KINESIOLOGY

The curriculum of the Department of Kinesiology is designed to provide the undergraduate student a strong liberal arts background in addition to a major in physical education, exercise science, or athletic training.

ABOUT THE PROGRAM

Graduates of the Department of Kinesiology are leading satisfying careers as:

- Athletic trainers in colleges, high schools, sports medicine clinics, professional athletics, hospitals and industry
- Exercise physiologists
- Professors and coaches in colleges and universities
- Physical therapists / Physical therapy assistants
- Occupational therapists / Occupational therapy assistants
- Teachers and coaches in elementary and secondary schools
- Directors of wellness programs
- Program directors in health facilities
- Athletic directors
- Personal trainers
- Strength and conditioning coaches
- Cardiac and pulmonary rehabilitation specialists
- Physicians
- Physician assistants
- Chiropractors
- Pharmaceutical sales
- Prosthetist/orthotist
- Medical equipment sales
- Childhood obesity specialist
- Public health workers
- Researcher

WORK/INTERNSHIP PROGRAM:

Opportunities to apply theories and principles developed in the classroom are available for all students planning to major or minor in each of the department’s programs. A May Term
partnership with Holland Hospital provides an intense 150-hour experience in all aspects of physical therapy. Other internships are also available. Consult the faculty for a copy of the program for your particular area of interest.

**MAJORS**

Students currently majoring in the Department of Kinesiology also:

- Assist in laboratory experiences
- Assist in the on-campus childhood obesity clinic
- Assess fitness of college students, community members and athletes
- Assist in directing the intramural program at Hope College
- Assist coaches in collegiate sports
- Assist Professors as tutors in various courses
- Assist as teaching assistants in various class offerings
- Work as assistants to physical therapists in local schools, hospitals, and private practices
- Serve as camp counselors in scout camps, camps for the handicapped, and church camps
- Provide meaningful experiences for children in elementary physical education
- Gain critical experience as athletic training students in colleges, high schools, clinics, and physician offices and during summer sports camps and professional internships
- Coach or serve as assistant coaches in area junior and senior high schools
- Work in corporate wellness programs
- Teach fitness in private health clubs and school settings
- Work in the Klooster writing center and/or with Kinesiology faculty as writing fellows

**APPLICATION PROCEDURES**

Major programs of study are available in two areas: physical education and exercise science. Physical Education majors have prerequisite requirements. Consult the department chairperson as soon as possible in your college career. See the department website at www.hope.edu/academic/kinesiology.

**Exercise Science**

Exercise science majors must take a minimum of 38 credits within the department. Required courses are:

- BIO 221
- CHEM 103, or CHEM 125/127, or CHEM 131/132
- MATH 210, or MATH 311 and 312
• KIN 200, 202, 208, 221, 222, 223, 250, 323, 324, 383, 422, 499 or 299
• One elective from the following list of courses:
  o KIN 301, 308, 325, 326, 330, 340 or 371

Physical Education Elementary Education

TEACHER CERTIFICATION

In partnership with the Hope College Department of Education, the Kinesiology Department offers a track in physical education for grades K-12 through the State of Michigan. Physical Education certification through Hope College mandates two areas of endorsement; thus physical education teaching majors must also choose a teaching minor in order to meet requirements in Hope's teacher education program.

PHYSICAL EDUCATION MAJORS

The major in physical education consists of a minimum of 35 credits. Candidates for certification in physical education must pass the Michigan Test for Teacher Certification in physical education.

Once a student has declared this as a major field of study and has been accepted into the department, he/she will be given a course/objective matrix prepared by both the Departments of Kinesiology and Education so the student may be intentional about constructing his/her own knowledge base in kinesiology and physical education. Required courses in addition to Department of Education requirements are:

• Pre-requisite: KIN 200
• GEMS 158 or BIOL 221 (preferred)
• KIN 160, 201, 221, 222, 223, 301, 330, 344, 345, 346, 350

MINORS

Minors in kinesiology, health education, physical education, and exercise science are also offered.

Exercise Science

An exercise science minor is available at Hope College. Students desiring an exercise science minor must take a minimum of 22 credits to include 18 credits of exercise science courses in the kinesiology department and four credits from Biology 221. Required courses include:

• BIO 221
• KIN 200, 208, 221, 222 and 223
• Three additional credits are required from the exercise science courses listed below:
  o KIN 301, 308, 323, 324, 325, 326, 340, 371, 383
**Health Education**

The Health Education minor consists of 22 credit hours. The core courses consist of KIN 140, 208, 251, 351, 451, 453 and 455.

