

ROWAN UNIVERSITY CURRICULUM PROPOSAL

PROPOSAL TITLE: PATHOLOGY AND EVALUATION OF ATHLETIC INJURIES II

CHECK APPROPRIATE: UNDERGRADUATE GRADUATE 4 SEMESTER HOURS

SPONSOR(S): Marsha L. Grant Ford, James Burd, Department of Health and Exercise Science

DEPARTMENT/TELEPHONE # HES Department X4785, Grant Ford X3767, Burd X4783

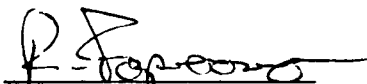
CHECK ONE: COURSE MINOR PROGRAM CONCENTRATION SPECIALIZATION

ACHIEVEMENT CERTIFICATE CERTIFICATION PROGRAM MAJOR PROGRAM

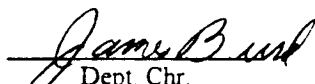
Step #1 (Department)

10/23/97 Approved (Date)

Not Approved (Date)


Dept. Curriculum Chr.

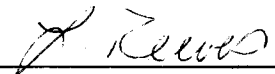
10/23/97
Reviewed (Date)


Dept Chr.

Step #2 (Receipt)

SCC# 97-98-

10/23/97
Date Received Senate


Senate Curriculum Chr.

Step #3 (School)

Reviewed Date: 11/3

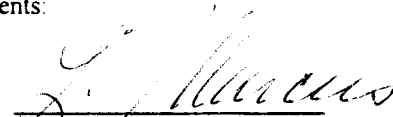
Recommend to Approved

Recommend NOT to Approve

Forward for Open Hearing:

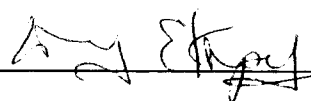
WITHOUT Reservations

WITH Reservations:
Comments:


School Committee Chr.

Step #4 (Academic Dean): Recommended NOT Recommended Conditionally Recommended (See Comments)

Comments:

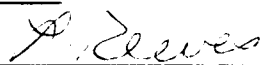
Dean Signature/Date  3/1/98

Step #5 (Senate Curriculum Committee): Open Hearing Date: 3/23/98 Approved by Curriculum Committee Date 3/23/98

Returned to Sponsor(s) for the following reason:

Step #6 (Senate) Date announced/voted on at Senate 4/25/98 If voted on: Approved NOT Approved

Be forwarded to Executive Vice President/Provost _____

Senate Curriculum Committee chair Signature/Date:  5/8/98

Step #7 (Executive Vice President/Provost): Date Received _____

Approved

NOT Approved If no, reasons are as follows:

Student Credit Hours _____

Faculty Load Hours _____

Equalized Credit Hours _____

Official Copy & Approval Sheet Filed (Date) 5/26/98

Executive Vice President/Provost Signature C. M. Hester

Registrar

Date Approved Course Description Received 5/27/98

Regis Taxonomy and Course Number Assigned 0835-220

Date Signature of Registrar Robert C. Kubat 5/28/98

Notification Forward:

Senate Curriculum Committee Chairperson

Department Chairperson(s)

Academic Dean(s)

Registrar

Sponsor(s)

COURSE PROPOSAL

1. Details

- a. Course Title
Pathology and Evaluation of Athletic Injuries II
- b. Sponsors: Marsha L. Grant Ford, MED, ATC
James Burd, Department Chair
Department of Health and Exercise Science
- c. 4 S.H.
- d. Course Level: Undergraduate (sophomore level)
- e. Prerequisites: Pathology and Evaluation of Athletic Injuries I
- f. Implementation: Spring Semester 1999
- g. Curricular Effect: Athletic Training Specialization Requirement. This course replaces Advanced Techniques in Athletic Injuries (0835.415) and Physical Assessment of Athletic injuries (0835.416). There is no other effect on departmental offerings.
- h. Resource Requirements: Faculty must be a NATA certified athletic trainer with a master's degree and at least one year of full time experience as a NATA certifies athletic trainer. Current full time staff is adequate. Present facilities are adequate.
- i. Library resources:
It is recommended that the following resources be added to complement current holdings.

Cailliet, R.
Neck and Arm Pain
F.A.Davis ISBN 0803616104

Torg, J.
Athletic Injuries to the Head, Neck and Face
Lea and Febiger ISBN 0815188463

Hartley, Anne
Joint Assessment: A Sports Medicine Manual
Mosby ISBN 0815142099

It is recommended that the following periodicals be added to compliment current holdings.

International Journal of Sports Medicine
Thieme-Stralton, Inc., New York ISSN 0172-4622

Physical Medicine and Rehabilitation Clinics
W.B. Saunders Co. ISSN 1047-9651

Clinics in Sports Medicine
W.B. Saunders Co.

