

FACULTY

DIVISION HEAD
Fontaine C. Piper

PROFESSORS
John A. Applegate, Paula S. Cochran, Jerry Mayhew,
Fontaine C. Piper

ASSOCIATE PROFESSORS
Michael Bird, Carolyn C. Cox, Carlton O. DeFosse, Janet
L. Gooch, Stephen Hadwiger, Christopher Lantz, James
Padfield, Stephanie Powelson

ASSISTANT PROFESSORS
Sarah P. Delaware, Pam Gardner, Mariquit Hadwiger,
Jennifer Eldridge Houser, Jeremy Houser, Jody Frame Kelly,
Alex Koch, Regina Lindhorst, Rebecca McClanahan,
Sharon A. McGahan, JoAnn Weekley, Brenda Wheeler, Amy
F. Wilson

INSTRUCTORS
Jeff Arabas, Alf Bilbao, Evonne Bird, Michelle Boyd, Mike
Cannon, John Cochrane, Mary Lou Cole, Matt Copeland,
Alice Davis, Tim Deidrick, Joseph Fanthorp, Marne Fauser,
Troy Garrett, Eric Horning, Jeff Jacques, Melody Jennings,
Elizabeth Jorn, Pete Kendall, Erik Kruppe, Colleen Murphy,
Matthew Nelson, Teak Nelson, Lacey Schanz, Edward
Schneider, Jack Schrader, David Schutter, Larry Scully,
John Sloop, Qi Wang, John Ware, Corrie Willis, Dan
Zimmer

DIRECTOR OF COMMUNICATION DISORDERS
John A. Applegate

DIRECTOR OF HEALTH AND EXERCISE SCIENCES
Christopher Lantz

DIRECTOR OF NURSING
Stephanie Powelson

CLINICAL SUPERVISOR (Communication Disorders)
Sheila Garlock
Melissa Passe

DEGREES OFFERED

Bachelor of Arts, BA
Bachelor of Science, BS
Bachelor of Science in Nursing, BSN
Master of Arts, MA

UNDERGRADUATE MAJORS

Communication Disorders
Exercise Science
Health Science
Nursing

HUMAN POTENTIAL AND PERFORMANCE

The Division of Human Potential and Performance is home for disciplines that focus on Applied Life Sciences. Each degree program is grounded in liberal arts and sciences that serve as the foundations for content studied within the major. Communication Disorders, Exercise Science, Health Science, and Nursing require their students to participate in clinical and/or internship experiences that allow the student to apply didactic studies in real world settings. Programs within the division are accredited by national, state and professional boards that allow students to be eligible for certification and licensure. In addition to meeting the needs of its majors, the HPP disciplines offer interdisciplinary support courses for other university areas of study.

The intense concentration on career preparation ensures a high level of student-faculty interaction that affords various opportunities for individualized learning. Research is highly valued in the various HPP disciplines as is seen in the number of student research presentations at state, regional and national conferences. Each discipline offers students an opportunity to become members of their respective student honor societies. These societies allow students to gain valuable leadership experience that further enhances their marketability upon graduation.

The faculty members within the division are highly student-oriented, willing to share their time and knowledge outside the classroom as well as within. This personal interest contributes to the reason for the high number of graduates that elect to continue their education in graduate or professional schools.

COMMUNICATION DISORDERS

The undergraduate major in Communication Disorders is designed to provide a broad background in normal communication processes, an introduction to the techniques and tools with which speech, language, and hearing disabilities are evaluated, and an introduction to the characteristics of disorders of communication in adults and children. The American Speech-Language-Hearing Association (ASHA) explicitly recommends that the best preparation for graduate work in communication disorders is a strong undergraduate background in liberal arts and sciences. The undergraduate major in communication disorders, in conjunction with the Truman general education curriculum, is designed to provide such preparation.

2
0
0
3
-
2
0
0
5

HUMAN POTENTIAL AND PERFORMANCE

HUMAN
POTENTIAL
AND
PERFORMANCE

An undergraduate major in communication disorders draws from the content and methodologies associated with many closely related areas of study, such as linguistics (phonetics), psychology (language development), biology (anatomy of speech and hearing, audiology), physics (speech and hearing science), and education (principles of clinical practice, aural rehabilitation). Courses in the major are carefully sequenced, leading to a senior-level culminating experience. Students choose a clinical or non-clinical culminating experience, depending upon their qualifications, interests, and long-term career goals.

Students who have questions about majoring in communication disorders should contact the Program Director in Communication Disorders (660-785-4669) for more information. The number of students permitted to major is limited.

Special Facilities

The Communication Disorders program staffs and maintains the Truman State University Speech and Hearing Clinic. The Clinic has individual and group therapy rooms, observation facilities, and modern closed-circuit TV and videotaping capabilities to facilitate supervision and observation by student clinicians and client family members. An audiological testing suite is available for complete hearing evaluations. The Kenneth M. McGuire Clinical Media Center houses the Clinic's extensive collection of diagnostic and therapy materials and is used by student clinicians as they prepare for therapy and complete other case management tasks. Student clinicians make use of the Clinical Computing Lab to explore and prepare clinical applications of computers for direct use with clients. Additional multimedia technologies readily available for use include interactive videodisc, CD-ROM, as well as both sound and video digitizing. A component of the Clinic is the Truman State University Rite Care Early Literacy Lab.

