

# DEPARTMENT OF HUMAN PERFORMANCE AND REHABILITATION SCIENCES

## The Department of Human Performance and Rehabilitation Sciences Mission

To prepare dynamic healthcare professionals, including clinicians and leaders who will promote collaborative healthcare efforts and partnerships in the community and beyond. The department faculty and students learn through innovation and are committed to excellence in education, research, and service.

### Vision

We aspire to transform students into successful healthcare professionals, scholars, citizens, and leaders, who through their commitment and passion to their profession will make powerful impacts on their communities.

The department offers certificate, associate, baccalaureate, master's and doctoral degree programs for future members of the health care delivery system.

### Baccalaureate programs are offered in:

- Didactic Program in Dietetics
- Exercise Science

### Certificate programs are offered in:

- Applied Aging across the Lifecourse
- Sports Dietetics

### Minors are offered in:

- Minor in Nutrition and Health
- Minor in Wellness

## Important Notice

Fingerprinting, a criminal background check, record of up to date immunizations, and drug testing may be required as a condition for working with a variety of sites used by programs offered in this department. Some sites used by programs offered in the department require that a person have no felony convictions, have certain immunizations, and have passed a drug test within the past year. Students unable to meet these site requirements may not be able to complete their degree from the department. If you have questions concerning these requirements, please see an advisor in the department.

## Department Chair

Dr. Nancy Landgraff

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## Faculty List

### Chair

Nancy Landgraff PhD, PT

### Professor

Morgan Bagley PhD, AT, ATC, Associate Professor

Shannon Dudash PT, DPT, PhD, Assistant Professor

Edmund Ickert PT, DPT, PhD, Associate Professor

Alan Koren DAT, AT, ATC, Assistant Professor

Kenneth Learman PT, PhD, Professor

Jeanine Mincher PhD, Professor

Matthew R. O'Dell M.B.A., Assistant Professor

Cathy Bieber Parrott PT, PhD, Assistant Professor

Rebecca Riblet PT, DPT, Assistant Professor

Omar Ross PT, DPT, Associate Professor

Zara Rowlands PhD, Professor

Tyler J. Singer Ph.D., Assistant Professor

Erin Shilling PT, DPT, Assistant Professor

Annie Tapp PT, DPT, PhD, Assistant Professor

Dan Van Dussen PhD, Professor

### Lecturer

Meri Surdoval-Fetkovich M.S., Lecturer

## Baccalaureate Programs

- Dietetics (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/food-nutrition-didactic-program-dietetics/>)
- Dietetics -MHHS 4+1 Graduate Track (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/dietetics-mhhs-four-plus-one/>)
- Exercise Science (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/bsas-exercise-science/>)
- Exercise Science Graduate Track (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/bsas-exercise-science/pt-track/>)
- Exercise Science MAT Graduate Track (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/bsas-exercise-science/mat-track/>)
- Exercise Science 4+1 MPH Graduate Track (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/bsas-exercise-science/four-plus-one-mp/>)
- Food and Nutrition - Graduate Track (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/food-nutrition-graduate-track/>)

## Minors

- Minor Nutrition and Health (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/nutrition-and-health-minor/>)
- Minor in Wellness (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/minor-wellness/>)

## Certificates

- Aging Studies (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/certificate-in-aging-studies/>)
- Sports Nutrition (<https://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-human-performance-rehabilitation-sciences/certificate-sports-nutrition/>)

### **FNUT 1512 Food Safety and Sanitation 2 s.h.**

Safe food handling and sanitation practices for students desiring to be employed in the food service industry as Food Service Managers. Upon successfully completing the ServSafe exam, the student will be awarded the ServSafe Certification and the Ohio Department of Health Food Protection Certification.

### **FNUT 1551 Normal Nutrition 3 s.h.**

The fundamentals of normal nutrition as they apply to health; nutritional needs during various stages of the life cycle; dietary guides and their application to the selection of adequate diets; problems of nutritional deficiencies and excesses.

