

**CALIFORNIA STATE UNIVERSITY, NORTHRIDGE**  
**Department of Kinesiology**  
**KIN 311 Adapted Therapeutic Exercises: Principles and Applications**

Professor:	John Banola	Office:	BC 118
Units:	2 units	Office Hours:	MW 11:00A-12:00P
Pre-requisite:	KIN 201 or 241		TR 9:00-10:00A
Co-requisite:	Concurrent enrollment in KIN 311L		or by appointment
Term:	Spring 2008	Phone:	818-677-7210
Time:	TR 8:00-8:50A or 12:00-12:50P	Email:	john.banola@csun.edu
Location:	BC 140 (Brown Center)		

**Text**

- Banola, John (1998) *Manual Exercises for Strength & Flexibility*. CSUN Bookstore.

**Course Description**

This course is designed to introduce principles and applications of adapted therapeutic exercise. Students are expected to acquire theoretical and practical knowledge in adapted physical activity and therapeutic exercise for individuals with physical disabilities. Various disciplines of Kinesiology in relation to adapted physical activity and therapeutic exercise, such as anatomy, physiology, biomechanics, pedagogy, and psychosocial aspects, will be reviewed in this course so that students can integrate the knowledge to implement an adapted therapeutic exercise program. In addition to the lecture class, all students will have the hands-on experiences of working in a lab class (KIN 311L), which will provide clinical opportunities to work with individuals with various physical disabilities, including cerebral palsy, spinal cord injury, traumatic brain injury, multiple sclerosis, stroke, Parkinson's disease, arthritis, etc.

**Instructional Objectives**

By successfully completing KIN 311, the student will be able to:

1. Identify and explain motor/physical/psychological characteristics of various physical disabilities.
2. Explain and demonstrate proper techniques of manual exercises for strength and flexibility improvement for individuals with disabilities.
3. Explain and demonstrate the proper use of exercise machines for adapted therapeutic exercise.
4. Explain contraindications of exercise for a specific disability.
5. Explain and apply theoretical principles used in a specific therapeutic exercise.
6. Perform practical applications of exercise principles for individuals with disabilities.

**Course Outline**

- I. Introduction to Adapted Therapeutic Exercise
- II. Range of Motion and Flexibility
- III. Muscular Strength and Endurance

----- **Mid-term I (Practical Exam)** -----

- IV. Cardiovascular Endurance

----- **Mid-term II (Written Exam)** -----

- V. Back & Disc Problems
- VI. Postural Deviations
- VII. Benefits of Standing
- VIII. Balance and Proprioception
- IX. Gait Training, SAID Principle Cognitive Training

----- **Final Exam (Written Exam)** -----

**Note: The course schedule may change due to guest lectures and special topics.**

**Evaluation & Grading Policy**

**A. Evaluation Criteria:**

Students will be evaluated based on the following:

- |                                       |            |             |
|---------------------------------------|------------|-------------|
| 1. Three exams                        | (20+20+25) | 65%         |
| 2. One Disability Fact Sheet          |            | 15%         |
| 3. Group Presentation                 |            | 15%         |
| 4. Class Attendance and Participation |            | 5%          |
| <b>Total –</b>                        |            | <b>100%</b> |

**B. Approximate Schedule for Exams and Assignments**

- Mid-term I (Practical Exam)    Week 4-5
- Fact Sheet                            Week 4
- Mid-term II (Written Exam)    Week 6
- Group Presentation                Week 14-15 (TBD)
- Final Exam                            Week 16

**C. Final Grading Scale:**

A	> 94%	C	73-76%
A-	90-93%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	0-59%

## **D. Policy**

- a. Class attendance and participation is mandatory.
- b. Students will receive separate grades for the lecture and the lab classes.
- c. **No late assignments will be accepted.** Assignments must be turned in NO LATER than five minutes after the beginning of the class session on the due date.
- d. No make-up exams. If absolutely unavoidable, a one-on-one verbal exam will be given the Friday before finals week.