The Clinic is open throughout the academic year and summer semesters, serving a local and regional population of all ages. Members of the university community including students, faculty, staff and their families are also served by the Clinic. All Clinic services are provided under the supervision of faculty who are licensed by the Missouri State Board of Registration for the Healing Arts and certified by the American Speech-Language-Hearing Association.

General Information

The Bachelor's degree in Communication Disorders can serve as strong preparation for a number of careers which require specialized graduate level study, including speech-language pathology, audiology, special education, and others in health, education, or communication-related fields. It is considered a pre-professional degree by the American Speech-Language-Hearing Association. Undergraduate majors are encouraged to consider graduate education alternatives, and assisted in making plans to do so. Master's level work is required in order to obtain professional credentials such as certification by the American Speech-Language-Hearing Association, Missouri State Teaching Certification, and the state license from the Missouri State Board of Registration for the Healing Arts.

Courses designated as Required Support for the major in Communication Disorders are chosen to help students meet a variety of certification requirements. Substitutions

should be considered only after consultation with an academic advisor who is well-informed about the details of the curriculum.

All student majors must observe a minimum of 25 clock hours of evaluation and/or intervention services as approved by the Truman Communication Disorders faculty. These observations normally take place in the Truman Speech and Hearing Clinic. Note that observations must be completed as a prerequisite to enrolling for either undergraduate or graduate level clinical practicum (CMDS 480, CMDS 681).

**COMMUNICATION DISORDERS
BACHELOR OF SCIENCE**

Semester
Hours

Liberal Studies Program Requirements	32-57
Missouri Statute Requirement	1-3
POL 161, American National Government is recommended to meet this, as well as Missouri teacher certification requirements.	
Required Support	14-23
PSYC 166 General Psychology**	3
ENG 238 Introduction to Linguistics	3
PSYC 332 Child Development	OR
ED 230 Early Childhood Growth & Development	3
ED 389 Foundations of Education	2
ED 593 Psychological Foundations of Education	3
SED 535 Counseling, Collaboration, and Consultation with Parents and Families	3
HIST 104 United States History I, 1607-1877**	OR
HIST 105 United States History II, 1877-Present**	3
POL 161 American National Government	3
**May be used to fulfill Liberal Studies Program Requirements.	

Bachelor of Science Requirements	6
Complete 6 hours from the following (with approval of advisor):	
BIOL 365 Human Anatomy	4
PHYS 185 College Physics I	4
SOAN 331 Linguistic Anthropology	3
HLTH 346 Microcomputer Applications	OR
ES 346 Microcomputer Applications	3
Any 300- or 400-level PSYC course	

MAJOR REQUIREMENTS	33
CMDS 200 Introduction to Communication Disorders	3
CMDS 261 Phonetics	3
CMDS 380 Principles of Clinical Management	3
CMDS 460 Language Development	3
CMDS 470 The Speech Mechanism	3
CMDS 472 Audiology	3
CMDS 473 Aural Rehabilitation	3
CMDS 474 Speech and Hearing Science	3
CMDS 477 Articulation and Phonology	3
CMDS 490 Organization and Administration of Speech Pathology Services	4

Capstone Experience:
OPTION 1 (Clinical)
CMDS 480 Clinical Practice 1.5
Course taken twice. (See course description for CMDS 480. A prerequisite 3.0 GPA overall AND in all CMDS courses is required.) Students majoring in Communication Disorders

must demonstrate clinically appropriate speech/language/hearing skills prior to enrollment in clinical practicum.

OPTION 2 (Non-Clinical)

CMDS 489 Culminating Experience in Communication Disorders3

Certification also requires two science courses with lab components; AGSC 100 does **not** meet certification requirements.

Electives to Total **128**

NOTE: Communication Disorders majors must have a 2.50 cumulative G.P.A. and a 2.50 in the major in order to graduate.

**COMMUNICATION DISORDERS
BACHELOR OF ARTS**

Semester

Hours

Liberal Studies Program Requirements32-57

Missouri Statute Requirement1-3

POL 161, American National Government is recommended to meet this, as well as Missouri teacher certification requirements.

Required Support14-23

PSYC 166 General Psychology**3

ENG 238 Introduction to Linguistics3

PSYC 332 Child Development **OR**

ED 230 Early Childhood Growth & Development 3

ED 389 Foundations of Education2

ED 593 Psychological Foundations of Education .3

SED 535 Counseling, Collaboration, and

Consultation with Parents and Families .3

HIST 104 United States History I, 1607-1877** **OR**

HIST 105 United States History II, 1877-Present** .3

POL 161 American National Government3

**May be used to fulfill Liberal Studies Program

Requirements.

Bachelor of Arts Requirements0-6

Intermediate proficiency in ONE foreign language

MAJOR REQUIREMENTS33

CMDS 200 Introduction to Communication Disorders .

3

CMDS 261 Phonetics3

CMDS 380 Principles of Clinical Management3

CMDS 460 Language Development3

CMDS 470 The Speech Mechanism3

CMDS 472 Audiology3

CMDS 473 Aural Rehabilitation3

CMDS 474 Speech and Hearing Science3

CMDS 477 Articulation and Phonology3

CMDS 490 Organization and Administration of Speech

Pathology Services4

Capstone Experience:

OPTION 1 (Clinical)

CMDS 480 Clinical Practice1.5

Course taken twice. (See course description. A prerequisite

3.0 GPA overall and in all CMDS courses is required.)

Students majoring in Communication Disorders must

demonstrate clinically appropriate speech/language/hear-

ing skills prior to enrollment in clinical practicum.