**Gen Ed:** Social and Behavioral Science, Social Science 2024, Social and Pers Awareness 2024.

### **FNUT 1553 Food Science and Management Principles 3 s.h.**

Scientific principles and methods used in selecting, purchasing, and preparing food. Consideration given to nutritional, aesthetic, and socioeconomic factors in meal planning.

### **FNUT 1553L Food Science and Management Principles Laboratory 1 s.h.**

Application of principles from FNUT 1553. Three hours lab per week.

**Prereq.:** FNUT 1553 or concurrent.

### **FNUT 2600 Orientation to Dietetics Major 1 s.h.**

Introduction to the dietetics profession for Food and Nutrition majors. Exploration of the academic and professional requirements for successful entry level practice in Dietetics careers.

**Prereq. or Coreq.:** FNUT 1551.

### **FNUT 2612 Food Systems: Operation, Production, and Service 3 s.h.**

The fundamentals of food service operations including menu planning, purchasing of foods and equipment, care of foods and equipment, efficient work methods, budget and cost control. Also standard principles, techniques in quantity food production, management, and service.

**Prereq.:** FNUT 1553 and FNUT 1553L.

### **FNUT 2612L Food Systems: Operations, Production, and Service Laboratory 2 s.h.**

Application of the fundamentals of food systems operations, management, and service. Six hours lab per week. Concurrent with: FNUT 2612.

**Prereq.:** FNUT 1553 and FNUT 1553L.

### **FNUT 2640 Nutrition Counseling and Education Skills Development for Dietetics 3 s.h.**

Application of dietetics principles in providing counseling and education to clients in preventive and therapeutic settings. Techniques for effective nutrition interviewing, counseling and selection of educational modes and resources for diverse clients and groups. 3 lecture hours.

**Prereq.:** FNUT 2600.

### **FNUT 2641 Diet Prescriptions and Intervention Planning 2 s.h.**

Course Description: Exploration of nutrients needed for the proper human functioning and health, types of prescribed diets and how to plan comprehensive diet interventions. The development of therapeutic and preventive diet intervention plans for diseases requiring careful nutrient management. The course will introduce students to dietetics software used in planning diets. 2 lecture hours.

**Prereq.:** C or better in FNUT 1551.

### **FNUT 2652L Nutrition Assessment Laboratory 1 s.h.**

Procedures and techniques in anthropometric, biochemical, clinical and dietary assessment of nutritional status in healthy and at-risk populations. Three hours lab per week.

**Prereq.:** FNUT 1551.

### **FNUT 3720 Nutrition, Health, and Aging 3 s.h.**

Current knowledge of nutrition as it relates to overall health and human aging. Needs of the elderly in normal and diseased conditions. Nutritional needs/concerns of the elderly in the contexts of their physiological, social, and psychological dilemmas.

**Prereq.:** SOC 1500.

### **FNUT 3735 Nutritional Biochemistry 2 s.h.**

Designed for nutrition majors, this course covers the basic concepts of classification, structure, and function of biological molecules, major metabolic pathways, heredity and immune function, with emphasis on the understanding of the metabolism and function of nutrients. Course is also appropriate for Minors and Certificates related to Nutrition.

**Prereq.:** FNUT 1551 with C or better.

### **FNUT 3759 Advanced Nutrition 3 s.h.**

Integrated approach to nutrition and health, emphasizing metabolism and functions of nutrients at the cellular level; nutritional needs for optimal health; problems of over nutrition and under nutrition.

**Prereq.:** FNUT 3735 or permission of instructor.

### **FNUT 3760 Medical Nutrition Therapy 2 3 s.h.**

Application of the principles of the nutrition care process in prevention and management of selected acute and chronic conditions, including creating medical nutrition therapy interventions, counseling and education plans, and coding and billing for dietetics services.

**Prereq.:** FNUT 2641 and 2652L.

### **FNUT 3760L Medical Nutrition Therapy 2 Laboratory 3 s.h.**

Orientation to the dietetics profession. Select clinical experiences providing opportunities for developing an understanding and working knowledge of the nutrition care process and its application to individuals exhibiting special nutritional needs. Six hours lab. Restricted course.

