology (e.g., acute and chronic physiological responses of the neuromuscular, bioenergetic, and cardiorespiratory systems) to the development of comprehensive conditioning programs for individuals with chronic conditions.

- SLO#4 Develop and modify programs to coincide with the limitations and capacities of individuals with chronic conditions.
- SLO#5 Sensitively identify and explain other individual differences that should be taken into consideration when designing exercise programs for diverse populations.
- SLO#6 Identify and explain the effects of muscle fatigue, overtraining, environmental factors, nutrition, and ergogenic aids on exercise programming for individuals with chronic conditions.

## **Required Texts/Readings**

### **Textbooks**

Durstine, J. L., Moore, G. E., Painter, P. L., & Roberts, S. O. (Eds.). (2009). *ACSM's exercise management for persons with chronic diseases and disabilities* (4<sup>th</sup> ed.). Champaign, IL: Human Kinetics

Thompson, W. R. (Ed.). (2013). *ACSM's guidelines for exercise testing and prescription* (10<sup>th</sup> ed.). Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins.

Other course information: Available on Canvas

**Calculator – required for every class**

## **Library Liaison**

The KIN library liaison is Poo, Adriana, Phone: [408\) 808-2019](tel:4088082019), Email: [adriana.poo@sjsu.edu](mailto:adriana.poo@sjsu.edu)

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## **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.”

## **Midterms and Final Exams**

Exams may include true-false, multiple choice, matching, and short answer questions and problems.

Make-up exams are permitted only for illness and emergency (TRULY EXTRAORDINARY CIRCUMSTANCES). The student is responsible for notifying the instructor and making arrangements at the earliest possible time. In most cases, the exam must be completed before the next class meeting. All requests for make-up exams will be evaluated on an individual basis. The final exam will NOT be given early.

## Grading

Grading is based on percentage of total points earned as follows:

97-100%	A+	77-79%	C+	Below 60%	F
93-96%	A	73-76%	C		
90-92%	A-	70-72%	C-		
87-89%	B+	67-69%	D+		
83-86%	B	63-66%	D		
80-82%	B-	60-62%	D-		

### Example

Component	% Earned	%	X	Points Possible	=	Points Earned
Class Contributions/Activities	88%	.88	X	10	=	8.8
Observations Report	94%	.94	X	20	=	18.8
Midterm Examination #1	80%	.80	X	20	=	16.0
Midterm Examination #2	79%	.79	X	20	=	15.8
Final Examination	90%	.90	X	30	=	27.0
						86.4
						Grade: B+

## Classroom Protocol

- This is a professional preparation course. Students are expected to:
  - Read assigned material prior to class.
  - **Be fully prepared; actively and enthusiastically participate** in ALL class activities and discussions.
  - Bring appropriate reading for the topic, calculator, and other necessary supplies to each class.
  - Complete assignments on time.
  - Keep the classroom clean. No food or drinks are allowed in SPX 208 except water.
  - Silence cell phones during class. Use electronic equipment ONLY for class activities (e.g., note taking).  
**TEXTING, SCANNING THE INTERNET, AND CHECKING E-MAIL DURING CLASS IS UNPROFESSIONAL, DISRESPECTFUL, AND DISTRACTING TO OTHERS.**

The most effective class results when EACH class member makes an INDIVIDUAL COMMITMENT to be an active participant in the teaching/learning process. Individual contributions and differing viewpoints will be appreciated and respected. Students are responsible for material presented and announcements made in each class. Students who miss class (a rare occurrence!) are responsible for obtaining material from another student BEFORE seeing the instructor about content missed. Borderline grades may be raised or lowered depending upon student's professional commitment.