OPTION 2 (Non-Clinical)

CMDS 489 Culminating Experience in Communication Disorders3

Certification also requires two science courses with lab components; AGSC 100 does **not** meet certification requirements.

Electives to Total **128**

Note: Communication Disorders majors must have a 2.50 cumulative G.P.A. and a 2.50 in the major in order to graduate.

**CMDS COURSE SEQUENCE (MAJOR REQUIREMENTS)
FRESHMAN YEAR—FALL OR SPRING**

CMDS 200 Introduction to Communication Disorders .

3

SOPHOMORE YEAR—FALL

CMDS 261 Phonetics3

SOPHOMORE YEAR—SPRING

CMDS 460 Language Development3

Prerequisites: CMDS 200, 261, or instructor's permission

JUNIOR YEAR—FALL

CMDS 470 The Speech Mechanism3

Prerequisites: CMDS 200, 261, 460, or instructor's permission

CMDS 472 Audiology3

Prerequisites: CMDS 200, 261, 460, or instructor's permission

JUNIOR YEAR—SPRING

CMDS 380 Principles of Clinical Management3

Prerequisites: CMDS 200, 261, 460, 470, 472, or instructor's permission. Majors only.

CMDS 473 Aural Rehabilitation3

Prerequisites: CMDS 200, 261, 460, 470, 472, or instructor's permission

CMDS 477 Articulation and Phonology3

Prerequisites: CMDS 200, 261, 460, 470, 472, or instructor's permission

SENIOR YEAR—FALL

CMDS 474 Speech and Hearing Science3

Prerequisites: CMDS 200, 261, 460, 470, 472, 380, 473, 477, or instructor's permission

CMDS 490 Organization and Administration of Speech Pathology Services4

Prerequisites: CMDS 200, 261, 460, 470, 472, 380, 473, 477, or instructor's permission. Majors only.

OPTION 1

CMDS 480 Clinical Practice1.5

Prerequisites: CMDS 200, 261, 460, 470, 472, 380, 473, 477, or instructor's permission. Majors only.

SENIOR YEAR—SPRING

OPTION 1

CMDS 480 Clinical Practice1.5

Prerequisites: CMDS 200, 261, 460, 470, 472, 380, 473, 477, or instructor's permission. Majors only.

2
0
0
3
-
2
0
0
5

**HUMAN
POTENTIAL
AND
PERFORMANCE**

OPTION 2
 CMDS 489 Culminating Experience in
 Communication Disorders 3
 Prerequisites: CMDS 200, 261, 460, 470, 472, 380, 473,
 477, 490, or instructor's permission. Majors only.

COURSE DESCRIPTIONS

CMDS 200 – Introduction to Communication Disorders
3 hours
 Review of normal speech, language, and hearing develop-
 ment and acquired disorders of speech and language in
 children and adults. Theories of etiology and examples of
 traditional intervention strategies. Potential impact of
 speech or language impairment on the social, emotional,
 and vocational aspects of a person's life.

CMDS 260 – Voice and Articulation
3 hours
 Fundamentals of spoken communication with emphasis
 on voice and diction. Oral class presentations are required
 and students learn to make use of self evaluation and peer
 critique. Participants learn optimal use of their own voice
 and articulation for effective oral communication. This
 course is open to non-CMDS majors as well as majors.

CMDS 261 – Phonetics
3 hours
 Study of the speech sounds of language with emphasis on
 American English. Participants practice broad and narrow
 transcription of speech using the International Phonetic
 Alphabet. Comparisons of Standard American English pro-
 nunciation with regional and social dialects.

CMDS 380 – Principles of Clinical Management
3 hours
 Introduction to assessing human communication behavior
 and planning intervention for improving speech and lan-
 guage abilities. Introduction to principles of professional
 and ethical conduct. Participants observe persons with
 communication disorders and intervention techniques in
 the Truman State University Speech and Hearing Clinic.
 Prerequisites: CMDS 200, 261, 460, 470, 472, or instruc-
 tor's permission. Majors only.

CMDS 460 – Language Development
3 hours
 Study of typical language development in children from
 birth to adolescence. Theories of language development
 and placing language in the context of motor, cognitive,
 and social development. Language observation and linguis-
 tic analysis techniques; comparison of Standard American
 English to major social dialects. Relationship between lan-
 guage development and literacy. Prerequisites: CMDS 200,
 261, or instructor's permission.

CMDS 470 – The Speech Mechanism
3 hours
 Study of anatomy, neuroanatomy, and physiology of the
 human speech mechanism. Coverage includes upper body
 skeletal, muscular, respiratory, and nervous systems.
 Focus on respiration, phonation, resonance, and articula-
 tion. Prerequisites: CMDS 200, 261, 460, or instructor's
 permission.

CMDS 472 – Audiology
3 hours
 Introduction to the anatomy and physiology of the human
 ear and the process of hearing. Basic principles of hearing
 assessment and characteristics of hearing disorders.
 Participants develop familiarity with the procedures and
 instrumentation used to measure human hearing and
 speech perception. Prerequisites: CMDS 200, 261, 460, or
 instructor's permission.