**Prereq.:** FNUT 2603L.

**Coreq.:** FNUT 3760 and FNUT 3760R.

### **FNUT 3760R Medical Nutrition Therapy 2 Laboratory Recitation 2 s.h.**

Orientation to the dietetic profession. Lecture to further students' understanding and working knowledge of the nutrition care process and its application to individuals exhibiting special nutritional needs. Concurrent with: FNUT 3760 and FNUT 3760L. Restricted course.

### **FNUT 3761 Science of Nutrition in Exercise 3 s.h.**

Advanced study of concepts related to the integration of nutrition and physical activity in athletic as well as normal and diseased populations. Emphasis on substrate utilization and modification, and nutrient/ergogenic supplementation and crash diets.

**Prereq.:** FNUT 1551, FNUT 3735.

### **FNUT 4802 Research Methods in Dietetics 2 s.h.**

Overview of research methodology, statistics and applications in the field of nutrition and dietetics.

**Prereq.:** MATH 2623 or MATH 2623C or STAT 2625 or STAT 2625C and junior standing.

### **FNUT 4802L Research Methods in Dietetics Laboratory 1 s.h.**

Application of basic concepts of research methodology and statistics to dietetic practice. Three hours lab per week. Concurrent with: FNUT 4802. Permit required.

**Prereq.:** FNUT 4802.

### **FNUT 4810 Experimental Foods 2 s.h.**

Advanced study of food science and technology; methodology of food research including evaluation by sensory and objective methods.

**Prereq.:** FNUT 1553 and FNUT 1553L, junior standing.

**FNUT 4810L Experimental Foods Laboratory 1 s.h.**

Application of scientific principles and experimental procedures to cooking processes. Three hours lab per week. Concurrent with: FNUT 4810. Permit required.

**FNUT 4858 Food Service Systems Management 4 s.h.**

Advanced food service systems management principles and processes as they relate to resources and operating subsystems. Focus on subsystem interrelationships.

**Prereq.:** FNUT 2612, junior standing.

**FNUT 4859 Food Systems Management Clinical Experience 2 s.h.**

Application of the management process to institutional and commercial food service systems. Approximately 7.5 hours of supervised practice per week. Hours of experience should not fall below 97.5 hours total for the course. This course is offered Fall only.

**FNUT 4860 Medical Nutrition Therapy 3 3 s.h.**

The course covers the professional guidelines - Scope and Standards for the practice of dietetics, and the application of the nutrition care process in the prevention and management of selected acute and chronic conditions.

**Prereq.:** FNUT 2641 and 2652L.

**FNUT 4861 Medical Nutrition Therapy III Clinical 2 s.h.**

Clinical experiences providing opportunities for application of nutritional care process to individuals exhibiting abnormal nutritional needs. Eleven hours per week in an acute care clinical setting. A total of 165 hours per semester are required for successful completion of the course.

**Coreq.:** FNUT 4863.

**FNUT 4862 Food Systems Management Clinical Experience Discussion 1 s.h.**

Discussion and application of food systems management theories, skills and mathematics to the Food Systems Management field.

**Coreq.:** FNUT 4859.

**FNUT 4863 Medical Nutrition Therapy 3 Discussion 1 s.h.**

One hour of discussion per week to explore nutrition's role in various diseases, discuss case studies and enhance skills and knowledge base related to the administration of Medical Nutrition Therapy. Fifteen hours of discussion per semester.

**Prereq. or Coreq.:** FNUT 4861.

**FNUT 4872 Maternal and Child Nutrition 2 s.h.**

Principles of the nutritional care process as it relates to the maternal and pediatric population.

**Prereq.:** CHFM 3731 or special approval.

**FNUT 4873 Nutrition and Aging 2 s.h.**

Nutritional needs of the elderly as influenced by the aging process and disease states; factors affecting the food availability, food intake, and nutritional status of the elderly; nutritional services for the elderly.

