

ROWAN UNIVERSITY CURRICULUM PROPOSAL

PROPOSAL TITLE: CLINICAL EXPERIENCE IN ATHLETIC TRAINING IV 1

CHECK APPROPRIATE: UNDERGRADUATE GRADUATE 1 SEMESTER HOURS

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

DEPARTMENT/TELEPHONE # HES Department X 4785, Grant Ford X3767, Burd X4783

CHECK ONE: COURSE MINOR PROGRAM CONCENTRATION SPECIALIZATION

ACHIEVEMENT CERTIFICATE CERTIFICATION PROGRAM MAJOR PROGRAM

Step #1 (Department)	Step #2 (Receipt)	Step #3 (School)
<p>10/23/97 <input checked="" type="checkbox"/> Approved (Date) <input type="checkbox"/> Not Approved (Date)</p> <p style="text-align: center;"><u>R. F. Foye</u> Dept. Curriculum Chr.</p> <p style="text-align: center;">10/23/97 Reviewed (Date)</p> <p style="text-align: center;"><u>James Burd</u> Dept Chr.</p>	<p style="text-align: center;">SCC# <u>97-98-104</u></p> <p style="text-align: center;">_____ Date Received Senate</p> <p style="text-align: center;"><u>A. Reeves</u> Senate Curriculum Chr.</p>	<p style="text-align: center;">Reviewed Date: <u>11/3</u></p> <p><input checked="" type="checkbox"/> Recommend to Approved <input type="checkbox"/> Recommend NOT to Approve</p> <p>Forward for Open Hearing: <input type="checkbox"/> WITHOUT Reservations <input type="checkbox"/> WITH Reservations:</p> <p>Comments: <u>J. Williams</u> School Committee Chr.</p>

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

Comments:

Dean Signature/Date: [Signature] 3/2/98

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: 5/8/98 If voted on: Approved NOT Approved

Date forwarded to Executive Vice President/Provost: _____

Senate Curriculum Committee chair Signature/Date: A. Reeves 5/8/98

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

Approved

MAY 2 1998

NOT Approved If no, reasons are as follows:

Student Credit Hours _____

Faculty Load Hours _____

Equalized Credit Hours _____

Official Copy & Approval Sheet Filed (Date) 5/24/98

Executive Vice President/Provost Signature C. A. Patton

Registrar

Date Approved Course Description Received 5/27/98

Hegis Taxonomy and Course Number Assigned CE335-341

Date/Signature of Registrar Robert A. Kulat 5/28/98

Notification Forward:

_____ Senate Curriculum Committee Chairperson

_____ Department Chairperson

_____ Academic Dean(s)

_____ Registrar

_____ Sponsor(s)

COURSE PROPOSAL

1. Details

- a. Course Title
Clinical Experience in Athletic Training IV
- b. Sponsors: Marsha L. Grant Ford, MEd, ATC
James Burd, Department Chair
Department of Health and Exercise Science
- c. 1 S.H.
- d. Course Level: Undergraduate (senior level)
- e. Prerequisites: Clinical Experience in Athletic Training III
- f. Implementation: Spring Semester 1999
- g. Curricular Effect: This athletic training specialization requirement has no 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 certified athletic trainer. Present facilities are adequate.
- i. Library resources:

It is recommended that the following resources be added to complement current holdings.

Crenshaw
Campbell's Operative Orthopedics
Mosby Year Book, 1992 ISBN 080161096

Perrin, Dave
Isokinetic Exercise and Assessment
Human Kinetics, Publishers ISBN 0873224647

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

Archives of Physical Medicine and Rehabilitation

j. Required Materials:

Sullivan, J. Andy and Grana, William, Editors
The Pediatric Athlete ISBN 089203033

2. **Rationale:**

Entry level information pertaining to the profession of athletic training is required for CAAHEP accreditation. The weekly instructional emphasis will be placed on specific NATA competencies. The senior student athletic trainer student will complete 250 hours of clinical work in Rowan's athletic training facility or one of the affiliated settings under the supervision of a NATA certified athletic trainer as assigned by the director of athletic training education.