CMDS 473 – Aural Rehabilitation
3 hours
 Approaches to assisting persons with hearing impairment
 to maximize their communication with other people.
 Includes strategies such as speech-reading, speech conver-
 sation, and auditory training. Characteristics of deaf cul-
 ture and current issues in hearing impairment interven-
 tion. Prerequisites: CMDS 200, 261, 460, 470, 472, or
 instructor's permission.

CMDS 474 – Speech and Hearing Science
3 hours
 Study and measurement of the acoustic characteristics of
 speech. Includes introduction to the physics of sound,
 review of speech production, and historical perspectives on
 the study of sound and scientific instrumentation. Lab
 assignments require instrumental analysis of speech signals.
 Prerequisites: CMDS 200, 261, 380, 460, 470, 472, 473,
 477, or instructor's permission.

CMDS 475 – Sign Language
3 hours
 An introduction to the comprehension and use of sign lan-
 guage (signs, fingerspelling, and numbers). Participants
 will obtain a basic sign vocabulary and learn about the
 structure of American Sign Language. Open to any regular
 student currently enrolled at the University.

CMDS 477 – Articulation and Phonology
3 hours
 This course serves as an introduction to articulation and
 phonology. This course aims to provide students with a
 scientific understanding of the nature of both phonological
 and articulatory disorders as well as assist them in apply-
 ing this knowledge to clinical situations. Prerequisites:
 CMDS 200, 261, 470, and 472, or instructor's permission.

CMDS 480 – Clinical Practice
1.5 hours
 This course, when completed twice, comprises Option 1
 for the Capstone Integrating Experience in
 Communication Disorders. The student will obtain direct
 clinical experience with clients who exhibit a variety of
 communication disorders. Student responsibilities include:
 writing lesson plans; conferring with clinical supervisor
 and parents; utilizing clinical materials, equipment and
 computer programs; and writing reports. Taken by consent
 of instructor. May be repeated. Initial registration is limited
 to one and one half (1.5) hours. Registration for summer.
 Prerequisite: Observation of 25 hours of evaluation and
 management and a 3.0 grade point average overall and in all
 CMDS courses. Prerequisites: CMDS 200, 261, 380, 460,
 470, 472, 473, 477, or instructor's permission. (Majors only).

CMDS 488 – Independent Studies

1-3 hours

Special problems and research in language, communication disorders, audiology, special population, and related areas. Prerequisites: Advanced arrangement with instructor is required.

CMDS 489 – Culminating Experience in Communication Disorders

3 hours

This course comprises Option 2 for the Capstone Integrating Experience in Communication Disorders. The course is designed to allow students to integrate their knowledge of speech/language pathology with skills in professional writing. To this end, students will write weekly papers summarizing topic presentations given by professionals or viewed from videos. Topics may range from Alzheimer's disease to deafness. Students will refine their writing by demonstrating weekly improvements in the areas of content, grammar, and punctuation. In addition, students will log instructor's comments and corrections onto a weekly recording form. Implications that these topics have for society, people needing services, and service providers will be addressed. Prerequisites: CMDS 200, 261, 380, 460, 470, 472, 473, 477, 490, or instructor's permission. (Majors only)

CMDS 490 – Organization and Administration of Speech Pathology Services

4 hours

Organizational structures and administrative practices related to the provision of services to persons with communication disorders. Characteristics of professional practice in a variety of settings, with emphasis on relevant legal statutes and guidelines. History of the development of communication disorders as an interdisciplinary field of research and professional practice; current professional issues. Prerequisites: CMDS 200, 261, 380, 460, 470, 472, 473, 477, or instructor's permission. (Majors only)

CMDS 560 – Professional Writing Seminar

1-3 hours

This seminar will provide the student in Communication Disorders with intensive instruction in clinical writing in preparation for the clinical experience as well as future employment. The following areas of writing will be addressed: format of scientific writing, diagnostic reports, treatment plans, SOAP notes, professional correspondence, Individual Education Plans (IEP), and ethical issues in report writing. Prerequisite: CMDS 380 or consent of instructor.

CMDS 561 – Advanced Speech Pathology

3 hours

Will emphasize the study of normal and deviant development of the areas of orofacial, fluency, voice, and articulation. Emphasis will also be placed on etiology, symptomatology, and remediation procedures within each area.

CMDS 562 – High Risk Infants

3 hours

Familiarizes students with the concept of high risk as it applies to infants. Factors which contribute to a high-risk label being applied to an infant will be discussed. The developmental outcome of high-risk infants during the preschool and school age years will be presented. Assessment and intervention strategies, as well as available

materials, will be outlined. Parental and family concerns will also be discussed relative to the special adjustments and needs of the high-risk infant.

CMDS 564 – Voice Disorders

3 hours

Theories of voice production, emphasizing voice defects, related pathologies, and therapeutic procedures.

CMDS 566 – Diagnosis of Communication Disorders

3 hours

Etiologies of communication disorders, emphasizing diagnostic procedures, interviews, history techniques, parental counseling, report writing, and referral. Prerequisite: consent of instructor and eligibility for CMDS 480, Clinical Practice.

CMDS 568 – Phonological Disorders

3 hours

An overview of phonological theory, evaluation, and treatment methods for disorders of phonology enabling the student to effectively design a therapeutic program.