## **University Policies**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be 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/>"

# KIN 187 01/ Clinical Exercise Physiology, Fall 2018, Course Schedule

*The schedule is subject to change with fair notice announced in class and on Canvas.*

## Course Schedule

Date	Content	Reading Assignments
Tues., Aug 21	Introduction & course overview, EIM	<i>CCD4; Guide: Chap. 1</i>
Thurs., Aug 23	PA & Exercise for Persons with Chronic Conditions; Health Screening	<i>CDD4: Chaps. 2 Guide: Chaps. 2, 3</i>
Tues., Aug 28	Exercise Programming; Art of Exercise Medicine	<i>CDD4: Chap. 3, 4 Guide: Chaps. 2, 3</i>
Thurs., Aug 30	Comorbidities	<i>CDD4: Chap. 5 Guide: pgs 187 – 189</i>
Tues., Sept 4	Cardiovascular Disease	<i>CDD4: Chaps. 10 Guide: Chap. 10 Defining and setting National Goals</i>
Thurs., Sept 6	Cardiovascular Disease	<i>CDD4: Chaps. 11</i>
Tues., Sept 11	Cardiovascular Disease	<i>CDD4: Chaps. 12</i>
Thurs., Sept 13	Cardiovascular Disease	<i>CDD4: Chaps. 13</i>
Tues., Sept 18	Cardiovascular Disease	<i>CDD4: Chap. 14</i>
Thurs., Sept 20	Cardiovascular Disease	<i>CDD4: Chaps. 15</i>
Tues., Sept 25	<b>Midterm exam #1</b>	
Thurs., Sept 27	Pulmonary Diseases	<i>CDD4: Chaps. 16, 17, 18, 19 Guide: Chap. 10 COPD Essentials National Asthma Control Initiative</i>
Tues., Oct 2	PA and Children	<i>Guide: pgs 180 – 184 Youth Resistance Training: Updated Position Statement</i>
Thurs., Oct 4	Diabetes	<i>CDD4: Chap.6 Guide: Chap. 10 Management of Hyperglycemia in Type 2 Diabetes</i>

Tues., Oct 9	Diabetes	CDD4: Chap. 6 <i>Guide: pgs 268 – 279</i>
Thurs., Oct 11	Older Adults	<i>Guide: pgs 188 – 195</i>
Tues., Oct 16	Older Adults	<i>Guide: pgs 188 – 195</i>

Thurs., Oct 18	Osteoporosis	CDD4: Chap. 6 <i>Guide: pgs 345 – 347</i>
Tues., Oct 23	Arthritis Lower Back Pain	CDD4: Chap. 6 <i>Guide: pgs 297 - 301</i> <i>Guide: pgs 184 – 188</i>
Thurs., Oct 25	Stroke <b>Observations Report Due</b>	CDD4: Chap. 25 <i>Guide: pgs 248 - 251</i> My Stroke of Insight: Jill Bolte Taylor, Ph.D.
Tues., Oct 30	Joint Replacements	OrthoInfo Total Hip and Knee Replacement
Thurs., Nov 1	<b>Midterm Exam #2</b>	
Tues., Nov 6	Alzheimer's Disease	CDD4: Chap. 31
Thurs., Nov 8	Fibromyalgia	CDD4: Chap. 23
Tues., Nov 13	<b>Work on Case Studies</b>	
Thurs., Nov 15	Pregnancy & postpartum	<i>Guide: pp. 195 – 202</i> <i>AOG Committee Opinion</i>
Tues., Nov 20	TBA	
Thurs., Nov 22	<b>THANKSGIVING</b>	
Tues., Nov 27	TBA	
Thurs., Nov 29	Practice case studies	
Tues., Dec 4	Practice case studies	
Thurs., Dec 6	Review for final exam	
Wednesday, 12/12	<b>FINAL EXAM</b> <b>9:45 am – 12:00 pm</b>	

§ Readings from *ACSM's exercise management for persons with chronic diseases and disabilities* are preceded by CDD4 and in regular typeface.

§ Readings from *ACSM's guidelines for exercise testing and prescription (Guide)* are indicated in italics.

§ Medications are covered in the Appendix A of CDD4 & Appendix A of the *Guidelines*