## **Statement on Cheating and Plagiarism**

Cheating or plagiarism in connection with an academic program at a campus is listed in Section 41301, Title V, California Code of Regulations, as an offense for which a student may be expelled, suspended, or given a less severe disciplinary sanction. See university catalog pages 523 through 525 for details on academic dishonesty, cheating, fabrication, facilitating academic dishonesty, plagiarism and faculty policy on academic dishonesty.

## **Students With Disabilities**

This instructor, in conjunction with California State University Northridge, is committed to upholding and maintaining all aspects of the federal Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. If you are a student with a disability and wish to request accommodations, please contact the office of Students With Disabilities Resources located in 110 Student Services Building, or call (818) 677-2684 for an appointment. Any information regarding your disability will remain confidential. Because many accommodations require early planning, requests for accommodations should be made as early as possible. Any requests for accommodations will be reviewed in a timely manner to determine their appropriateness to this setting.

## **References**

- Sherrill, C. (2001). *Adapted physical activity, recreation and sport: crossdisciplinary and lifespan*. (6<sup>th</sup> ed.) Madison, Wisc: Brown and Bechmark.
- Houglum, P. A. (2001). *Therapeutic exercise for athletic injuries*. Champaign, IL: Human Kinetics.
- Auxter, D. and Pyfer, J. (1993). *Adapted Physical Education and Recreation*. St. Louis: Times Mirror/Mosby College Publishing.
- Dunn, John (1997). *Special Physical Education*. Dubuque, IA.: Wm. C. Brown Publishers.
- Wiseman, D.C. (1994). *Physical Education for Exceptional Students: Theory to Practice*. Albany: Delmar Publishers.

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**Department of Kinesiology**  
**KIN 311L Adapted Therapeutic Exercise: Principles and Applications**

Units:	1 unit	Professor:	John Banola
Co-requisite:	To be taken with KIN 311	Office:	BC 118
Term:	Spring 2008	Office Hours:	MW 11:00A-12:00P
Time:	Individually scheduled for 50 min. sessions twice a week		TR 9:00-10:00A or by appointment
Location:	BC 140 (Brown Center)	Phone:	818-677-7210
		Email:	john.banola@csun.edu

**Course Description**

This course is designed to provide hands-on laboratory experiences in the Adapted Physical Activity and Therapeutic Exercise Program at the Center of Achievement. Under clinical supervision, students will implement and monitor individualized exercise programs for individuals with physical disabilities.

**Instructional Objectives**

At the conclusion of each laboratory experience the student will be able to:

1. Perform appropriate exercise techniques for individuals with disabilities.
2. Explain and demonstrate proper operation of exercise equipment for therapeutic exercise programs.
3. Explain/describe appropriate exercises, precautions, and contraindications for a specific disability.
4. Explain and apply appropriate motor learning/control principles for specific therapeutic exercises.
5. Demonstrate proper record keeping for any progress of clients in individualized goals: strength, flexibility, CV endurance, balance & proprioception, and functional motor skills.

**Course Outline**

- |      |                                   |       |                             |
|------|-----------------------------------|-------|-----------------------------|
| I.   | Intro. to Lab Procedures/ Program | V.    | Endurance Exercises         |
| II.  | Techniques Used in Transferring   | VI.   | Exercise Machines/Equipment |
| III. | Strength Exercises                | VII.  | Functional Training         |
| IV.  | Flexibility Exercises             | VIII. | Record Keeping/Weekly Logs  |

**Evaluation/Grading**

- |    |   |     |
|----|---|-----|
| 1. | Attendance/Punctuality & Participation - <b>See below</b> | 30% |
| 2. | Midterm Practical Exam – <b>Client’s Program</b>          | 10% |
| 3. | Final Practical Exam – <b>See Note Below</b>              | 30% |
| 4. | Weekly Logs   | 10% |
| 5. | Program card recording                                    | 10% |
| 6. | Introspective Lab Paper - <b>See guidelines below</b>     | 10% |

**Total – 100%**

**Note:** The **final practical exam** will consist of questions based on the following: 1) all of the exercises introduced in the lecture class, 2) all of the machines/equipment in the lab setting, and 3) any other exercise protocols introduced – i.e. transfers, gait training, etc. It is the **students’ responsibility** to come to the lab during open hours to learn about all of the machines/equipment and how to use them appropriately.