**Kinesiology**

Students desiring a general minor in kinesiology must take at least 20 credits of kinesiology courses at the 200 level or above. Students desiring a general minor in kinesiology are encouraged to consult with the department chairperson to develop a course plan designed to meet their academic and career needs.

**Physical Education**

A teaching minor in physical education is available in elementary education. A minimum of 22 credits is required. Elementary Minors need to take the following courses: 160, 201, 221, 222, 223, 301, 344, 345

Consult the kinesiology website, www.hope.edu/academic/kinesiology, for specific details.

*Students cannot take courses for the minor on a pass/fail basis.*
COURSES

KINESIOLOGY

KIN 140 - Health Dynamics
This course is part of the General Education Curriculum and will establish the knowledge of diet, stress management, and exercise as they relate to fitness and health, and will provide an opportunity for the student to personally experience those relationships by putting into effect an individualized program appropriate to the student’s needs and interests.

Credits Awarded: 2
Terms Offered: Fall, Spring, Summer
Attribute: Health Dynamics (HD)

KIN 195 - Physical Education Activities
A course offered in response to student and instructor interest. Topics are not generally covered in the regular course listings. Course may be taken multiple times if topics are different.

Credits Awarded: 1-4
Terms Offered: As Needed

KIN 198 - Athletic Training Practicum I
This course provides students with the opportunity to develop competence in a variety of introductory athletic training skills. Specific skills to be developed include, but are not limited to, athletic training room procedures, cryotherapy application, first aid procedures, therapeutic modality operation and application, and upper and lower extremity taping, wrapping, and bracing. Clinical experiences are obtained in the college's sports medicine facilities and will be accompanied by a one-hour seminar each week. Admission into the AT program is required for course registration.

Credit Awarded: 1
Terms Offered: Fall, Spring
Prerequisites: Permission of instructor

KIN 200 - Human Anatomy
A course where the human body is studied from histological and gross anatomical perspectives. Laboratories include examination of human cadaver prosections, use of models and human specimens. Three lectures and one 3-hour laboratory period per week. Students also register for a Lab section. Cross-listed with Biol 222.

Credits Awarded: 4
Terms Offered: Fall, Spring, Summer
Prerequisites: Permission of department
Attribute: Natural Science I with lab (NSL)
KIN 201 - Physical Education: Movement, Meaning and Value
This course is designed to provide introductory theories and philosophies of embodiment, meaningful movement, and physical activity values to physical education major and minor students. The current challenges of physical education and physical activity will be topics of discussion, along with theoretical remedies for those challenges. The required lab experience will provide students with physical and cognitive applications in a variety of activities.

Credits Awarded: 4
Terms Offered: Fall

KIN 202 - Introduction to Writing in Exercise Science
This course is an introduction to resources in exercise science and the various aspects of research within the field. The course will include learning how to use the library to acquire recent research articles, how to read the literature, as well as how to compile the literature into written reviews. The major goal of the course will be to learn how to write and cite the literature within our field. A secondary goal will be to introduce the various career options within the field.

Credit Awarded: 1
Terms Offered: Fall, Spring, Summer

KIN 207 - Sports in Society
This course will help students investigate the ways they perceive race, gender, class, deviance, violence, the media, economy, and education, all through a magnifying glass called sports. Students will think critically about sports as social constructions and phenomenon to identify and understand social problems and solutions by reflecting on how sports affect the ways people feel, think, and live their lives. Students will find a greater sensitivity to the ways they choose to be consumers, leaders, participants, and change agents in society through sports.

Credits Awarded: 2
Terms Offered: Fall, Spring
Attribute: Social Science 2 (SS2)

KIN 208 - Introduction to Nutrition
This course is designed to develop student awareness of the nutritional implications of food choices. Students will learn the physiology of ingestion, digestion, and absorption. They will then learn how the nutrients are transported, stored, and used with the body. We will then cover the structure, function, as well as diseases involved with the over-consumption of carbohydrates, proteins and fats. Topics include the history of the current My Plate and Dietary Guidelines, The National School Lunch Program, as well as how to shop effectively in the grocery store. Each student will be required to practically apply all knowledge learned through a three day diet analysis and correction project.

Credits Awarded: 3
Terms Offered: Fall, Spring, Summer
KIN 209 - Medical Terminology for Health Care Professionals

This basic medical terminology course will provide the framework needed before advancing to a more comprehensive pre-health professional graduate program. This course will focus on the many components of a medical term and how to break down a medical term by simply knowing the meaning of the prefix or suffix or combining form and/or word root. It is important for students to realize that accurate spelling, pronunciation, and usage of medical terms in context is of extreme importance in the care of a patient regardless of their setting in health care.