CMDS 578 – Clinical Applications of Computers in Communication Disorders

3 hours

This course presents an overview of the computer applications available to clinicians for diagnosis and remediation of persons who have communication disorders. Emphasis will be placed on applications which are used directly with clients in speech and language intervention. Prerequisite: permission of instructor, prior experience with special populations such as CMDS 480, Clinical Practice or CMDS 681, Advanced Clinical Practice, or SED 640, Practicum.

FACULTY
CREDENTIALS

Note: Date in parentheses indicates year of employment at Truman. *Indicates graduate faculty.

John A. Applegate

Professor and Director of Communication Disorders*
BA, Muskingum College; MA, Ohio University; PhD, Kent State University. (1980)

Paula S. Cochran

Professor of Communication Disorders*
BA, College of Wooster; MA, Ohio University; PhD, University of Virginia. (1987)

Carlton O. DeFosse

Associate Professor of Communication Disorders*
BS, Western Illinois University; MA, Western Illinois University; PhD, University of Toledo. (2001)

Sheila J. Garlock

Clinical Supervisor in Communication Disorders
BSE, Northeast Missouri State University; MA, Northeast Missouri State University. (1996)

HUMAN
POTENTIAL
AND
PERFORMANCE

Janet L. Gooch

Associate Professor of Communication Disorders*
BA, University of Kansas; MA, Kent State University; PhD,
Case Western Reserve University. (1995)

Melissa Passe

Clinical Supervisor in Communication Disorders
BS, MA, Northeast Missouri State University. (1992)

Amy F. Wilson

Assistant Professor of Communication Disorders*
BM, Florida State University; PhD, University of South
Alabama. (2003)

HEALTH AND EXERCISE SCIENCES

MISSION OF THE PROGRAM

The mission of the Health and Exercise Sciences Program is to attract students of strong academic ability and character, and to empower them with knowledge, skill, and the ability to facilitate improvement in the human condition and the greater society. Further, Health and Exercise Sciences students should grow to embrace a commitment to life-long learning and be good stewards of health, human movement, and personal well-being.

PROGRAM PHILOSOPHY

The Health and Exercise Sciences faculty and staff are dedicated to providing students a first class education facilitated through a nurturing and supportive environment. The student-centered philosophy creates a learning community whereby faculty and students work collectively in the pursuit of knowledge and application. Problem-based learning, practical experience and scholarly research are utilized as primary vehicles in the achievement of these objectives.

Students who have questions about majoring in Health Science or Exercise Science should contact the Health and Exercise Sciences Program at (660) 785-4456 or by e-mail (hes@truman.edu).

DEPARTMENTAL HONORS PROGRAM PURPOSES

1. To address the special needs of outstanding students by providing a focus for formulating personal goals, developing self-esteem, and increasing the desire for self-directed learning.
2. To contribute to the general advancement of learning by encouraging the active pursuit of academic goals, as exemplified by research, scholarly activity, and creative endeavor.

ELIGIBILITY

Any Health Science or Exercise Science major who attains the following will receive Departmental Honors. Student must take application to the Health and Exercises Program Office, PB 212, during graduating semester.

1. Major GPA of 3.5 or higher.
2. Overall GPA of 3.5 or higher.
3. Complete a Research Project.
4. *Present at Student Research Conference, present at a professional conference, or publish a paper (a paper that has been submitted or accepted for publication would qualify).
5. Obtain combined verbal and quantitative assessment score of 1100 or higher on GRE, or 27 or higher on the

MCAT, or pass a national, major-specific certification exam (ACSM, NATA, CHES, NSCA). Personal training and aerobic certifications do not apply.

6. Receive concurrence from majority of HES faculty.
*“Present” means that the individual was a major contributor to the research paper (assisted in the data collection, assisted in the data reduction and analysis, and assisted in preparation of manuscript, poster or oral presentation). A major contributor is one who participates meaningfully in all parts of the project, not a person who simply assisted with data collection. The faculty mentor is responsible for verifying level of participation.

EXERCISE SCIENCE MAJOR

The Bachelor of Science degree in Exercise Science is grounded in a strong liberal arts and sciences foundation. Courses within the discipline are rooted in the basic sciences of physics, biology, chemistry, and psychology. Exercise Science majors engage in the study of all aspects of human movement including motor skill development and acquisition, movement production and efficiency, energy systems and metabolism, anatomical structures (cadaver anatomy lab), and psycho-sociological influences. Students also engage in the advanced study of a selected concentration area (pattern) in the human movement or allied health professions. The major culminates in a four-credit, 200-hour required summer field experience. Depending on the student’s specialized interest, the field experience provides opportunities to design and implement programs in an organizational setting under the supervision of highly qualified professionals in the field.

Assessment is a core institutional value and is a substantive component of the Exercise Science Program. Faculty members evaluate teaching effectiveness through pre/post assessment and student evaluations. Many faculty employ additional modes of assessment to garner information regarding specific aspects of their courses or teaching style. The Graduate Record Examination (GRE) serves as the senior test for all Exercise Science majors. Many students also sit for the certification exams of the National Athletic Training Association, National Strength and Conditional Association, and the American College of Sports Medicine.

A significant feature of the Exercise Science Program is the use of scholarly research to facilitate learning. Students are provided numerous in-class opportunities to conduct research on a variety of self-selected topics. The Program’s Human Performance Laboratory and Biomechanics/Motor Learning and Control Laboratory represent important resources for the facilitation of student research. Interested students are also provided substantial opportunity to conduct independent research under the guidance of faculty mentors. These projects are often presented at the local, state, and national levels and provide students with excellent opportunities for professional and personal growth.

