

THERAPEUTIC EXERCISE

HPE 376

SPRING 2007

Days: MWF

Office Location Edu 005

Time: 8:00-8:50

Instructor: J Palmer

Office hours MWF: 7-8, 1-2, TTH: 7-8, 11-12

Office Phone: 546-8208

Classroom Rules/Expectations:

To enhance the learning atmosphere of the classroom, students are expected to dress and behave in a fashion conducive to learning in the classroom. More specifically, students are to refrain from wearing clothes that impede academic learning such as but not limited to, wearing body-revealing clothing and excessively baggy pants; hats/caps. Students will turn off telephones prior to entering the classroom. Students who exhibit the behaviors described above, or similar behaviors will be immediately dismissed from the class at the third documented offense. The student will be readmitted to class only following the decision by the department chair. The student may appeal the decision of the department chair to the Dean of the College offering the course, and, subsequently, to the Vice President of Academic Affairs, and then to the President of Shaw University. Third decision of the President will be final. Failure to follow the procedures herein outlined will result in termination of the appeal, and revert to the decision of the department chair.

Each behavior constructed by the teacher/professor as nonconductive to learning will be recorded, properly documented and, and appropriately reported to other student and to the chair of academic department offering the course. This report will be in written form with a copy provided to both the student and the department chair. The faculty member should retain a copy for his/her own records.

Description of Course: Therapeutic Exercise is motion of the body or its part to relieve symptoms or to improve functions. Because of new techniques on physical rehabilitation, facilitation of purposeful movement in patients with neuromuscular dysfunction requires the application of therapeutic exercise to that particular body part. A firm foundation is necessary in neurological and neuromuscular elements of therapeutic Exercise in order to develop a sound, scientific exercise program.

Text: Therapeutic Exercise for athletic injuries and Therapeutic Exercise

Author: Kisner, C and Houglum P., Foundations

Instructional Objectives:

- To understand the purpose and why therapeutic exercise is necessary
- To understand to morphological function of therapeutic exercise.
- To develop proficiency in the assessment of conditioning.
- To understand how frequency, intensity and duration of training interact.
- To understand the energy systems and be able to design programs to augment the function of these systems
- Demonstrate knowledge of training and conditioning techniques to improve muscular strength, power, speed ability, endurance, and body composition.

Behavioral Objectives

- Students will be able to outline the various applications of therapeutic exercise
- Students will be able to list functions of therapeutic exercise
- Students will be able to identify various types of therapeutic exercise.
- Students will be able to recognize and develop certain types of exercise programs for all ages.
- Students will be able to demonstrate knowledge of training and conditioning techniques to improve muscular strength, power, flexibility, endurance and body compositions.
- Students will be able to design programs to augment to function of these systems.

Course Description:

This course focuses on basic therapeutic exercise used for the treatment of musculoskeletal and cardiopulmonary disorders. Open and closed chain activities are presented. Proper uses for isokinetic, isotonic, isometric and semi-isokinetic exercise are described. PNF and joint mobilization is practiced and discussed. Aquatic exercises are also presented. Pre-operative and post-operative exercises are suggested. Specific exercise for vascular disorders is suggested. The kinesiology of each joint is reviewed.

Outline

Week 1- The Introduction to Therapeutic exercise. Patient evaluation, the goal of therapeutic exercise and training principles, History of Therapeutic Exercise.

Week 2- Range of motion exercise: passive, active-assistive, active, resistive. Assistive and resistive devices

Week 3- Differences between strength, endurance and power. Physiological effects and proper uses of isokinetic, isotonic, isometric and semi-isokinetic exercise. Equipment: Cybex, orthotron, B-2000, Kin-Kom, Nautilus, Rubber bands, free weights, wall pulleys.

Week 4- Stretching. Physiological causes of tightness. Proper stretching, myofascia release techniques. Warm-up and cool-down

Week 5- Principles of resistance training: Berger, Delorme and reversal methods, Brief maximal exercise, power sets

Week 6- Joint Mobilization: contraindication and indications. Basic joint mobilization techniques.

Week 7- Identify characteristics of soft tissue injuries. Pre-surgical and post-surgical management. Soft tissue healing the knee.

Week 8 – Establish a therapeutic exercise program to manage musculoskeletal Lesions of the shoulder and shoulder girdle

Week 9- Establish a therapeutic exercise program for musculoskeletal lesion of the wrist and hand.

Week 10- Identify important structures of the ankle and foot. Specific exercises for the ankle and foot

Week 11- Common back deformities and dysfunctions. Back injury exercise and exercise improve alignment.

Week 12- Establish treatment programs for torticollis, tension headaches, thoracic outlet syndrome and TMJ dysfunction.

Week 13- Management of obstructive and restrictive lung disease.

Week 14- Aquatic Exercises

Week 15- Basic Cardiopulmonary Rehabilitation

Week 16- Review for Final view

Evaluation

Practicum Exam #1	20%
Practicum Exam #2.....	20%
Practicum Exam #3.....	20%
Exam # 4.....	20%
Exam #5.....	20%

Grading

90-100.....	A
80-89.....	B
70-79.....	C
60-69.....	D
59- Below.....	F