Credits Awarded: 2
Terms Offered: Spring, Summer

KIN 212 - Health Advocacy and Care Coordination

This course provides an opportunity to study significant issues concerning health care aimed at developing practical approaches to supporting patients in the community. Students will identify barriers to effective health care as well as strategies for enabling at-risk patients to play a more active role in promoting their own health and well-being. Interactive and thought-provoking group discussions based on class presentations and readings will help prepare students to act as health advocates in the community. Students will learn about population medicine; specific chronic diseases in the community setting; ethical dilemmas about the uninsured and underinsured; methods of improving compliance, and measuring outcomes to name a few topics. This course is a pre-requisite for KIN 214, Health Advocacy Practicum. Recommended for pre-med and pre-health science majors in their sophomore year. Application required.

Credit Awarded: 1
Terms Offered: Spring
Prerequisites: Sophomore standing
KIN 214 - Health Advocacy Practicum
This course is a health advocacy practicum to provide experiences to students seeking a career in health care. Students will serve as health advocates to patients with chronic diseases within a transdisciplinary care coordination team in the community setting. As part of this course, students will provide healthcare advocacy services either face-to-face or by phone, to identified individuals in our community under the direct supervision of a healthcare provider. Students will be responsible for their own transportation. Updated immunizations, background checks, and provider CPR certification required.
Credit Awarded: 1
Terms Offered: Fall
Prerequisites: Kin 212

KIN 221 - Anatomical Kinesiology
The musculoskeletal system and its action is studied in detail, with specialized emphasis given to origin and insertion of skeletal muscles. The primary emphasis of the course is directed toward the health, fitness and medical fields. The laboratory component of the class will focus on palpation, stretching and strength exercises. Additionally, exercises to explore kinesthesis and proprioception, passive vs. active inefficiency, etc. will be covered. Three lectures and one, 1-hour lab section per week.
Credits Awarded: 4
Terms Offered: Fall
Prerequisites: Kin 200 or equivalent

KIN 222 - Exercise Physiology
Introduces the specialized knowledge associated with the physiology and biochemistry of exercise and physical conditioning. Additionally, it illustrates the process of the derivation of exercise principles and the application of those principles to health, fitness and/or performance objectives.
Credit Awarded: 3
Terms Offered: Fall, Spring, Summer
Prerequisites: Biol 221
Corequisites: Kin 223

KIN 223 - Exercise Physiology Laboratory
Laboratory experience designed to demonstrate physiological principles learned in Kin 222. Required for Kinesiology majors and minors.
Credit Awarded: 1
Terms Offered: Fall, Spring, Summer
Prerequisites: Biol 221
Corequisites: Kin 222

KIN 241 - Emergency Management of Injury and Illness
This course will focus on pre-hospital emergency management for injuries and illnesses commonly seen in athletics and other diverse patient populations. Theoretical and practical information based on current best practices and evidence-based research will be presented to inform and acclimate students responding to various non-life threatening and life threatening trauma, injuries, and illnesses for both pre-existing and acute conditions.
Credit Awarded: 2
Terms Offered: TBD
KIN 250 - Research Methods in Kinesiology
This course is an overview of the qualitative and quantitative research approaches specific to the various disciplinary areas in kinesiology. Topics covered include the role of the researcher, research ethics; selecting and developing a research problem; reviewing the literature; developing research hypotheses; writing research proposals; issues in measurement; sources of error; data collection issues; statistical analyses and communicating the results of research.

Credits Awarded: 4
Terms Offered: Fall, Spring
Prerequisites: Math 210 or equivalent

KIN 251 - Foundations for Teaching Health Education
This course provides health education minors with the theoretical, philosophical, practical, and professional foundations of health education. Topics include state-of-the-art information regarding health education definitions and concepts, settings in which health education occurs, standards for students and professionals, professional organizations, basic epidemiology, behavior change theories and models, and professional ethics.

Credits Awarded: 3
Terms Offered: Fall

KIN 252 - Health and Physical Education for Elementary Teachers
This course covers health and physical education concepts typically found in elementary and middle school PE/health curricula, and discusses how to teach these concepts to elementary and middle school students. Students may take Kin 140 either prior to enrollment in or concurrently with course.

Credits Awarded: 2
Terms Offered: Fall, Spring
Prerequisites: Kin 140
Corequisites: Kin 140

KIN 295 - Special Topics in Kinesiology
A course offered in response to student and instructor interest. Topics are not generally covered in the regular course listings. Course may be taken multiple times if topics are different.