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. Purposes of standard physical fitness tests and contemporary testing equipment and accepted testing protocol for measurement of cardiovascular-respiratory fitness, body composition, posture, flexibility and muscular strength, power, and endurance.
2. Role of personal health habits in the prevention of injuries/ illnesses including personal hygiene, diet, and nutrition, weight control, rest, etc.
3. Purposes and effects of contemporary isometric, isotonic, and isokinetic strength training equipment.
4. Techniques and physiological effects of cardiovascular endurance training and weight training (isometric, isotonic, isokinetic and accommodating resistive exercise) on the musculoskeletal, nervous, cardiovascular and respiratory systems of the human body.
5. Safety precautions, contraindications, and hazards associated with the use of various strength training equipment, conditioning methods, and exercise routines.
6. Principles of an effective heat illness prevention program including those pertaining to acclimatization and conditioning, fluid and electrolyte replacement, selection of clothing, monitoring weight loss, and scheduling and organization of practice sessions
6. Principles of energy absorption and force dissipation as applied to the protective capabilities of commercial padding materials and various types and models of standard protective equipment.

7. Comparative qualities of various types of protective sports equipment, clothing, and commercial padding materials with regard to their affect on body heat dissipation.
8. Legal concepts and considerations associated with the purchase, fitting, and maintenance of protective sports equipment including those pertaining to product liability, personal liability, shared responsibility, etc.
9. Rules and regulations pertaining to the use of special protective equipment braces, splints, etc. as established by governing athletic associations.
10. Operation and instruction in the use of commercial isometric, isotonic, and isokinetic weight training equipment.
11. Selection and fitting of standard protective equipment and clothing consistent with the physical characteristics and needs of individual athletes and the demands of participation in specific sports activities.
12. Selection, fabrication, and application of appropriate preventive taping and wrappings, splints, braces, and other special protective devices consistent with sound anatomical and biomechanical principles.
13. Legal, moral and ethical parameters which define the scope of first aid and emergency care and identify the proper role of the certified athletic trainer.
14. Typical administrative policies and procedures governing first aid and emergency care including those pertaining to parental consent, notification of parents, accident reports and record keeping.
15. Availability, purposes, and maintenance of contemporary first aid and emergency care equipment and supplies and commonly recommended contents of emergency care field kits.
16. Role and function of various medical/ paramedical specialists and their respective areas of expertise in the definitive treatment of sports related injuries/ illnesses.
17. Medical- legal and ethical protocol governing the referral of injured/ ill athletes for medical services.
18. Standard nomenclature of athletic injuries and communication of identified clinical signs and symptoms to medical personnel using commonly accepted medical terminology.
19. Physical/ physiological parameters to be evaluated as a basis for development of individualized rehabilitation programs (muscular strength/ endurance, range of motion, etc.).
20. Commonly used techniques of primary and reconstructive surgery, associated anatomical and/or biomechanical alterations, and resulting implications for selection and use of therapeutic modalities and rehabilitation exercises.

21. Role and function of commonly used prescription and non-prescription pharmacological agents in the medical treatment of common athletic injuries/ illnesses.
22. Basic components of a comprehensive plan for physical examination and screening of athletes for competition including (a) medical history, (b) the physical examination, and (c) medical authorization for participation.
23. Typical organizational plans for conducting individual and group physical examinations, their comparative advantages and disadvantages, and the respective roles of various medical and paramedical personnel in each.
24. Basic components of an effective physical examination including commonly recommended health factors to be evaluated and potentially disqualifying conditions.
25. Ethical and legal considerations associated with the conduction of physical examinations as related to confidentiality of medical information, medical authorization for participation, record keeping, etc.
26. Basic records and forms (medical history, physical examination, medical authorization, etc.) and filing systems pertinent to conduction of athletic physical examinations.
27. Basic records and forms pertaining to the management of athletic injuries including those used for (a) securing emergency care information and parental consent, (b) accident reporting, (c) medical referral, (d) documentation of treatment, (e) recording of rehabilitation progress, and (f) release of medical information.
28. Computer operation as related to data collection, record keeping, and data analysis.
29. Purposes and functions of exercise equipment, therapeutic modalities and other equipment and supplies essential to equipping and athletic training room.
30. Role of coaches and athletes in reducing injury/ illness risks including those related to physical conditioning, acclimatization, fluid and electrolyte replacement, care and maintenance of protective equipment, organization of practice sessions, coaching methods, etc.
31. General principles of health maintenance and personal hygiene pertaining to skin care, dental hygiene, environmental sanitation, immunizations, avoidance of infectious and contagious diseases, diet, rest, exercise, weight control, etc.
32. The role and function of various community based medical/ paramedical specialists (orthopedists, neurologists, internists, etc.) and other health care providers (psychologists, counselors, social workers, etc.).

