PROPOSAL TITLE: CLINICAL EXPERIENCE IN ATHLETIC TRAINING III

CHECK APPROPRIATE: X UNDERGRADUATE ___ GRADUATE ___ 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: X COURSE ___ MINOR PROGRAM ___ CONCENTRATION ___ SPECIALIZATION ___ ACHIEVEMENT CERTIFICATE ___ CERTIFICATION PROGRAM ___ MAJOR PROGRAM

Step #1 (Department)

0/23/97 Approved (Date)

R. Curpless
Dept. Curriculum Chr.

10/23/97 Reviewed (Date)

J. Burd
Dept. Chr.

Step #2 (Receipt)

SCC #97-98-

Date Received Senate

Step #3 (School)

Reviewed Date: 11/3

Recommend to Approved

Recommend NOT to Approve

Forward for Open Hearing:

___ WITHOUT Reservations

___ WITH Reservations

Comments:

S. Curpless
School Curriculum Chr

Step #4 (Academic Dean): 
Recommendation: 

Recommended: ___ NOT Recommended: ___ Conditionally Recommended: ___ (See Comments)

Comments:

Dean Signature/Date:

Step #5 (Senate Curriculum Committee)

Open Hearing Date: 3-17-98

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: 3-23-98

If voted on: ___ Approved ___ NOT Approved

Date forwarded to Executive Vice President/Provost:

Senate Curriculum Committee chair Signature/Date: B. Reeves 5/5/98
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) 5/28/98

Executive Vice President/Provost Signature __________________________

Registrar

Date Approved Course Description Received 5/27/98

High’s Taxonomy and Course Number Accepted 0835 - 340

Dean of Curriculum - Robert A. Lubat 5/28/98

Notification Forward:

Senate Curriculum Committee Chair

Department Chairs

Academic Dean(s)

Registrar

Sponsor(s)
COURSE PROPOSAL

1. Details
   a. Course Title
      Clinical Experience in Athletic Training III
   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 II
   f. Implementation: Fall Semester 1998
   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.

      Agostini, Rosemary
      Medical and Orthopedic Issues of Active and Athletic
      Women
      Hanley and Belfus, Publishers/ Mosby ISBN 1560530197

      Thompson, Ron and Sherman Roberta
      Helping Athletes with Eating Disorders

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

      Journal of Orthopedic Research
j. Required Materials:

Pearl, Arthur, Editor
The Athletic Female
ISBN 0873224108

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 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. Risk factors associated with congenital or acquired postural abnormalities, physical disabilities, and diseases (i.e., epilepsy, diabetes, asthma, congenital heart disease, absence of paired organs, visual impairments, etc.).
38. Normal thermoregulatory mechanisms of the human body including methods of heat dissipation and the associated effects of exposure to high environmental heat and humidity.
39. Recommendations, guidelines and policy statements published by professional organizations regarding athletic participation during extreme weather conditions. (AAFP, AAP, AOSSM, ACSM, etc.).
40. Basic components of in-season and off-season physical conditioning programs for the development of cardiovascular-respiratory efficiency, flexibility and muscular strength, power, and endurance specific to the needs of individual athletes and to the physical demands of specific sport activities.
41. Collection and interpretation of climatic data (temperature, humidity) through the use of appropriate instruments (sling psychrometer, WGBT Index, etc.).
42. Current banned drug lists published by various governing athletic associations (NCAA, USOC, etc.).
43. Physiological effects of physical activity on menstruation (oligomenorrhea, amenorrhea, dysmenorrhea) and associated psychological conditions.
44. Symptoms and clinical signs of common eating disorders (anorexia, bulimia).

(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.
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.
19. Collection and interpretation of climatic data (temperature, humidity) through the use of appropriate instruments (sling psychrometer, WGBT Index, etc.).
20. Clinical application of contemporary therapeutic modalities including patient preparation, set-up, determination of dosage, and operational procedures.

(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 and attend a weekly seminar. The student will complete specific competencies and will be expected to demonstrate development of critical thinking skill.

1. Contemporary issues and problems in athletic training
2. Athletes at risk (postural, congenital, disease)
3. Thermoregulatory mechanisms, prevention of heat illness, acclimatization
4. Competency in collection and interpretation of climatic data
5. Competency in in-season and off-season conditioning program design
6. Pharmacology and banned substances
7. The athletic female
8. The physically and emotionally challenged athlete
9. Competency in anthropometric measurement and body fat assessment
10. Exploration of educational and employment options
11. Development of the resume and cover letter
12. Introduction to athletic training research

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 examinations
   3. written examination
   4. research paper and oral presentation *students will be encouraged to integrate media into the presentation
   5. clinical evaluation
   6. specific sport conditioning program

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 III

Prerequisites: Clinical Experience in Athletic Training II

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 specific competencies and will be expected to demonstrate the development of critical thinking skills.