Credits Awarded: 1-4
Terms Offered: As Needed
Prerequisites: Permission of instructor

KIN 297 - Professional Tennis Management Practicum I
This course will provide instruction and experience in the fundamental concepts that lead to the Professional Tennis Management certification United States Professional Tennis Association (USPTA) and Professional Tennis Registry (PTR). Students will gain experience in the following: lesson set-up and breakdown, teaching group lessons, teaching individual lessons, coaching beginner players, and skills in the pro shop (e.g., stringing, scheduling).

Credits Awarded: 2
Terms Offered: Summer
Prerequisites: Permission of department
KIN 298 - Athletic Training Practicum II
This course provides students with the opportunity to develop competence in a variety of introductory and mid-level athletic training skills. Specific skills to be developed include, but are not limited to, use of various types of rehabilitation equipment, therapeutic modality application and operation, manual therapy, and upper and lower extremity taping, wrapping, and bracing. Clinical experiences are obtained in the college's sports medicine facilities and will be accompanied by a one-hour seminar each week. Students are also assigned as athletic training students to supervised clinical experiences for an individual or team sport.

Credit Awarded: 1
Terms Offered: Fall, Spring
Prerequisites: Kin 198

KIN 299 - Internships in Physical Education, Exercise Science or Professional Tennis Management
This program presents opportunities for students to pursue practical work experience in their chosen field of study as it relates to their professional plans. It is expected that the student intern will be a junior or senior with a major in Kinesiology. The department expects the student to have completed coursework necessary to carry out the objectives of the internship as well as possess the habits and motivation to be of benefit to the sponsoring agency. Students pursuing the Professional Tennis Management certification through USTA or PTR will be required to sign up for this course. PTM students will be required to coordinate their own internships, with the assistance from the staff at the DeWitt Tennis Center. An application for the internship must be completed and approved the semester prior to the experience.

Credit Awarded: 1-3
Terms Offered: Fall, Spring, Summer

KIN 301 - Motor Development
The purpose of this course is to develop student awareness of how motor behavior is developed as a child grows. Special emphasis is given to the study of the acquisition of fundamental motor skills and physical growth and development across the lifespan.

Credit Awarded: 3
Terms Offered: Spring

KIN 308 - Nutrition and Athletic Performance
A study of the relationship between nutrition and physical performance. Subjects to be covered include, but are not limited to, comparison of contemporary diets for athletes; and the function of carbohydrates, fat, protein, vitamins, and minerals in relation to physical performance. Additionally, various popular ergogenic aids will be discussed.

Credit Awarded: 3
Terms Offered: Spring
Prerequisites: Kin 208, Kin 222 and Kin 223

KIN 323 - Clinical Exercise Physiology
The purpose of this class is to familiarize the student with specialized knowledge in exercise science and its application to health and fitness. Students will understand the epidemiology and etiology of various disease states & health conditions. Further, students will understand how exercise and behavioral changes can impact disease risk. The course will also introduce an integrated approach to the assessment of physical fitness and the design of exercise programs in normal and special populations.

Credit Awarded: 3
Terms Offered: Fall, Spring
Prerequisites: Kin 222 and Kin 223
Corequisites: Kin 324
**KIN 324 - Clinical Exercise Physiology Laboratory**
The laboratory portion of this class will expand on concepts learned in Kin 223. Aspects of fitness assessment and exercise prescription will be emphasized utilizing health as well as various special populations.
*Credit Awarded: 1
Terms Offered: Fall, Spring
Prerequisites: Kin 222 and Kin 223
Corequisites: Kin 323

**KIN 325 - Science of Conditioning, Strength and Power**
This class is designed to provide the student with specific knowledge about the development of conditioning programs as well as strength and power training programs. Additionally it will cover the adaptations that occur within the body during strenuous conditioning and resistance training, and how these adaptations relate to improved performance. The laboratory experience stresses advanced techniques of performance-based fitness assessment and prescription. It will also provide time for the student to learn advanced lifting and spotting techniques.
*Credits Awarded: 4
Terms Offered: Fall
Prerequisites: Kin 222 and Kin 223

**KIN 326 - Children, the Elderly, and Exercise: Fitness and Health**
The purpose of this course is to familiarize the student with the specialized knowledge in exercise science with application to health and fitness benefits and potential risks in children and older adults. Three lectures per week.
*Credits Awarded: 3
Terms Offered: Every Other Spring
Prerequisites: Kin 222 and Kin 223

**KIN 330 - Principles of Coaching**
This engaging course provides students with the knowledge and the essential skills to be a leader in the field of coaching. The teaching of leadership qualities, developing leaders within a team or program, motivation, time management, and overall program development are key concepts taught and essential to coaching profession. Students will be able to learn skills that are transferable to leadership roles outside of athletics as well.
*Credits Awarded: 3
Terms Offered: Spring