**Course Policies:** See KIN 311 syllabus

**Final Grading Scale:** See KIN 311 syllabus

**Students With Disabilities:** See KIN 311 Syllabus

**Plagiarism:** See KIN 311 Syllabus

## **Attendance**

Attendance and full participation is expected everyday. You will be allowed to miss two (2) class periods without penalty, after that, five (6) points will be deducted for each missed class. Points will also be deducted as follows: late (-2), leave early (-2), or do not participate in class activities (-2). You are considered late or tardy if you arrive anytime after the class is scheduled to start. Leaving early is anytime you leave before the time the class is scheduled to end. If it is not possible for you to meet the attendance and participation requirements, consider taking the course at another time that is more convenient for you. Please refer to the class schedule for drop dates.

## **Introspective Lab Paper Guidelines**

**Due Date: Paper is to be turned in to lab supervisor. Check with lab supervisor for exact due date.**

**LENGTH:** 2-3 pages double-spaced, typed, 12 font

This is an introspective paper based upon reactions to your lab experience. Take the time to express your experience into words. The areas to discuss are the physiological, psychological, and sociological aspects of adapted aquatic exercise.

### **GUIDELINES FOR EACH SECTION**

**PHYSIOLOGICAL** – Answer what changes have occurred in your **client's** physical condition during this semester's exercise program. Begin by referring to your **client's** fitness components such as strength, flexibility, and cardiovascular endurance and note changes that have occurred. Other areas to consider are skills of locomotion (i.e. gait training), and balance. Concerns with your **client's** pain or discomfort may also be discussed. Has your **client's** overall function improved? By assessing basic changes in your **client's** capabilities you have answered the physiological aspect.

**PSYCHOLOGICAL** – Describe in this section of the paper **your own** thoughts, feelings, and attitudes experienced with implementing an exercise program in the adapted therapeutic exercise environment. These thoughts and feelings may be positive or negative. Many emotions may have been felt throughout the semester; this is an opportunity to express the impact of the semester.

**SOCIOLOGICAL** – Discuss how society is sensitive to the issue of individuals with disability with respect to the exercise setting. In your experience, have there been many adapted therapeutic exercise programs/classes for special populations offered? How accessible is the typical exercise environment? Discuss any friendships that may have developed with clients, class members, instructors or anyone throughout the semester.

### **GRADING**

Be sure to check the grading rubric for lab papers listed below to see how your paper will be scored. Important things to remember to include are an introductory and summary paragraph as well as writing about all of the required area (physiological, psychological, and sociological).

## Grading Rubric for Introspective Lab Papers

### 90-100 points

- ◇ All areas were addressed (physiological, sociological, psychological)
- ◇ Wrote an introductory and summary paragraph
- ◇ Ideas were presented in a clear and logical order
- ◇ Free of spelling errors
- ◇ Skillful sentence structure
- ◇ Did not exceed three pages

### 80-89 points

- ◇ Two of the three areas were addressed (physiological, sociological, psychological)
- ◇ Wrote an introductory and summary paragraph
- ◇ Most ideas were presented in a clear and logical order
- ◇ Most of the paper was free from spelling errors
- ◇ Acceptable sentence structure
- ◇ Did not exceed three pages

### 70-79 points

- ◇ Only one of the three areas was addressed (physiological, sociological, psychological)
- ◇ Briefly introduced and summarized the paper
- ◇ Some ideas were presented in a clear and logical order
- ◇ Contained some spelling errors
- ◇ Weak sentence structure
- ◇ Did not exceed three pages

### 60-69 points

- ◇ None of the three areas were sufficiently addressed (physiological, sociological, psychological)
- ◇ No introductory or summary paragraph was included
- ◇ Few ideas were presented in a clear and logical order
- ◇ Contained many spelling errors
- ◇ Sentence structure needs improvement
- ◇ Did not meet length requirement

### <50 points

- ◇ Paper has failed to meet a sufficient number of requirements.