

Exercise Science

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Instructor Jennifer Mueller;
Athletic Trainers Brian Azinger, Alyssa Buuck*

Departmental Mission Statement: The Department of Exercise Science develops students' physical, social, personal, and intellectual capacities for application toward lifetime professional activities. The close interaction of faculty and students challenges the development of a rich base of knowledge and skills that are ethically applied in a variety of practical settings.

Communicating Plus - Exercise Science: The student learning goals of the Communicating Plus Program are emphasized across the classroom portion of the exercise science major's curriculum. However, two classes have been designed specifically to begin and conclude the major with emphasis on the Communicating Plus skills areas. All exercise science majors begin their course work with EXS 201 which emphasizes the skills of writing, speaking, critical thinking, and problem solving. Students conclude the major with EXS 500 where they demonstrate their mastery of the exercise science education knowledge base and competence in the Communicating Plus student learning goals through completion of a semester long, faculty directed research project.

Requirements for a major in exercise science - School Based Physical Education Licensure: Thirty-eight credits in the department, including EXS 201, 211, 220, 241, 251, 253, 260, 270, 271, 333, 340, 426, 432, 450, (and 500 if not student teaching). BIO 210 or 211 is a prerequisite for EXS 333 and 432. Courses at the 100 level may be counted toward the major by prior consent from the department chair.

Requirements for a major in exercise science - Community and Recreation Physical Education: Thirty-four credits including: EXS 201, 211, 220, 281, 291, 333, 340, 432, 441, 450, 500; plus six credits from the following: EXS 232, 251, 253, 260, 270, 271, 321, 322, 324, 352. BIO 210 or 211 is a prerequisite for EXS 333 and 432.

Requirements for a major in exercise science - Athletic Training: Forty-one credits including: EXS 201, 211, 232, 333, 361, 362, 412, 432, (2) 441 (2 different practicum courses), 451, 501; BIO 211, 312. In addition, a student majoring in exercise science with an emphasis in athletic training would need to complete 800 hours of clinical work under the direct supervision of a certified trainer. Applicants for the athletic training program should contact Brian Azinger at the Storzer Center.

Requirements for a major in exercise science - Sports Management: Thirty-seven credits including: EXS 201, 220, 281, 421, (2) 441 (2 different practicum courses), 450, 500; ECO 212, plus four courses from the following at least two of which must be from the 300 level or higher: BSA 131, 208, 225, 310, 315, 325, 413; ECO 211, 321.

Requirements for a minor in Health: the following courses are required for a health minor: EXS 221, 231, 232, 342, 344; BIO 210 or 211; plus one of the following (both if getting teaching certification) PSC 110, SOC 110. In addition, one

more course may be chosen from the following: PSC 221, 235, 242; SOC 302. For a teaching minor, one additional course is necessary from the elective group.

The wellness requirement for graduation may be fulfilled by one credit selected from the following courses: EXS 111, 112, 113, and 114. No more than four credits in EXS 111 and 112 may be counted toward graduation. No activity which has been passed may be repeated for credit.

Medical excuses used for exemption must be approved by the department chair. As stated in the Academic Policy section of this catalog, students who participate in two seasons of varsity sports or receive credit for a ROTC course with a physical training component are exempt from the wellness requirement.

Explore curriculum goals for exercise science: exercise science strives to develop skills in physical activities and knowledge of the relationships among lifetime physical activity, physical fitness, and healthy lifestyles. Therefore, courses fulfilling the wellness requirement have the following learning goals:

1. engage in physical activities for lifetime health and recreation;
2. acquire knowledge about physical activities, including rules and regulations, for lifetime health and recreation.

111, 112. Wellness Activities

Staff

One credit each semester.

Activities include badminton, basketball, exercise programs, handball, golf, jogging, racquetball, swimming, tennis, volleyball, weight training, aerobic dance, and line dancing. Development of skill and acquisition of related knowledge are basic objectives in each activity. No activity which has been passed may be repeated for credit. *Grading is Pass-Fail.* Please note that some activities classes require the purchase of equipment at the student's expense.