**KIN 340 - Injury Prevention and Care**
This course provides the student with the knowledge and skills essential for the proper prevention and care of injuries. It is designed primarily for students contemplating careers in athletic training, sports medicine, coaching, and exercise science.
*Credits Awarded: 3
Terms Offered: TBD
Prerequisites: Kin 200 or equivalent

**KIN 344 - Basic Methods of Teaching Physical Education**
This course emphasizes task analysis, lesson planning, unit planning, styles of teaching, curriculum models, and behavior management in the physical education setting.
*Credits Awarded: 3
Terms Offered: Spring
KIN 345 - Methods of Teaching Early Physical Education and Field Experience

This course is taken after Kin 344 and applies the principles learned and mastered in that course to the situations encountered in a local elementary school setting.

Credits Awarded: 2
Terms Offered: Fall
Prerequisites: Kin 344

KIN 346 - Clinical Experiences in Physical Education

This course is taken after Kin 344. Emphasis will be placed on development of activity-specific unit planning for the secondary level. Application of material presented in Kin 344 will be required. Practical application by placements in local high school and/or middle school settings will be included in this course.

Credits Awarded: 2
Terms Offered: Fall
Prerequisites: Kin 344

KIN 350 - Adapted and Therapeutic Physical Education

A course designed to introduce students to methods of teaching children with disabilities. The laws and issues regarding individualizing the educational process in physical education are examined. Practical application is included in an adapted physical education lab setting one hour each week.

Credits Awarded: 4
Terms Offered: Fall

KIN 351 - Planning Coordinated School Health Programs

This course provides prospective school health educators with an understanding of the nature, scope, function, and integration of health instruction and other coordinated school health program components. It allows candidates to develop competencies in assessing needs, planning instruction, and evaluating health programs in schools, as well as specific skills related to using technology and advocating for school health programs.

Credits Awarded: 3
Terms Offered: Spring
Prerequisites: Kin 251

KIN 371 - Sport Performance Psychology

The purpose of this course is to gain an understanding of the relationship of human behavior to sport and how sport influences human behavior. Emphasis is given to the theory, research and application in the area of sport psychology.

Credits Awarded: 3
Terms Offered: Fall, Spring

KIN 372 - Sport Performance Psychology Laboratory

The objective of this course is for the student to practice and learn the psychological skills of arousal regulation, confidence, focus, imagery, flexible thinking and goal setting. Utilizing assessments, instructor-led discussion/training, partner accountability, and various drills, students will gain a better understanding of the mind's influence on performance and how to better control cognitive processing to improve results. We will also explore concepts such as flow, vision training, personality and burnout.

Credit Awarded: 1
Terms Offered: Fall, Spring
**KIN 383 - Biomechanics**
Initially, basic biomechanical principles underlying efficient movement are explored and applied to fundamental physical skills and sport. The second part of the semester is focused on the biomechanics of musculoskeletal injury. Knowledge of physics will make the course more meaningful, but it is not required. Use of mathematical formulae is limited. The laboratory component of the class focuses on practical applications of the material covered in class, including simple machines as applied to the human body. Material mechanics including forces, collisions, bending and rupture of tissue. Center of gravity will be estimated by different formulae, and gait will be explored during both walking and running. Three lectures and one, 1-hour lab section per week. Students must register for laboratory.

- **Credits Awarded:** 4
- **Terms Offered:** Spring
- **Prerequisites:** Kin 221

**KIN 385 - Injury Assessment I**
This course helps students understand the theory and application of various assessment methods used to evaluate injuries of the upper extremity, trunk, and head. Injury documentation and evidence-based practice methods are also covered. It is primarily intended for students in the athletic training education major, but may be of interest to pre-medical and pre-physical therapy students. Substantial out-of-class work for documentation skills and assessment skill practice is required.

- **Credits Awarded:** 4
- **Terms Offered:** Fall
- **Prerequisites:** Kin 221, Biol 221
- **Corequisites:** Kin 386

**KIN 386 - Injury Assessment II**
This course helps students understand the theory and application of various assessment methods used to evaluate injuries of the lower extremity and spine. It is primarily intended for students in the athletic training education major, but may be of interest to pre-medical and pre-physical therapy students. Substantial out-of-class work for documentation skills and assessment skill practice is required.