Outcome Statements of the Exercise Science Major

The primary objective of the Exercise Science Program is to assist students in preparing themselves for success in graduate study or to be competent practitioners in the allied health or other human movement related professions. Graduates of the Exercise Science program should:

1. Develop the ability to assimilate, synthesize, and apply information from multiple sources and disciplines;

2. Appreciate the need to maintain current knowledge in the field and develop the skills necessary to maintain that knowledge;
3. Become critical thinkers, consumers, and competent practitioners of research design and statistical analysis;
4. Analyze and assess human movement in a variety of developmentally appropriate levels and contexts;
5. Understand the mechanisms underlying behavior change and to facilitate the consumption and integration of positive behaviors by the persons with whom they work;
6. Acquire skills to plan, implement, and evaluate effective exercise or health-related intervention programs.

**EXERCISE SCIENCE
BACHELOR OF SCIENCE**

	Semester	Hours
Liberal Studies Program Requirements	32-57	
Missouri Statute Requirement	1-3	
Required Support	9-29	
BIOL 107 Introductory Biology I**	4	
ES 344 Growth & Motor Development	3	
ES 346 Microcomputer Applications	3	
HLTH 150 Nutrition in Health and Wellness	3	
Health option of the Personal Well-Being Liberal Studies Requirement**	2	
MATH 192 Essentials of Calculus** OR		
MATH 194 LAS Calculus** OR		
MATH 198 Analytic Geometry and Calculus I**	3-5	
PSYC 166 General Psychology**	3	
SOAN 190 Sociological Inquiry** OR		
SOAN 191 Anthropological Inquiry**	3	
STAT 190 Basic Statistics**	3	

**May be used to fulfill LSP requirements.

Bachelor of Science Requirements **8**

BIOL 325 Human Physiology	4
BIOL 365 Human Anatomy	3
BIOL 365 Human Anatomy Lab	1

MAJOR REQUIREMENTS **34-37.5**

Complete each of the following:

ES 190 Foundations of Exercise Science	3
ES 205 Community First Aid and CPR	2
ES 232 Sport Management* OR	
ES 435 Athletic Training Room Management*	3
ES 247 Data Interpretation in Exercise Science	2
ES 270 Research Methods in Exercise Science	2
ES 280 Principles of Athletic Training (3) OR	
ES 431 Injury Care of Active People (2)	2-3
ES 334 Physiological Assessment	3
ES 342 Concepts of Biomechanics	3
ES 343 Motor Learning and Control	2
ES 343 Motor Learning and Control Lab	1
ES 345 Introduction to Exercise Physiology	3
ES 502 Social Problems in Sport OR	
ES 503 Exercise and Sport Psychology	3

*Not required for Pre-Medicine Pattern.

Activities (4.0-6.5 hours)

(Select one (1) course from each of Areas A, B, C, and D; then select any additional course(s) from any area below (A-F) to equal 1 additional hour.)

A. Recreational Dance (select a minimum of one course)	
ES 154 Ballroom Dancing	1
ES 159 Social & Country/Western Dance	1
ES 211 Folk and Social Dance	1
B. Swimming (select a minimum of one course)	
ES 130 Beginning Swimming	1
ES 131 Intermediate Swimming	1
ES 133 Lifeguard Training	2
ES 134 Lifeguard Training Instructor	2
ES 135 Water Safety Instructor	2
ES 172 Analysis of Swimming	1
C. Team Sports (select a minimum of one course)	
ES 173 Analysis of Football	1/2
ES 174 Analysis of Basketball	1/2
ES 176 Analysis of Volleyball	1/2
ES 177 Analysis of Softball	1/2
ES 178 Analysis of Soccer	1/2
ES 179 Outdoor Activities*	1/2
*Required for Physical Education/Health/Coaching pattern	
D. Individual Activities (select a minimum of one course)	
ES 170 Analysis of Gymnastics	1
ES 180 Analysis of Tennis	1/2
ES 181 Analysis of Badminton	1/2
ES 183 Analysis of Fencing	1/2
ES 184 Analysis of Golf	1/2
ES 185 Analysis of Weight Training	1/2
ES 186 Outdoor Venture Activities*	1/2
ES 187 Analysis of Wrestling	1/2
ES 188 Analysis of Racquetball	1/2
ES 189 Analysis of Track and Field	1/2
*Required for Physical Education/Health/Coaching pattern	
E. Aerobic Activity	
ES 200 Techniques of Aerobic Dance	1
F. Dance*	
ES 156 Beginning Tap Dancing	1
ES 157 Beginning Jazz Dance	1
ES 212 Modern Dance	1
ES 214 Elementary Ballet	1
ES 215 Intermediate Ballet	1
ES 236 Creative Dance for Children	1
ES 256 Intermediate Tap Dancing	1
ES 257 Intermediate Jazz Dancing	1

Capstone Experience **1**

ES 450 Senior Seminar	1
Patterns approved by advisor♦	20-35
Electives to total minimum of	124

Graduation Requirements

1. An overall cumulative 2.0 GPA
2. A 2.0 GPA in all courses completed at Truman
3. A 2.5 GPA in select major, required support and BS requirements (see advisor or program office for specific courses)
4. 40 hours of 300-400-500-level courses
5. Grade of "D" or higher must be achieved in all required support, BS requirements, major and pattern requirements

EXERCISE SCIENCE PATTERNS

♦ To enable the students to explore and develop more specialized interests, the Exercise Science curriculum allows the selection of one career pattern ranging from 20-35 hours. Individualized patterns may also be designed to meet personal goals. A copy of the specific courses for each of the patterns can be obtained from the Health and Exercise Sciences program office or the discipline's

2003-2005

HUMAN
POTENTIAL
AND
PERFORMANCE

Website. A brief description of each pattern is provided below.