33. Accepted protocol governing the referral of athletes for medical, personal health, psychological, or social services.
34. Contemporary issues and problems confronting athletic training/ sports medicine and their affect on athletic health care in the United States.
35. Tasks required for entry -level proficiency of athletic trainers within the six major domains of the NATA Role Delineation Study.
36. Theories and techniques of interpersonal communication among athletic trainers, athletes, administrators, coaches, health care professionals, parents, and others.
37. Intrinsic risk factors associated with normal physical and psychological growth and developmental patterns of the pre-adolescent, adolescent, and adult male and female athlete.
38. Role of personal health habits in the prevention of injuries/ illnesses including personal hygiene, diet, and nutrition, weight control, rest, etc.
39. Principles of nutrition including the role of vitamins, minerals, and fluids and electrolytes as related to the dietary and nutritional needs of the competitive athlete.
40. Prevailing misconceptions regarding the proper utilization of foodstuffs as related to common food fads and fallacies, dietary supplements, and weight control diets.
41. The physiological effects, comparative benefits, and contraindications to the use of ergogenic aids (drugs, foodstuffs, physical agents, etc.).

(Psychomotor) The student will be able to demonstrate:

1. Operation of contemporary isokinetic, isotonic, and isometric strength testing devices.
2. Operation and instruction in the use of commercial isometric, isotonic, and isokinetic weight training equipment.
3. 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.
4. Identification of observable clinical signs typically associated with common athletic injuries/ illnesses including structural deformities, edema, discoloration, etc.
5. Location and palpation of "key" anatomical structures commonly involved in injury pathology including bony landmarks, ligamentous/ capsular tissues, musculotendinous structures, abdominal regions.

6. Administration of active and passive range of motion tests for all major joints of the body including the use of goniometric measurements.
7. Use of manual muscle testing techniques including application of the principles of muscle/muscle group isolation, segmental stabilization, resistance/pressure, grading, etc.
8. Administration of appropriate sensory and motor neurological tests for intracranial injuries to the spinal cord, nerve roots, plexuses, and peripheral nerves.
9. Administration of commonly used "special tests" for evaluation of athletic injuries to various anatomical areas (Thompson test, apprehension test, etc.).
10. Incorporation of appropriate examination techniques and procedures into an effective, systematic scheme of clinical evaluation.
11. Control of external bleeding including application of direct pressure, arterial pressure, and application of dressings and bandages.
12. Application of aseptic techniques in the management of open wounds (sterilization procedures, wound cleansing/debridement, dressing and bandaging, etc.).
13. Use of manual muscle testing techniques including application of the principles of muscle/ muscle group isolation, segmental stabilization, resistance/pressure, grading, etc.
14. Measurement and recording of muscular strength, endurance, and power through the use of contemporary isometric, isotonic, and isokinetic testing devices.
15. Measurement of range of motion for all major joints of the body through the use of a goniometer and other commonly used techniques.
16. Measurement and fitting of ambulation aids and instruction in the use of common crutch/ cane gaits.
17. Application of passive, active, active assisted, and resistive exercise through the use of manual exercise and contemporary commercial exercise equipment.
18. Application of proprioceptive neuromuscular facilitation (PNF) techniques for development of muscular strength/ endurance, muscle stretching, and improved range of motion.
20. Clinical application of contemporary therapeutic modalities including patient preparation, set-up, determination of dosage, and operational procedures.
21. Operation of contemporary isokinetic, isotonic, and isometric strength testing devices.
22. Administration of static and dynamic postural evaluation and screening procedures including functional testing for muscle shortening.
23. Application of passive and resistive underwater/ pool exercise for the improvement of joint range of motion, muscular strength, etc.