113, 114. Adapted Physical Education

Staff

One credit each semester.

Restricted and modified activities for students who are physically unable to participate in the regular required program.

201. Communication in Exercise Science

Dinegan

Two credits. Offered fall semester.

Emphasis on the development and improvement of oral and written communication, critical thinking, and problem-solving skills. In addition, time will be spent on technological communication skills and their role in physical education.

211. Athletic Training

Azinger

Three credits. Offered fall semester.

Introduction of sports medicine including the occurrence of injury and the process of healing. Special emphasis will be given to common injuries to the leg, foot, hip, shoulder and head. Assessment and injury evaluation are also included. American Red Cross adult CPR certification is included. Activity fee will be applied to the CPR section of the course.

220. Foundations of Physical Education

Dinegan

Three credits. Offered spring semester.

Survey of the historical, psychological, and sociological bases of modern physical education. Additional emphasis is placed on career and professional opportunities.

- 221. Drugs, Alcohol, and Tobacco** **Astrauskas**
Two credits.
Drugs, alcohol, and tobacco and their impact on the user as well as society as a whole. Emphasis is given to both the immediate as well as long-range effects of these drugs.
- 231. Health and the Consumer** **Astrauskas**
Two credits.
Health services and products and their impact on the consumer. Emphasis is given to medical care, health insurance, quackery, and consumer protection.
- 232. Personal and Community Health Problems** **Astrauskas**
Four credits.
Major health problems in the community; personal hygiene and the means of promoting healthful living.
- 241. Physical Education in the Elementary School** **Dinegan**
Three credits. Offered fall semester.
Emphasis upon perceptual-motor activities, movement education, gymnastics, rhythms and games, and the relationship of each to meaningful curriculum development.
- 251. Fundamental Sports Skills I** **Dinegan**
Two credits. Offered in 2014-15 and alternate years.
Analysis of the basic skill techniques used in basketball, baseball, softball, and track and field. Methods of presenting the various skills and drills for practicing them are included.
- 252. Fundamental Sports Skills II** **Coles**
Two credits.
Analysis of the essential skills used in football and wrestling. Specific teaching techniques and drills are included.
- 253. Rhythms and Dance** **Dinegan**
Two credits. Offered each spring semester.
Consideration of a variety of types of dance including folk, social, modern, and aerobic. Emphasis will be given to theory and technique development.
- 260. Methods and Techniques in Soccer, Badminton, and Tennis** **Dinegan**
Two credits. Offered in 2015-16 and alternate years.
Study of teaching methods, skill techniques, and evaluation procedures for each activity.
- 270. Methods and Techniques in Golf and Volleyball** **Kane/Astrauskas**
Two credits. Offered in 2015-16 and alternate years.
Consideration of the major aspects of both sports from the standpoints of the learner, the teacher, and the coach.
- 271. Fundamental Skills in Gymnastics and Swimming** **Mueller/Wahle**
Two credits. Offered in 2014-15 and alternate years.
Study and application of the skill techniques, teaching methods, and scientific principles related to gymnastics, tumbling, swimming, and diving. One-half of the semester will be devoted to gymnastics and tumbling and one-half to swimming and diving.

281. Exercise Testing and Prescription**Dinegan**

Two credits. Offered in 2014-15 and alternate years.

Introduction to testing for physical fitness and programming. There is additional emphasis on appropriate fitness prescription for exercise and rehabilitation through individual assessment.

285. Selected Court Games**Staff**

Two credits.

Introduction to handball, paddleball, paddle tennis, aerial tennis, and deck tennis. Techniques, drills, and methods of adapting the games to a variety of situations are included.

291. Community Recreation**Mueller**

Two credits.

Theoretical framework for analysis of orderly and consistent planning of community park and recreation services. The course examines techniques used to acquire, develop, and administer park and recreation resources, facilities, and programs.

300. Departmental Studies**Staff**

Two credits.