- **Credits Awarded:** 3
- **Terms Offered:** Fall
- **Prerequisites:** Kin 221, Biol 221
- **Corequisites:** Kin 385

**KIN 397 - Professional Tennis Management Practicum II**
This course will provide instruction and experience in the advanced concepts that lead to the Professional Tennis Management certification United States Professional Tennis Association (USPTA) and Professional Tennis Registry (PTR). Students will gain experience in the following: leading group lessons, coaching USTA travel teams, coaching intermediate and advanced players, designing and conducting youth tournaments, facility management, and legal and ethical behavior.

- **Credits Awarded:** 2
- **Terms Offered:** Summer
- **Prerequisites:** Kin 297, Permission of department
KIN 398 - Athletic Training Practicum III

This course provides students with the opportunity to develop competence in a variety of mid-level and advanced athletic training skills. Specific skills to be developed include, but are not limited to, career development and preparation as well as policy and procedures for athletic training facilities, ergonomics and health and wellbeing of the student athlete. Students are assigned to supervised clinical experiences as athletic training students for an individual or team sport. Students may also be assigned to one or more off-campus clinical affiliations. Students at this level will develop instructional skills by acting as peer的帮助 for level I and II students. Clinical experiences are accompanied by a one-hour seminar each week.

Credit Awarded: 1
Terms Offered: Fall, Spring
Prerequisites: Kin 298

KIN 401 - Therapeutic Modalities

This course helps students understand the theory and application of various physical medicine devices commonly used in athletic training and sports medicine clinical settings. There is heavy emphasis on use, application of the various modalities studied, and the evidence behind their use. Therefore lab and out-of-class access to the modalities is required for competence. It is primarily intended for students in the athletic training education major, but may be of interest to pre-medical and pre-physical therapy students.

Credit Awarded: 3
Terms Offered: Spring, Even Years
Prerequisites: Kin 200 or equivalent, Biol 221

KIN 402 - Therapeutic Exercise

This course helps students understand the theory and application of exercise methods and manual therapies commonly used in athletic training and sports medicine clinical settings for the rehabilitation of injuries. It is primarily intended for students in the athletic training education major, but may be of interest to pre-medical and pre-physical therapy students. There is heavy emphasis on use, application of the various techniques covered in class, and the evidence behind their use. Therefore lab and out-of-class access to the exercise equipment in the athletic training room and weight room are required for competence.

Credit Awarded: 3
Terms Offered: Fall, Odd Years
Prerequisites: Kin 200 or equivalent, Kin 222 and Kin 223

KIN 404 - Seminar in Athletic Training Administration

This course helps students understand the theory and application of managerial skills commonly employed in sports medicine settings. A heavy emphasis on the case method of instruction will help students apply administrative concepts in situations similar to those they will face in professional practice.

Credit Awarded: 2
Terms Offered: Fall, Odd Years
**KIN 405 - Non-Orthopedic Conditions**
This course is designed to help students gain an understanding of the various non-orthopedic conditions seen in physically active populations. Students will not only learn about common illnesses and their management, but they will also develop basic medical assessment and referral skills. Basic pharmacologic treatment is covered in this course. The course is primarily intended for students in the athletic training major, but may be of interest to nursing, pre-medical, and pre-physical therapy students.

**Credits Awarded:** 2
**Terms Offered:** Spring, Odd Years

**KIN 422 - Regulation of Human Metabolism**
This course focuses on the underlying metabolic events that occur in association with exercise. Skeletal muscle metabolism and substrate delivery are discussed with respect to the intracellular biochemical events involved in regulation of the energy provision pathways. Advanced level. Students must register for an accompanying lab section where group research projects with human participants are designed and carried out.

**Credits Awarded:** 4
**Terms Offered:** Fall, Spring
**Prerequisites:** Kin 222 and Kin 223, Kin 250, Chem 103 or equivalent

**KIN 451 - Methods of Teaching Health Education I**
This lecture/lab course is designed to help health education minors develop competencies in planning and implementing health instruction and related learning opportunities. Attention focuses on developing the following skills: designing grade-level programs; preparing lesson plans and materials utilizing existing resources; applying primary teaching strategies used in health education; and delivering lessons that synthesize student outcomes, specific content, teaching strategies, student activities, and materials for all student abilities. This course also includes a school-based practicum.

**Credits Awarded:** 4
**Terms Offered:** Fall
**Prerequisites:** Kin 351

**KIN 453 - Health Education Methods II & Sexuality Education**
This course provides continued development, methodology, management, administrative, and instructional skills needed to plan and implement a health education program within a school setting. Teacher candidates will begin to explore how to teach sexuality education. Different topics related to sexuality will be discussed by teacher candidates in reflective writing. Students will enhance their understanding of human sexuality with knowledge and skills that will enable them to plan, implement, and evaluate developmentally appropriate instruction related to sexuality education. HIV/AIDS certification will be included in this course. A capstone experience with a certified health educator will allow students to actively teach health.