ISSN 0278-5919

j. Required Materials:

Starkey, Chad and Ryan, Jeff
#Evaluation of Orthopedic and Athletic Injuries
F.A. Davis ISBN 0803600488

Magee, David
#Orthopedic Physical Assessment
W.B. Saunders Company ISBN 0721643442

Hoppenfeld, Stanley
#Physical Examination of the Spine and Extremities
Appleton-Century-Crofts ISBN 0838578535

Norcken, C.C. and White, D.J
#Measurement of Joint Motion: A Guide to Goniometry
F.A. Davis ISBN 0803665792

Previously purchased for Part I of this course

Gallaspy, James and May, J. Douglas
Signs and Symptoms of Athletic Injuries
Mosby ISBN 0815140398

Damjanov, Ivan
Pathology for the Health Related Professions
W.B. Saunders Co. ISBN 0721664695

Kendall, F. and McCreary, E.
Muscles Testing and Function
Williams and Wilkens ISBN 068304575X

2. **Rationale:**

Entry level information pertaining to the profession of athletic training is required for CAAHEP accreditation. Instructional emphasis will be placed on specific NATA competencies. The core of this course is two former courses, Advanced Techniques in Athletic Training (0835.415) 3 S.H. , and Physical Assessment of Athletic Injuries (0835.416) 3 S.H.. The name change more accurately reflects the content of the course. The combining of the two entities will benefit students by introducing and combining pathology and evaluation of the upper and lower extremities respectively, in the same semester. The separation into two courses to emphasizes all competencies and more thoroughly provides students with the requirements necessary for effective functioning as an entry-level certified athletic trainer.

3. **Essence of the Course:**

- a. Objectives: NATA competencies in athletic training will be addressed. By the completion of the course

(Cognitive) The student will be able to identify:

1. Normal anatomical structures of the human body including the musculoskeletal (including articulations), nervous (central and peripheral), cardiovascular, respiratory, digestive, urogenital, and special sensory systems.
2. Common injuries* to each major body part as indicated by contemporary epidemiological studies of injuries in various sports.
3. Characteristic pathology of all common closed soft tissue injuries* (sprains, strains, contusions, dislocations, etc.), open wounds (abrasions, lacerations, incisions, punctures, etc.), and fractures.
4. Common etiological factors contributing to injury including congenital and/or acquired structural and functional abnormalities, inherent anatomical and biomechanical characteristics, common mechanisms and adverse conditions.
5. Relationships between etiological factors and resulting injury/ illness* pathologies.
6. Relationships between typical symptoms and clinical signs and injury/illness* pathologies.
7. Commonly accepted techniques and procedures for clinical evaluation of common athletic injuries/ illnesses* including (a) history, (b) inspection, (c) palpation, (d) functional testing (range-of-motion testing), ligamentous/ capsular stress testing, manual muscle testing, sensory and motor neurological testing, etc.), and (e) special evaluation techniques.

(Psychomotor) The student will be able to demonstrate:

1. Construction and phrasing of questions appropriate to obtaining a medical history of an injured/ ill* athlete including a past history and a history of the present injury/ illness.
2. Identification of observable clinical signs typically associated with common athletic injuries/ illnesses* including structural deformities, edema, discoloration, etc.
3. Location and palpation of "key" anatomical structure commonly involved in injury* pathology including bony landmarks, ligamentous/ capsular tissues, musculotendinous structures, abdominal regions, etc.
4. Administration of active and passive range-of-motion tests for all major joints of the body including the

use of goniometric measurements.

5. Use of manual muscle testing techniques including application of the principles of muscle/ muscle group isolation, segmental stabilization, resistance/ pressure, grading, etc.

6. Administration of appropriate clinical laxity (stress) tests for ligamentous/ capsular instability including application of joint positioning, segmental stabilization, pressure, etc.

7. Administration of appropriate sensory and neurological tests for intracranial injuries (conscious and unconscious athlete), and injuries to the spinal cord, nerve root, plexuses, and peripheral nerves.

8. Administration of commonly used "special tests" for evaluation of athletic injuries* to various anatomical area (Thompson test, apprehension test, etc.).

9. Incorporation of appropriate examination techniques and procedures into an effective, systematic scheme of clinical evaluation.

(Affective) The student will demonstrate an understanding of:

1. Acceptance of the professional, ethical, and legal parameter which define the proper role of the certified athletic trainer in the evaluation of athletic injuries/ illnesses* and medical referral.

2. Recognition of the initial clinical evaluation by the certified athletic trainer as an assessment and screening procedure rather than a "diagnostic" procedure.

3. Appreciation of the practical importance of thoroughness in the initial clinical evaluation of the athlete's injury/ illness*.

**Injury/ illness competencies established by CAAHEP include:

1. General Musculoskeletal Disorders/ Inflammatory Conditions

arthritis, apophysitis, bursitis, chondral fracture, chondromalacia, contusion, dislocation, enthesitis, epicondylitis, epiphyseal plate injury, epiphysitis, exostosis, fasciitis, fibrositis, fracture, lymphangitis, myositis, myositis ossificans, neuritis, osteochondral fracture, osteochondritis, osteochondritis dissecans, osteomyelitis, periostitis, radiculitis,, sprain, strain, subluxation, tendinitis, tenosynovitis

2. Shoulder/ Upper Arm

blocker's exostosis, bursitis (subdeltoid etc.), dislocation of the long head of the biceps, dislocation/ subluxation (glenohumeral), epiphyseal plate injury (proximal humerus), fracture (humerus, radius, ulna), nerve injury (axillary, radial, etc.), rotator cuff strain, sprain (sternoclavicular, acromioclavicular, glenohumeral), rupture of the long head of the

biceps, tenosynovitis (long head of the biceps, etc.)

