

EXRS 4110 REHABILITATION PRINCIPLES

Class Schedule

Class will meet M,W,F 11:15 – 12:05, Lab – Thursday 9:30 – 10:45

INSTRUCTORS:

Mike Ferrara 542-4801 mferrara@uga.edu
Ramsey 101B

Mike Dew 542-6521 mdew@sports.uga.edu

Mandy Langton 542-6936 alangton@sports.uga.edu

Laboratory Teaching Assistant – Alexis Murphy and Kaitlin Keeler

REQUIRED TEXT:

Therapeutic Exercise for Athletic Injuries, 2nd Edition, Houglum, Peggy A., Human Kinetics, ISBN: 0-88011-843-1

Therapeutic Modalities, 2nd Edition, Chad Starkey, F.A. Davis.

COURSE DESCRIPTION:

Course Description: Application of rehabilitation and therapeutic modalities techniques for specific injuries to the spine, upper extremity and lower extremity.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Attendance:

Attendance to class and lab are mandatory. Failure to complete lab competencies will result in failure. If you miss class for an excused absence then makeup work must be completed within the next 72 hours.

Course Outline

1. Electrical modalities used in the treatment of injury
 - a. Interferential current
 - b. Transcutaneous electrical nerve stimulation
 - c. Russian current
 - d. Laser therapy
 - e. Iontophoresis

2. Mechanical modalities used in the treatment of injuries
 - a. Continuous passive motion
 - b. Cervical and lumbar traction
3. Shortwave diathermy
4. Therapeutic ultrasound
5. Treatment and rehabilitation of the spine and sacroiliac joint
6. Treatment and rehabilitation of the upper extremity
7. Treatment and rehabilitation of the lower extremity

TESTING:

There will be 4 tests worth 100 points each and 1 cumulative final worth 200 points. You will also have a rehabilitation project worth 100 points. You will also have ~10 pop quizzes worth 10 points each.

GRADING:

TESTS	100 POINTS EACH FOR A TOTAL OF	400 POINTS
FINAL	COMPREHENSIVE	200 POINTS
PROJECT		100 POINTS
POP QUIZES		100 POINTS

TOTAL		800 POINTS
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FINAL GRADES:

- A=93% or better
- A-=90%-93%
- B+=87%-90%
- B=83%-87%
- B-=80%-83%
- C+=77%-80%
- C=73%-77%
- C-=70%-73%
- D+=67%-70%
- D=63%-67%
- D-=60%-63%
- F=<60%

LAB POLICY:

You must pass each of your competencies in lab to pass the course. The competencies are pass/fail and will be observed at the beginning of the next lab session.

ATTENDANCE POLICY:

We expect each student to be present and on time to class and laboratory sessions. You must make up all missed work. Unexcused missed tests will not be made up unless permission was obtained by the instructor.

ACADEMIC HONESTY:

All academic work must meet the standards contained in “A Culture of Honesty.” Students are responsible for informing themselves about those standards before performing any academic work. The University of Georgia and the Athletic Training program seeks to promote and ensure academic honesty and personal integrity among students and members of the university community. Academic honesty means performing all academic work without lying, cheating, tampering, stealing or receiving assistance from any other person or using any source of information that is not common knowledge. You should read and become familiar with A Culture of Honesty publication, which defines the policies, procedures and sanctions for academic honesty. Your instructors will strictly enforce these procedures.

Class Project

The purpose of the class project is for you to research and develop a rehabilitation program for common surgical procedures seen in athletic and active populations. More specifically, the learning objectives of this project are:

1. The student will be able to design a rehabilitation program from prehabilitation to return to play (RTP) following a major surgical procedure.
2. The student will be able to identify the correct surgical procedures for a specific injury or pathology.
3. The student will be able to describe the correct medications prescribed by a MD for the surgical procedures for pre, during and post operation.
4. The student will be able to describe and identify all pertinent anatomical and biomechanical considerations following the surgical procedures that would impact the rehabilitation program.
5. The student will be able to discuss tissue healing properties associated with the surgical procedures and the related consideration for the rehabilitation program.
6. The student will be able to identify functional rehabilitation exercises for the surgical procedures.
7. The student will be able to describe the criterion for clearance for full unrestricted participation.
8. The student will be able to describe common problems or set-backs that would typically occur from a surgical procedure.

Class Project Cases

1. Lateral ankle reconstruction with calcaneal osteotomy
2. ACL, MCL, lateral meniscus repair
3. Small rotator cuff tear, bony Bankhart lesion and anterior labral tear
4. UCL reconstruction with ulnar nerve transplant and radial head osteotomy
5. Lumbar microdissectomy and fusion

Project Requirements

1. Each group will prepare a 30-35 minute PowerPoint presentation using the following outline:
 - a) description of the patient (age, sex, previous HX, etc)
 - b) description of the injury (MOI), structural damage, clinical signs and symptoms, diagnostic tests
 - c) description of the surgical procedure
 - d) pre-operative and post operative rehabilitation program using evidenced based medicine and sound biomechanical principles to include:
 - i. goals for each stage of the rehabilitation program
 - ii. rehabilitation exercises used for each stage
 - iii. criterion for advancement to next stage of the rehabilitation program
 - e) end stage functional rehabilitation activities specific to the sport or activity **BONUS POINTS** – You will given bonus points if you develop a new and innovative rehabilitation activity
 - f) criteria to be cleared for full unrestricted RTP
2. Each member of the class must submit 2 written questions on the class day prior to the presentation.

Therapeutics II Course Outline

Proposed Class Schedule:

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Week	Monday	Wednesday	Friday	Lab
Aug. 14-18		Introduction to Course	Principles of Electrical Stimulation S-5	Introduction to Electrical Modalities
Aug. 21-25	Principles of Electrical Stimulation	Principles of Electrical Stimulation	Principles of Electrical Stimulation	IFC, HVPS, Russian
Aug. 28-Sept. 1	Concepts of Strength Development	TEST 1	Core Stability – Basic Concepts	Core Stability Exercises
Sept. 4-8		Core Stability	Shoulder Rehab H-17	Shoulder rehab and Iontophoresis
Sept. 11-15	Shoulder	Shoulder	Shoulder	Shoulder rehab and Iontophoresis
Sept. 18-22	Shoulder	Class Presentation	TEST 2	Isokinetics
Sept. 25-29	Knee Rehab H-21	Knee Rehab	Knee Rehab	Knee rehab, Russian current & CPM
Oct. 2-6	Knee Rehab	Knee Rehab	Knee Rehab	Knee rehab, Russian current & CPM
Oct. 9-13	Class Presentation	TEST 3	Foot rehab H-20	Foot/Ankle Rehab
Oct. 16-20	Ankle rehab H-20	Ankle rehab	Ankle rehab	Hip/Thigh Rehab
Oct. 23-27	Lower leg rehab	Hip/Thigh H-21-22		

Oct. 30- Nov. 3	Hip/Thigh	Class Presentation	TEST 4	Elbow Rehab
Nov. 6- 10	Elbow H-18	Elbow	Hand/Wrist/Finger H-19	Hand/Wrist/Finger
Nov. 13- 17	Hand/Wrist/Finger	Class Presentation		Spine rehab, massage, traction (manual and mechanical)
Nov. 20- 24	Spine H-16			
Nov. 27- Dec. 1	Spine	Spine	Spine	Spine rehab, massage, traction (manual and mechanical)
Dec. 4-8	Class Presentation	Ultraviolet Modalities		

S=Starkey, H=Houglum

FINAL EXAMINATION, MONDAY DEC 11, 12-3 PM