**Prereq.:** FNUT 3760 or concurrent.

**FNUT 4874 Community Nutrition and Wellness 3 s.h.**

Public health nutrition and wellness programs and their services to the community. Emphasis on program funding, cultural competence and needs of the underserved and elderly.

**Prereq.:** FNUT 3760.

**FNUT 4874L Community Nutrition and Wellness Experience 3 s.h.**

Selected clinical experiences providing opportunities for application of the nutrition care process and wellness education to individuals and groups in the community setting. This includes one hour of lecture and 7 hours of clinical experience per week for 105 total hours of clinical experience.

**Prereq.:** Restricted to students in the Dietetics Future Model (MPH-RDN).

**FNUT 4890 Directed Individual Study in Dietetics 1-3 s.h.**

The student will complete a structured project on a selected topic that encompasses research and/or remediation in dietetics. This project will be done in direct and interactive collaboration with the assigned instructor. The topic is selected through student and instructor consultation on objectives to be achieved. May be repeated for a total of 6 semester hours.

**Prereq.:** Permission of the Instructor.

**FNUT 4895 DPD Capstone 3 s.h.**

Application of dietetics principles learned in the classroom to situations in clinical, food service-management, and community settings. Provides opportunities for communication with diverse groups, critical thinking, and problem solving. Emphasis on case-study presentations of current issues and trends in the field. One (1) hour lecture and six (6) hours of laboratory per week.

**Prereq.:** FNUT 4858, FNUT 4860, FNUT 4874 or concurrent, and HMEC 4890 or concurrent.

**Gen Ed:** Capstone 2024.

**FNUT 5801 Nutrition Assessment for Fitness & Athletes Seminar 3 s.h.**

This course is taken as part of the Sports Nutrition Certificate. Techniques for screening and assessment of nutritional status of individuals and groups, including analyses of dietary intake, anthropometric measures, nutrition-focused physical assessment, biochemical measures, and assessment of Pharmacotherapy, in the context of fitness and athletics. SH. 3 s.h.

**Prereq.:** FNUT 1551.

**FNUT 5825 Current Nutrition Concepts 3 s.h.**

Readings and critical appraisal of research literature in nutrition.

**Prereq.:** FNUT 3759, CHEM 3705.

**FNUT 5850 Sports Nutrition Practicum 2 s.h.**

This course is taken as part of the Sports Nutrition Certificate. Application of sports nutrition and wellness principles learned in the classroom to situations in athletic and community settings. Provides opportunities for communication with diverse groups, critical thinking, and problem solving. Emphasis on practical application and skill development with hands-on training by practitioners in various areas in the fields of athletics and wellness. 4 hours per week for 7 weeks. Part of the Sports Nutrition Certificate Program.

**FNUT 5862 Food and Culture 2 s.h.**

Exploration of how identity, gender, ethnicities, class, and religion are related to food production, preparation and consumption. How foodways illustrate the experiences of local and immigrant communities.

**Prereq.:** SOC 1500.

**Prereq. or Coreq.:** FNUT 5862L.

**FNUT 5862L Food and Cultures Laboratory 1 s.h.**

Concurrent with: FNUT 5862. Three hours lab per week. Permit required.

**KSS 1500 Physical Activity Core Concepts 1 s.h.**

Essential concepts that document the relationship between physical activity and maintaining optimal health. Personal and social implications of physical inactivity are also explored. Two KSS activity courses must be taken in addition to this course to satisfy the requirements for GER credit.

**Gen Ed:** Well Being 2024, Social and Pers Awareness 2024.

**KSS 1502 Volleyball 1 s.h.**

Basic rules and fundamental skills of volleyball including serves, bump, overhead pass, and block.

**KSS 1503 Flight: 1st Year Student-Athlete Experience 2 s.h.**

An introduction to the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

**KSS 1504 Life After Sports 2 s.h.**

Life After Sports is a continuation of the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

**KSS 1508 Group Cycling 1 s.h.**

Introduction to improving fitness levels through group cycling. The emphasis in this class will be on improving cardiovascular fitness through indoor stationary cycling bicycles. All fitness levels are welcomed and will acquire fitness benefits.