**Credits Awarded:** 4
**Terms Offered:** Spring
**Prerequisites:** Kin 451
**KIN 455 - Measurement and Evaluation in Health Education**

This course provides a forum for developing measurement and evaluation skills relevant to health education in schools and community health. Health education minors will develop competencies related to needs assessment and data collection, evaluation, and presentation, which are aligned with current best practice and available resources.

- **Credits Awarded:** 3
- **Terms Offered:** Fall
- **Prerequisites:** Kin 351

**KIN 490 - Independent Study**

This course provides opportunity for the pursuit of an independent research study or in-depth reading in a specific area of interest. Experience in a research methods course is highly recommended.

- **Credits Awarded:** 1-3
- **Terms Offered:** Fall, Spring

**KIN 498 - Athletic Training Practicum IV**

This course provides students with the opportunity to develop competence in a variety of mid-level and advanced athletic training skills. Specific skills to be developed include, but are not limited to, facility design and management, human resources, finance and budgeting. Senior case presentations and the completion of a rehabilitation case from beginning to end will occur. Students will prepare for the Board of Certification examination. Students may be assigned supervised clinical experiences as athletic training students for an individual or team sport clinical experience or will be assigned to one or more off-campus clinical affiliations. Students at this level will develop instructional skills by acting as peer-helpers for level I, II, and III students. Clinical experiences are accompanied by a one-hour seminar each week.

- **Credit Awarded:** 1
- **Terms Offered:** Fall, Spring
- **Prerequisites:** Kin 398
**KIN 499 - Special Studies in Exercise Science or Athletic Training**

This class is designed to give senior exercise science students an opportunity to pursue a topic of their choosing in a supervised setting. The project may take one of two forms: 1) laboratory research, or 2) a scholarly project using the library. In both cases a thorough literature review will be required.

**Credits Awarded:** 1-3  
**Terms Offered:** Fall, Spring  
**Prerequisites:** Kin 222 and Kin 223, Kin 250

**FACULTY & STAFF**

**Albers, Diana**  
*Preceptor - AT Education (1999)*  
M.S., Indiana University Bloomington,  
B.A., Hope College, 2002

**Aldrich, Mike**  
*Men’s Basketball Coach (2004)*  
B.A., Hope College, 2007

**Ashdown, Jordan**  
*Lecturer/Kinesiology (2010)*  
M.S., Desales University,

**Beltman, KayLynn**  
*Preceptor - AT Education (1996)*

**Brandt, Daniel**  
*(2018)*

**Brandt, Dave**  
*Associate Professor of Kinesiology/Head Mens Soccer Coach (2018)*  
B.S., Messiah College,  
M.Ed., Temple University,

**Brumels, Dr. Kirk**  
*Professor of Kinesiology and Department Chair (2001)*  
Ph.D., Western Michigan University, 2005  
MAT, Western Michigan University, 1990  
B.A., Hope College, 1988

**Burgess, Jason**  
*Lecturer in Kinesiology (2015)*

**Carlson, Dr. Chad**  
*Associate Professor of Kinesiology/JV Men’s Basketball Coach (2001)*  
Ph.D., Pennsylvania State University, 2010  
M.A., Western Michigan University, 2005  
B.A., Hope College, 2003

**Caserta, James**  
*Asst. Football Coach (2017)*

**Cole, Dr. Kevin**  
*Associate Professor of Kinesiology/Track & Field Coach (2005)*  
Ph.D., Ball State University, 1994  
M.S., Texas Christian University, 1991  
B.A., Hope College, 1988

**Davelaar, Tom**  
*Adjunct Assistant Professor of Kinesiology/Assistant Men’s Basketball Coach (1983)*  
B.A., Hope College, 1972

**De Jong, Thomas**  
*Lecturer in Kinesiology (2015)*

**Doherty, Tom**  
*Asst. Volleyball Coach (2013)*

**Dunn, Dr. Maureen**  
*Professor of Kinesiology (1997)*  
Ph.D., University of Guelph, 1997  
M.S., McMaster University, 1994  
B.S., University of Victoria, 1991

**Duram, Jason**  
*Asst. Football Coach (2016)*
Folkert, Eva  
Lecturer/IDS (1985)  
B.A., Hope College,  
M.A., Western Michigan University,  

Fritz, Stu  
Assistant Professor of Kinesiology/Baseball Coach (1993)  
M.A., Univ of Northern Colorado, 1992  
B.A., Wartburg College, 1988  

Gkekas, David  
Coach-Men’s Football (2011)  