Special subjects in exercise science not covered by regular courses. This course may be repeated for credit when topics differ. Please see the pertinent Schedule of Courses for the listing of topics courses. *Prerequisite: six hours of credit in exercise science or consent of the instructor.*

315. Advanced Concepts of Personal Training**Astrauskas**

Two Credits. Offered spring semester 2014-15 and alternate years.

The course successfully bridges the gap between exercise theory and practical hands-on instruction. Course subject matter includes: anatomy, physiology, nutrition and weight management, assessment, exercise programming components, working with special populations, and ethics and professional behavior. The course prepares a student to take the National Council on Strength and Fitness certifying examination and also provides students with the skill set for capable job performance in the expanding personal training market. A student could enter the workforce as a qualified and competent nationally certified practitioner after passing the certification exam. *Prerequisite: BIO 210 or 211.*

321. The Coaching of Football and Wrestling**Coles**

Two credits. Offered in 2015-16 and alternate years.

Comparative analysis of offensive and defensive systems in football and expansion of techniques used in counter and combination wrestling. *Prerequisite: EXS 252 or consent of the instructor.*

322. The Coaching of Basketball and Baseball**Staff**

Two credits. Offered in 2015-16 and alternate years.

Critical examination of offensive and defensive strategies and systems as they relate to various coaching situations. *Prerequisite: EXS 251 or consent of the instructor.*

323. The Coaching of Swimming and Track and Field**Staff**

Two credits. Offered in 2015-16 and alternate years.

Specific techniques in the coaching of each sport. Detailed procedures for the development of teams at various levels of competition are included. *Prerequisite: EXS 251 or consent of the instructor.*

- 324. Theories of Coaching** **Coles**
 Two credits. Offered in 2014-15 and alternate years.
 Study of coaching theory including skill development, strategies, rules and regulations, conditioning, scouting, practice and game organization and management, safety, and evaluation of program and personnel. Special emphasis will be given to the differences in coaching team and individual sports.
- 333. Physiology of Exercise** **Coles**
 Three credits. Offered spring semester.
 The physiological changes which occur during physical activity. Analysis of systems commonly used for the improvement of physical work capacity is included. *Prerequisite: BIO 210 or 211.*
- 340. Adapted Physical Education** **Dinegan**
 Three credits. Offered fall semester.
 The physical, mental, and emotional disabilities which affect the performance of children in public school programs. Implications for physical education programming are included. Off-campus experience.
- 342. School Health Program** **Dinegan**
 Two credits.
 The school health program and health education. Emphasis is given to the organization of school health education, curriculum, evaluation, and services.
- 344. Health Education Methods and Materials** **Dinegan**
 Two credits.
 A study of the methods, instructional strategies, and materials used in the teaching of health. *Corequisite: EXS 342.*
- 352. Sports Psychology** **Astrauskas**
 Two credits. Offered in 2015-16 and alternate years.
 A study of the psychology of sport and coaching including the psychological characteristics of both athletes and coaches, psychological and physical performance enhancement, aggression and violence, officiating, youth sports, and ethical issues.
- 361. Therapeutic Modalities in Athletic Training** **Staff**
 Three credits. Offered in spring 2015-16 and alternate years.
 Application of anatomy and physiology to the phenomenon of rehabilitation. Emphasis will be given to the use of therapeutic modalities and physical agents in the healing and treatment process of athletic injuries. *Prerequisite: EXS 211.*
- 362. Therapeutic Rehabilitation in Athletic Training** **Staff**
 Three credits. Offered in 2014-15 and alternate years.
 Application of anatomy and physiology to the phenomenon of rehabilitation. Emphasis will be given to the use of therapeutic exercise in the healing, treatment and return to play of athletic injuries. *Prerequisites: EXS 211 and BIO 211 or junior status.*

412. Advanced Athletic Training**Azinger**

Three credits. Offered in 2015-16 and alternate years.

A continuation of sports medicine with emphasis given to injuries occurring to the back, abdominal region, shoulder, arm, and head. Time is also spent discussing preventative as well as rehabilitative training techniques. *Prerequisites: EXS 211 and BIO 211 or junior status.*

421. Sports Law**Ernst**

Two credits. Offered in 2015-16 and alternate years.