**KSS 1509 Meditation 1 s.h.**

Overview of practical meditation theory, with diverse practices culled from the world's wisdom inheritance presented as guided meditation experiences. Historical perspective, along with relevant findings of current neuroscience research which support the efficacy of meditation are considered. The practices develop heightened awareness skills, whether practiced sitting, standing, walking, or supine.

**KSS 1512 Bowling 1 s.h.**

Fundamentals of bowling the straight ball. Equipment selection, correction of errors, and scoring. For beginning bowlers. The bowling lanes are located off campus. Transportation to the lanes is not provided.

**KSS 1514 Fencing 1 1 s.h.**

Fundamentals of foil fencing. Methods of attack and parry, and elementary bouting and judging.

**KSS 1516 Boxing for Beginners 2 s.h.**

This course consists of learning how to properly workout like a boxer. Students will be trained to use the proper equipment, and how to stand, move, punch, and train like a boxer preparing to competitively box. Students will NOT be actually boxing another competitor.

**KSS 1517L Horseback Riding 1 Lab 1 s.h.**

This course provides students with a fun way to enjoy recreational horseback riding while learning important riding skills. This course is off campus.

**Coreq.:** KSS 1517.

**KSS 1519 Racquetball 1 s.h.**

Racquetball rules and techniques for singles and doubles play. Basic strategy and skill development.

**KSS 1520 Golf 1 1 s.h.**

Fundamental skills of golf. Includes grip, stance, swing patterns, and putting as well as rules of course play.

**KSS 1522 Tennis 1 1 s.h.**

Fundamental skills of tennis including forehand and backhand drives and service. Basic rules, strategy, and method.

**KSS 1524 Physical Fitness and Exercise Program 1 s.h.**

Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control.

**KSS 1526 Marksmanship 1 s.h.**

The safety and practice of handling firearms. Target shooting in prone, kneeling and standing positions.

**KSS 1530 Learn to Swim 1 s.h.**

Introduction to swimming and survival skills, floating, drown-proofing, basic swim strokes (side, elementary back, and front crawl), beginning diving, and simple aquatic games. This course is designed for the student who cannot swim; it is not open to swimmers.

**KSS 1534 Fitness Swimming 1 s.h.**

Utilization of freestyle swimming stroke to improve/maintain fitness across the lifespan. Content includes stroke mechanics, turning technique, and swim training program design to meet individual fitness and health goals.

**Prereq.:** Ability to swim for 250 yards.

**KSS 1547 Flexibility and Core Training 1 s.h.**

When performed properly, flexibility can reduce injuries, help recover from injuries, correct muscle imbalances, and recover from exercise. Stretching has also been shown to promote relaxation and stress reduction. This course will cover flexibility utilizing flexbands. In addition, core work and light resistance training will be explored.

**KSS 1549 Varsity Competition 1 s.h.**

Credit may be obtained through competition in varsity athletic programs. Consent of coach required.

**KSS 1550 Pilates 1 s.h.**

Instruction in principles of body alignment and posture and participation as it pertains to fundamental Pilates techniques.

**KSS 1552 Yoga 1 s.h.**

Instruction in principles of meditation, body alignment and posture, and participation as it pertains to fundamental yoga techniques.

**KSS 1553 Yoga 2 1 s.h.**

Builds on the groundwork of fundamental postures, breathing, present moment awareness practices, and various methods for removal of mental and physical tensions introduced in KSS 1552. Practices are drawn from the inheritance of Yoga (Hatha and Raja), for further skill development for managing health and vitality of mind and body.

**Prereq.:** KSS 1552 or consent of instructor.

**KSS 1554 Fitness Walking 1 s.h.**

Information on the benefits of walking for fitness. Health advantages, appropriate conditioning, pace, warm-up and cool-down. Practical experience in the skills needed to achieve success in developing and adhering to a walking program.

**KSS 1555 Jogging 1 s.h.**

Holistic approach to the theory and practice of jogging with emphasis on the physiological benefits.