3. Elbow

bursitis (olecranon, etc.), dislocation/subluxation (elbow, radioulnar), epicondylitis, epiphyseal plate injury (distal humerus, proximal radius, proximal ulna), fracture (humerus, radius, ulna), nerve injury (radial, median, ulnar), osteochondritis dissecans, sprain, supracondylar fracture, ulnar nerve contusion

4. Forearm/Wrist/Hand

Barton fracture, baseball finger, Bennett fracture, boutonniere deformity, boxer's fracture, carpal tunnel syndrome, Colles' fracture, dislocation (wrist, lunate, IP, etc.), epiphyseal plate injury (distal ulna, phalanges, etc.), felon, fracture (radius, ulna, carpals, metacarpals, phalanges), ganglion, navicular fracture, paronychia, profundus tendon rupture, Smith's fracture, subungual hematoma, sprain (wrist, IP, etc.), Volkmann's ischemic contracture

5. Head/Face

orbital blowout fracture, cauliflower ear, concussion, conjunctivitis, corneal abrasion, corneal laceration, dental caries, detached retina, deviated septum, epistaxis, fractures (nose, maxilla, mandible, etc.), gingivitis, keratitis, impacted cerumen, intracranial hematoma (epidural, subdural, subarachnoid, intracranial), otitis, externa, otitis media, pericorinitis, periodontitis, periorbital contusion, post concussion syndrome, skull fracture, styte, temporomandibular dislocation, temporomandibular dysfunction, tooth abscess, tooth extrusion, tooth fracture, tooth intrusion, tooth luxation

6. Spinal Column

brachial plexus stretch, dislocation/subluxation (vertebrae), fracture (vertebrae), intervertebral disc rupture/herniation, nerve root compression, spinal cord injury (concussion, contusion, transection), spondylitis, spondylosis, spondylolysis, spondylolisthesis, sprain (intervertebral, lumbosacral), strain

7. Thorax/Abdomen/Urogenital Organs

celiac plexus syndrome, contusion (ribs, sternum, etc.), costochondral fracture, chondrosternal sprain, costovertebral sprain, fracture (rib, sternum), hemorrhoids, hernia, hydrocele, kidney injury (contusion, laceration), liver (contusion, laceration), spleen injury (contusion, laceration), peritonitis, pneumothorax, testicle contusion, ulcer, varicocele

8. Common Illnesses

AIDS, amenorrhea, anorexia, appendicitis, asthma, bulimia, bronchitis, chickenpox, chlamydia, coccidioidomycosis, colitis, constipation, diabetes, diarrhea, dysmenorrhea, epilepsy, gastritis, gastroenteritis, gonorrhea, hay fever, heat exhaustion, heat stroke, hepatitis, hypertension, hyperventilation, hypothermia, indigestion, infectious mononucleosis, influenza, laryngitis, measles, meningitis, mumps, oligomenorrhea, pancreatitis, pharyngitis, pneumonia, rhinitis, sickle cell anemia, shock, sinusitis, syncope, syphilis, tetanus, tonsillitis, urethritis, vaginitis

b. Topical Outline:

1. Structural, functional and surface anatomy as it relates to human performance and athletic injury of the upper extremity, head, axial spine, chest, thorax and common illnesses.
2. The mechanisms of tissue injury and healing to soft tissue, bone and nerve as it relates to injury and illness to the upper extremity, head, axial skeleton, chest and thorax.
3. The following elements will be thoroughly explored pertaining to injuries to the shoulder/upper arm, elbow, forearm/wrist/ hand, head/face, spinal column, thorax/abdomen/urogenital organs, and common illnesses: pathology, etiology, epidemiology, evaluation (history, inspection, palpation, active/passive/ resisted range of motion, functional tests, neurological testing, stability tests and criteria for return to competition).
4. Current management philosophies for injuries to upper extremity, head, axial skeleton, chest and thorax injury and common illness pathologies.

c. Evaluation and Grading Procedure

1. writing intensive project (ie case study and/or research paper
2. written quizzes
3. written examination
4. practical examination
5. paper patient exercise

d. Course Evaluation

1. student evaluation
2. review by department athletic training education program director
3. review by department curriculum committee

4. Letters of Consultation

This course is not being taught elsewhere on campus, nor does it have an impact on departmental offerings.

Catalog Description

Pathology and Evaluation of Athletic Injuries II

Prerequisites: Pathology and Evaluation of Athletic
Injuries I and Clinical Experience in Athletic
Training I

This course is an examination of the etiology, epidemiology, pathology and assessment of injuries and illnesses to the upper extremity, head, axial skeleton, chest thorax and common illnesses. Structural, functional and surface anatomy will be reviewed. Current management philosophies will be addressed.