Athletic Training (26 Hours): The Athletic Training pattern is designed to prepare students to successfully pass the NATABOC (National Athletic Trainers' Association Board of Certification) exam and enter the field of athletic training as a certified athletic trainer. Students will spend approximately 20 hours per week in a program of progressive clinical experiences gaining the skills necessary to perform the duties of a certified athletic trainer. In addition to the exercise science requirements such as anatomy, physiology, nutrition, biomechanics, and exercise physiology, students will complete the athletic training pattern courses including: basic and advanced athletic training, athletic injury evaluation, rehabilitation of athletic injuries, therapeutic modalities, and athletic training room management. The athletic training pattern is accredited by CAAHEP (Committee for Accreditation of Allied Health Education Programs). Formal application to the pattern is required. Application involves a completed application form, two letters of recommendation, an interview with the head and two assistant athletic trainers, and a four-year commitment to the athletic training pattern. Application forms can be obtained by writing to the head athletic trainer, or printing them from the Website. Applications must be received before March 1. Acceptance into the program is determined by the certified athletic training staff and is based on the number of vacant spaces available and: 1) the student's potential to successfully complete cognitive and psychomotor competencies and proficiencies, 2) aptitude to maintain a 3.0 grade point average in all academic coursework while completing 20 hours a week of clinical experience, and 3) commitment to pursuing a career in athletic training. Specific details are included with the application materials. A minimum GPA of **3.00** is required to enter and remain in this pattern.

Biomechanics (20-24 Hours): The Biomechanics pattern is designed to prepare students for graduate school or an entry-level position in a biomechanics-related lab or personal training setting. Students in this pattern are interested in understanding anatomical and mechanical characteristics of human movement. Those completing this pattern will be prepared for analyzing the techniques of movement and have knowledge of how those processes relate to the movement product. Students within this pattern develop extensive knowledge of the muscular, kinematic, and kinetic nature of human movement, and use this information to analyze motion for the characteristics reflecting effective motion as well as those characteristics relating to injury risk. The pattern relies on a research-based approach to investigating biomechanical characteristics using commonly available tools including video-based motion analysis, electromyography, and force transduction.

Exercise Physiology (23-25 Hours): The Exercise Physiology pattern is designed to prepare students for graduate school or an entry-level position in clinical exercise physiology. The pattern develops extensive knowledge of the body under the adaptive stress of exercise including the study of body composition, energy metabolism, cardiovascular function, muscular strength and development, neuromuscular integration, and thermal regulation. An emphasis is placed on development of a research-based approach to investigating physiological phenomena. Students who wish to enter clinical exercise physiology

(cardiac rehabilitation) have the option to specialize their exercise physiology studies with advanced studies in cardiac pathophysiology, biomechanics, pathophysiology, pharmacology, and behavior modification.

Physical Education/Health/Coaching (34-35 Hours): Students who select this pattern are interested in teaching Physical Education, Health Education, and/or coaching within the public school system, grades K-12. By completing this pattern, students will fulfill all course requirements necessary to be eligible for certification to teach Physical Education and/or Health Education in the public school system. Required coursework includes substance abuse prevention, human sexuality, mental and community health, school health programs, outdoor activities, gymnastics, physical activities/ creative movement for children, adapted physical education, principles of coaching, and three foundational education courses. This pattern requires the student to complete specific coursework to fulfill LSP and certification requirements. Please see the TEACHING CERTIFICATION section for these requirements.

Pre-Medicine (32-35 Hours): The Pre-Medicine pattern is designed to prepare a student to take the MCAT examination, which is required for admission to medical school. The pre-medicine pattern within the exercise science program is viewed as a viable choice for those who are interested in the orthopedic/sports medicine aspect of physician care. The required courses in biomechanics, kinetics, exercise physiology, motor learning and sport and exercise psychology or sport sociology provide a solid foundation for the sports medicine/team physician. A minimum GPA of 3.25 is recommended for this pattern.

Pre-Physical Therapy (31-32 Hours): This pattern is designed to prepare the student for admission into a master's degree program in physical therapy. Students are required to obtain a minimum of 200 hours of clinical experience in a physical therapy setting. Course work includes human anatomy, therapeutic modalities, physical rehabilitation and evaluation, as well as physics and psychology. Students should maintain a minimum GPA of 3.25 to remain in this pattern. Graduate admission is generally granted to students with a GPA of 3.5 or higher.

Pre-Physician's Assistant (25-28 Hours): The Pre-Physician's Assistant pattern is designed to prepare students for entry into an advanced degree program that would lead to certification as a Physician's Assistant. Physician Assistant (PA) programs prepare the student to operate as a mid-level practitioner in family practice, preventative medicine, or orthopedic settings (sports medicine), under the supervision of a physician. In addition to course work in biology, chemistry, physics, and psychology, the student must plan to gain experience in a medical-related setting throughout the college experience. Physician Assistant graduate programs are now requiring 2000+ hours of experience in health settings prior to admission. It is strongly advised that the student start to develop a related work dossier upon entry to the university to be able to complete the required hours for admission into graduate schools. Students should maintain a 3.00 GPA to remain in this pattern.