Gruppen, Tonia  
Assistant Professor of Kinesiology and Athletic Trainer (2001)  
M.S., Indiana University Bloomington, 1999  
B.A., Hope College, 1998  

Hamilton, Matthew  
Tennis Pro (2013)  

Jackson, Shawn  
Football Coach (2011)  
Unknown, Ferris State University,  

Jones, Damon  
(2018)  

Jones, Philip  

Kamstra, Nancy  
Associate Professor of Kinesiology (2005)  
M.Ed., Grand Valley State University, 2008  
B.A., Hope College, 1982  

Karafa, Sandi  
Preceptor - AT Education (2005)  

Kegerreis, Jean  
Women’s Volleyball Coach (2004)  
B.A., Hope College, 1999  

Koberna, Timothy  
Assistant Professor of Kinesiology and Head Athletic Trainer (2013)  
M.A., Western Michigan University, 1992  
B.S., Mount Union College, 1990  

Kroeze, Joan  
Lecturer in Kinesiology (2009)  

Lapciuk, Michael  
Football Coach (2016)  

Larson, Melinda  
Associate Professor of Kinesiology and Co-Director of Athletics (2014)  
M.S., Florida International Univ, 1994  
B.A., Whitworth University, 1992  

Lunderberg, Jon  
Track Coach (2011)  
B.A., Hope College,  
MBA, University of Michigan,  

Markel, Paul  
Track Coach (2003)  

Mitchell, Greg  
Assistant Professor of Kinesiology/Men’s Basketball Coach (2004)  
M.S., Michigan State University, 1999  
B.A., Hope College, 1989  

Morse, Amber  
(2004)  

Mumby, Becca  
Lecturer (2017)  

Northuis, Dr. Mark  
Professor of Kinesiology/Cross Country Coach (1988)  
Ph.D., Univ of Minnesota Twin Cities, 1998  
M.A., University of Michigan, 1984  
B.A., Hope College, 1982  

Olinger, Jeanette  
Assistant Softball Coach (2017)
Patnott, Dr. John
Professor of Kinesiology/Swimming & Diving Coach (1978)
Ph.D., University of Utah, 1989
M.A., Calif St Univ San Bernardino, 1973

Ray, Dr. Richard
Professor of Kinesiology and Provost Emeritus (1982)
Ed.D., Western Michigan University, 1990
M.A., Western Michigan University, 1980
B.S., University of Michigan, 1979

Rider, Dr. Brian
Assistant Professor of Kinesiology (2015)
Ph.D., Univ Tennessee Knoxville, 2015
M.A., Oakland University, 2011
B.A., Adrian College, 2007

Rose, Katharine
Lecturer/Kinesiology (2006)
B.A., Hope College, 2010

Ruby, Chad
Men's Baseball Coach (2001)
B.A., Hope College, 1998

Scheldt, Chris Jr.
Men's Lacrosse Coach (2010)
Unknown, Grand Valley State University,

Schmidt, Becky
Associate Professor of Kinesiology/Volleyball Coach (1994)
M.S., Miami University, 2003
B.A., Hope College, 1999

Schoonveld, Timothy
Assistant Professor of Kinesiology and Co-Director of Athletics (1995)
M.A., Western Michigan University, 2005
B.A., Hope College, 1996

Sears, Dr. Leigh
Associate Professor of Kinesiology/Women's Soccer Coach (2000)
Ph.D., Ohio State University, 2007
M.S., Ithaca College, 1999
B.A., Ohio Wesleyan University, 1991

Slette, Stein
Assistant Professor of Kinesiology (2008)
M.S., University of Utah, 1992
B.A., Hope College, 1987

Slotman, Kristen
JV Women's Basketball Coach (2011)

Smith, Dr. Steven
Professor of Kinesiology/Men's Soccer Coach (1990)
Ph.D., Michigan State University, 1989
M.A., Michigan State University, 1984
B.A., Cornerstone University, 1982

Soukup, Kirsten
Lecturer/Kinesiology (2007)

Stafford, Gregory
Women's Golf Coach (2009)

Stephan, Michael
(2014)

Stuursma, Peter
Associate Professor of Kinesiology/Football Coach (1999)
M.A., Univ of Northern Colorado, 1998
B.A., Hope College, 1993

Taber, Jake
Assistant Professor of Kinesiology and Head Men's & Women's Swim & Dive Coach (2002)
M.A., Western Michigan University, 2005
B.A., Western Michigan University,

Thayer, Kate
(1996)
Winton, Kara  
*Track Coach (2007)*  
B.A., Hope College, 2011

Zimmerman, Lori  
*Women's LaCrosse Coach (2014)*  
Unknown, Grand Valley State University,