**KSS 1557 Weight Training 1 s.h.**

Introduction to progressive resistive exercise for men and women. Topics include strength training, types of equipment, exercise techniques, circuit training, competitive weightlifting, body building, and injury prevention.

**KSS 1559 Aerobic Conditioning Activities 1 s.h.**

Practical experience in activities that improve cardiovascular endurance. Such activities include, but are not limited to, aquatics, fitness walking and jogging.

**Prereq.:** Exercise science major.

**KSS 1560 Resistance Training 2 s.h.**

Concepts and applications of progressive resistance exercise. Emphasis on advanced principles and techniques for developing muscular strength and endurance for fitness and athletic performance. Two hours lab.

**Prereq.:** major in exercise science or permission of instructor.

**KSS 1563 Rock Climbing 1 s.h.**

Instruction and participation in fundamental rock climbing techniques that include safely constructing anchor systems, employing belay methods, equipment selection, and beginning climbing skills.

**KSS 1565 Self Defense 1 s.h.**

The defensive techniques of Judo and Aikido designed to counter attacks with a knife, club, gun or bare fist. Balance, control, safety, falling.

**KSS 1568 Taekwondo/Karate 1 s.h.**

An introduction to the history, philosophy and techniques of taekwondo/karate. Fundamental techniques include: stances, kicks, punches, and forms.

**KSS 1588 Selected Activities in Kinesiology and Sport Science 1 s.h.**

Knowledge of and practice in a particular area of dance, fitness, or sport.

Activity is announced each time the course is offered. May be repeated up to 4 s.h. with change in topic.

**KSS 1590 Foundations of Fitness 3 s.h.**

Students will learn the fundamentals of fitness as it relates to lifestyle choices and health. Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control will be used to develop a personal fitness program through personal goals.

**KSS 1595 Introduction to Kinesiology and Sport Science 2 s.h.**

Introduction to physical education, exercise science and related professions. Includes exploration of the general concepts, goals, aims, objectives, professional organizations, scholarly literature, sub-disciplines within the field, and career employment opportunities.

**KSS 2605 Sports First Aid and Injury Prevention 3 s.h.**

Basic injury prevention, evaluation, and emergency care. Certification in ARC Standard First Aid and Adult CPR. Basic wrapping and strapping techniques used with common sports injuries. Two hours lecture, two hours lab.

**Prereq.:** Exercise science major, Wellness minor, or consent of instructor.

**KSS 2625 Pedagogical Aspects of Exercise Science 3 s.h.**

Effective instructional practices and development of organizational skills and characteristics required for teaching in exercise programs. Two hours lecture, two hours lab.

**KSS 2699 Sport in American Culture 3 s.h.**

Sport in American culture from the colonial period to the present as it relates to such areas as education, literature, film and drama, minorities, politics, professional sport, religion and urbanization.

**KSS 3700 Exercise Evaluation and Testing 4 s.h.**

Theory and practice of pre-exercise evaluation, exercise testing, and results interpretation for generally healthy populations, according to American College of Sports Medicine (ACSM) guidelines. Includes a minimum of 30 hours of field experience.

**Prereq.:** Major, KSS 3710 and KSS 3710L.

**KSS 3710 Physiology of Exercise 4 s.h.**

Acute responses and chronic adaptations of the body to physiological demands of physical activity. Topics related to the optimization of performance in sport and exercise include neuromuscular and cardiorespiratory function, energy production and utilization, and environmental influences.

**Prereq.:** Exercise Science major.

**KSS 3710L Physiology of Exercise Laboratory 1 s.h.**

Experiments and basic laboratory procedures in the field of exercise physiology. Concurrent with: KSS 3710.

**KSS 3720 Kinesiology and Applied Anatomy 4 s.h.**

Muscular structure and function in relation to physical movement; analysis of fundamental movements.