Introduction to law and its relationship to high school, college, and professional sports and sports business. Emphasis will be given to teams and their relationships to their governing bodies (conferences, NCAA, etc.).

426. Motor Learning**Mueller**

Two credits.

The study of the process and factors related to motor skill acquisition and performance including motor learning (the relatively permanent change in performance of a motor skill resulting from experience and/or practice), motor development (the aspects of motor skill acquisition and performance resulting from heredity), and motor control (the cognitive basis of motor skill acquisition and performance and the organization and application of these during controlled, skilled movement).

432. Kinesiology**Coles**

Four credits. Offered fall semester.

Analysis of human motion; mechanical and neuromuscular aspects of movement. *Prerequisites: junior standing and BIO 210 or 211.*

441. Student Practicum**Coles**

Two credits. Offered both semesters.

A minimum of 60 hours observing and assisting in a carefully supervised teaching, coaching, or administrative situation connected with some aspect of the Ripon College exercise science program. Each student will present their experiences at an exercise science symposium at the end of the semester. Repeatable for credit. Grading is S-U. *Prerequisite: consent of the department chair.*

450. Administration in Physical Education, Athletics, and Recreation**Ernst**

Two credits. Offered in 2015-16 and alternate years.

Overview of problems in the administration of athletic, intramural, and physical education programs. Among topics included are budget, schedules, curriculum liability, evaluation, and grading. *Prerequisite: junior status.*

451. Athletic Training Administration**Azinger**

Two credits. Offered in 2014-15 and alternate years.

The study and discussion of management strategies specific to program administration in the athletic training setting. Emphasis to be given to budgeting and program development of an athletic training program.

500. Senior Seminar in Exercise Science

Coles/Dinegan

Two credits. Offered spring semester.

Extensive study of research in physical education and sport. Each student will conduct a research project to be written and presented at an exercise science symposium at the end of the semester. This course is designed to enhance the students' understanding of research and the research process.

501. Senior Seminar in Athletic Training

Coles/Dinegan

Two credits. Offered spring semester.

Extensive study of research in athletic training and physical therapy. Each student will conduct a research project relating to athletic training to be written and presented at an Exercise Science symposium at the end of the semester. This course is designed to enhance the students' understanding of research and the research process and its application to injury prevention and rehabilitation.

540. Independent Study

Staff

Variable credit course, 1-4 credits.

Extended study and research culminating in a substantial paper. No more than twelve credit hours of independent study or internship may be taken, and no more than eight credit hours may be in one department. A registration form is required. *Prerequisites: junior or senior standing, consent of the department chair and a department project director, and 12 credits toward the major.*

First-Year Studies ProgramPaul F. Jeffries (*Coordinator*)

Participating Faculty for 2014-15:

Professors Robert Amsden (Theatre), Colleen Byron (Chemistry),

Linda Clemente (French), Soren Hauge (Economics),

Barbara A. McGowan (History), Diane Mockridge (History);

Associate Professors Diane L. Beres (Environmental Studies),

Paul F. Jeffries (Philosophy), Hervé Somé (Educational Studies);

Assistant Professors Emily Margaretten (Anthropology), Ann Pleiss Morris (English),

Travis Nygard (Art), Mary Unger (English),

Andrea Young (Mathematics and Computer Science)

Visiting Professor Thomas C.M. Truesdell (English)

Goals: The First-Year Studies (FYS) program has two key educational goals. First, FYS will introduce students to the teaching/learning environment at Ripon College. Second, it will prepare students to succeed and thrive at Ripon. FYS emphasizes the nature and benefits of a liberal education, and so provides a firm foundation for students as they choose their majors and build their college careers. FYS will also help students understand Ripon's goals and expectations. Those goals include: introducing students to the concept of a liberal education in a concrete way; helping students see that a liberal education will prepare them to deal with the complexity of issues that they will meet throughout their lives; demonstrating to students that learning is not confined to the classroom, and that they, as active learners, are ultimately responsible for the quality of their education; helping to establish student understanding of the expectations faculty have for student performance; and