(Affective) The student will demonstrate an understanding of:

1. Acceptance of the moral and ethical responsibility to conduct safe athletic programs and to minimize injury/ illness risk factors to the fullest extent possible.
2. Appreciation of the importance of developing and implementing a thorough, comprehensive injury/ illness prevention program.
3. Appreciation of the need for the cooperation among administrators, coaches, athletic trainers, parents, and athletes in the implementation of effective injury/ illness prevention programs.
4. Acceptance of the professional, ethical, and legal parameters which define the proper role of the certified athletic trainer in the evaluation of athletic injuries/ illnesses and medical referral.
5. Recognition of the initial clinical evaluation by the certified athletic trainer as an assessment and screening procedure rather than a "diagnostic" procedure.
6. Appreciation of the practical importance of thoroughness in the initial clinical evaluation of the athlete's injury/ illness.
7. Respect for the injured athlete as an individual deserving of quality professional health care.
8. Acceptance of the injured athlete's physical complaint(s) without personal bias or prejudice.
9. Acceptance of the professional, ethical, and legal parameter which define the proper role of the certified athletic trainer in the first aid and emergency care of athletic injuries/ illnesses.
10. Appreciation of the importance of developing a thorough comprehensive athletic injury emergency care plan and the need for continual review and practice of emergency care procedures.
11. Realization of the injured athlete's emotional, and psychological dependence on the certified athletic trainer as an initial health care provider.
12. Acceptance of the professional, ethical, and legal parameters which define the proper role of the certified athletic trainer in the treatment and rehabilitation of injured athletes including the use of drugs and therapeutic agents.
13. Acceptance of the moral and ethical obligation to provide for rehabilitation of the injured athlete to the fullest extent possible.
14. Respect for the proper role of attending physicians and other medical and paramedical personnel in the treatment and rehabilitation.

15. Respect for accepted medical/ paramedical protocol involving confidentiality of medical information, medical/ therapeutic prescriptions, and health care referral as related to the rehabilitation process.
16. Acceptance of the responsibility for completion of paperwork and maintenance of records associated with the administration of athletic training programs.
17. Respect for the roles of medical personnel, administrators, and other staff members in the organization and administration of athletic training programs and recognition of the need for cooperation among involved personnel.
18. Acceptance of the professional, ethical and legal parameter which define the proper role of the certified athletic trainer in providing health care information and counseling.
18. Acceptance of the responsibility to provide health care information and counseling consistent with the certified athletic trainer's professional training and expertise.
19. Recognition of the athletic trainer's role as a liaison among athletes, coaches, health care professionals, parents, and other involved individuals.
20. Acceptance of the responsibility to interpret and promote athletic training as a professional discipline among allied professional groups and the general public.
21. Acceptance of the professional responsibility to remain abreast of current theory and practice in athletic training and sports medicine.
22. Acceptance of the responsibility to enhance the professional growth of athletic training students, colleagues, and peers through a continual sharing of knowledge and skills.

b. Topical Outline:

The student will complete 250 clinical hours under the supervision of a NATA certified athletic trainer as assigned by the director of athletic training education. The student will complete specific competencies in the weekly classroom session and will be expected to demonstrate the development of critical thinking skills.

1. Contemporary issues and problems in athletic training
2. Technology in athletic training
3. Competency in the operation, use, measurement and recording of data in contemporary isotonic, isokinetic, and strength testing and weight training devices.

4. Dietary needs of the competitive athlete.
 - food fads and fallacies
 - dietary supplements
 - ergogenic aids
5. General health maintenance
6. Aquatic exercise
7. Surgery observation and commonly used techniques of primary and reconstructive surgery
8. The interviewee and mock exercises
9. Athletic training research
10. Ethical dilemmas in athletic training
11. The pre-adolescent and adolescent athlete
 - development
 - intrinsic risk factors
 - common injury/ illness pathology and recognition
 - contemporary epidemiology studies
 - congenital and acquired structural and functional abnormalities

c. Evaluation and Grading Procedure

1. writing intensive exercises based on contemporary problems presented in LISTSERV and paper patient dilemmas based on course material
2. practical competency examination (isokinetic, isometric, isotonic equipment)
3. written examination
4. research paper and oral presentation
 - *students will be encouraged to integrate media into the presentation
5. clinical evaluation

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 other departmental offerings.

Catalog Description

Clinical Experience in Athletic Training IV

Prerequisites: Clinical Experience in Athletic Training III

This clinical experience is designed for the senior student athletic trainer who will complete 250 clinical hours in Rowan's athletic training facility or in an affiliated setting under the supervision of a NATA certified athletic trainer as assigned by the director of athletic training education. The student will attend a weekly classroom session which will address the development of critical thinking skills.