**Prereq.:** KSS 1595.

**KSS 3725 Mindfulness 2 s.h.**

Mindfulness is a state of active, open attention on the present and the practice of being aware moment-to-moment. Students will learn techniques of mindfulness. Topics include breath awareness, sitting meditation, body scanning, walking meditation, eating meditation, yoga, loving kindness and yoga nidra.

**Prereq.:** PSYC 1560 or KSS 1590.

**KSS 3730 Exercise Prescription 4 s.h.**

Theory and practice of exercise prescription based on metabolic calculations for apparently healthy populations, older adults, children/adolescents, pregnant women, and those with obesity, dyslipidemia, and hypertension. Includes approximately 18 hours of field experience. Content based on American College of Sports Medicine objectives.

**Prereq.:** KSS 3700.

**KSS 3750 Principles of Coaching 2 s.h.**

The scientific, psychological, and management aspects of coaching. Includes ethics and management responsibilities, personnel management, community relations, conditioning, and other related topics.

**Prereq.:** Junior standing.

**KSS 3760 Strength Training and Conditioning 3 s.h.**

Scientific principles, concepts, and adaptations to resistance exercise. Practical application of lifting and spotting technique, testing procedures, program design, and organization and administration of the strength and conditioning facility. Two hours lecture, two hours lab.

**Prereq.:** KSS 1560 and KSS 3710.

**KSS 3765 Athletic Training 1 2 s.h.**

Practical and theoretical aspects of the prevention of athletic injuries. Includes supplies, wrapping and strapping, protective equipment. Emphasizes prevention, evaluation, and emergency care. One hour lecture, two hours lab.

**Prereq.:** KSS 1595 and KSS 2605.

**KSS 4805 Administration of Exercise Programs 3 s.h.**

Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

**Prereq.:** KSS 3700.

**KSS 4810 Clinical Exercise Testing and Prescription 4 s.h.**

Theory and practice of clinical exercise testing, including electrocardiography, and prescription, for those with cardiovascular disease, pulmonary disease, diabetes, kidney disease, diabetes, and cancer. Includes approximately 36 hours of field experience. Content based on American College of Sports Medicine objectives.

**Prereq.:** KSS 3730.

**KSS 4865 Athletic Training 2 2 s.h.**

Advanced techniques of athletic training with emphasis on evaluation, treatment and rehabilitation of athletic injuries. Topics include application of therapeutic modalities, reconditioning programs, and the role of the athletic trainer in sports medicine. One hour lecture, two hours lab.

**Prereq.:** KSS 3765.

**KSS 4870 Exercise and Aging for Health Professions 3 s.h.**

For majors in Gerontology/Health Professions who work with older adults in exercise/physical activity programs. Emphasis on physical aspects/limitations of aging, exercise testing, prescription, and programs for the elderly. Not applicable to the major in Exercise Science.

**Prereq.:** Senior standing or permission of instructor.

**KSS 4875 Exercise Counseling and Behavioral Strategies 4 s.h.**

Exercise Counseling and Behavioral Strategies Evidence-based theories and domains geared toward fostering change, growth, and self-actualization in exercise. The scientific foundations of basic exercise counseling and behavioral strategies that enable effective wellness coaching are explored.

**Prereq.:** Junior standing.

**KSS 4880 Internship 8 s.h.**

A culminating experience in an approved fitness or sports-related setting under the direct supervision of a qualified individual and coordinated by a supervising faculty member. Requires 400 hours to obtain 8 s.h. May be taken concurrently with KSS 4875.

**Prereq.:** Completion of Exercise Science core requirements through KSS 4810.

**KSS 4888 Selected Topics in Kinesiology and Sport Science 1-3 s.h.**

In-depth study of special subject matter within the field of physical education. Topic announced each time course is offered. May be repeated for a maximum of 6 s.h. with change in topic.

**Prereq.:** 72 s.h. or consent of instructor.

**KSS 4890 Undergraduate Research 1-3 s.h.**

Research participation under the direction and guidance of a full-time faculty member. Provides the advanced student with research experience in KSS. May be repeated to a maximum of 6 s.h. Junior standing or permission of instructor.

**Prereq.:** none.