Psycho-Social Aspects of Sport (28 Hours): The psycho-social aspects of sport pattern is designed to prepare students for entry into graduate training in sport and exercise

psychology, sport sociology, or counseling. This pattern employs an interdisciplinary approach requiring courses from exercise science, psychology, and sociology based upon the Association for the Advancement of Applied Sport Psychology's certification model. Students will explore, through coursework, the basic content of areas of social and psychological theory and specific content areas of applied sport psychology. This coursework will lead to a minor in psychology. This pattern prepares students to enter into graduate programs that emphasize teaching and conducting scholarly research in psychology/sociology of sport or counseling.

Sport and Recreation Management (25 Hours): This pattern is designed to prepare Exercise Science majors for leadership positions in the fields of sport and recreation. Individuals with careers in sport management maintain a variety of positions that help direct competitive sport organizations such as high school, intercollegiate or professional athletic programs. Recreation is a broad field that encompasses diverse organizations (YMCA/YWCA, Parks & Recreation departments) and highly specialized settings (golf/ski resorts). Careers in recreation focus on the leadership of broad-based programs that seek to maximize participation. The curriculum, with a foundation in the sciences supplemented by business and specialized courses, will foster an interdisciplinary perspective on Exercise Science and enable students to pursue graduate degrees in sport and recreation management. Successful completion of this pattern will result in a minor in Business Administration (assuming all courses are completed at Truman). Students must maintain a minimum GPA of 2.5 to remain in the pattern.

Individualized: The individualized pattern is designed to support the development of special support areas not available from the normal selection. This pattern must be relevant to the career goals of the student and must be one that would logically follow from the courses included with the major. This pattern is not a "catch-all" for courses taken that do not fit the published degree requirements. Individualized patterns must be submitted to the Program Director by the academic advisor for approval. The individualized pattern should be agreed upon early to facilitate course sequence planning.

TEACHING CERTIFICATION FOR EXERCISE SCIENCE MAJORS

At Truman State University, the professional degree is the Master of Arts in Education, built upon a strong liberal arts and sciences undergraduate degree. Students who wish to become teachers should consult with their academic advisors as early as possible. The professional preparation component of the Master's degree program is administered in the Division of Education. Undergraduate preparatory procedures are available online on the Division of Education Website.

Students who successfully complete the **Physical Education/Health/Coaching** pattern, including three Education courses (ED 389, ED 393, and ED 593), will partially fulfill the undergraduate requirements for admission into the graduate MAE program in Exercise Science. Because of the background required, it is strongly recommended that SOAN 190 be taken for the Required Support/ Intercultural Perspective requirement. Students must also take HIST 104 or HIST 105 to meet the

Historical Mode of Inquiry, as well as POL 161 to meet the Missouri Statute requirement. Completion of ES 179 and ES 186 to fulfill Exercise Science activity requirements must also occur. For additional information, please see the MAE Admission requirements in the Graduate Section of this Catalog or contact the Division of Education at (660) 785-4383.

Exercise Science MAE Requirements:

ED	601G	Measurement and Evaluation	3
ED	603G	Learning Strategies for Print Discourse	2
ED	605G	Psychology of Exceptional Children	3
ED	607G	Applied Educational Psychology	3
ED	609G	Teaching Internship in Exercise Science	8
ED	681G	Research Study in Education	0
ES	502G	Social Problems in Sport AND/OR	
ES	503G	Exercise and Sport Psychology	3
ES	608G	Management of Instruction	3
ES	649G	Research Methods in Health and Exercise Sciences	3
ES	650G	Individual Study in Health and Exercise Sciences	3

Select one of the following:

ES	501G	Advanced Exercise Physiology	3
ES	505G	Advanced Biomechanical Analysis	3
ES	515G	Exercise Testing and Prescription	3
ES	532G	Cardiac Pathophysiology	3
ES	545G	Exercise Physiology Seminar	3
ES	647G	Analysis and Interpretation of Data	3

HEALTH SCIENCE MAJOR

The Bachelor of Science degree in Health Science is enhanced by a broad liberal arts background in English, mathematics, biological and physical sciences, social sciences, and humanities, together with the specialized courses that comprise the depth of the Health Science major.

The Health Science curriculum is designed to prepare students as health promoters in educational or clinical settings in school, community, or public health environments. The undergraduate degree provides training for entry-level positions in municipal, county, state and national health departments, voluntary health agencies and HMOs (health maintenance organizations) as well as the curricular background necessary for graduate work in public health, health administration, occupational therapy, medicine, or physician's assistant (PA) programs.

Students graduating in Health Science from Truman State University will be technically and professionally competent and accountable. More specifically, graduates of the program will:

1. Gain experiences and training based on a Liberal Arts and Sciences background that supports specialized study in personal health encompassing nutrition, mental health, sexuality and family life, school health programs, community health, worksite health, and public health;
2. Demonstrate knowledge of anatomy, physiology, microbiology, psychology, sociology, and growth and motor development;
3. Develop competency to assess individual, school, and community needs for health education and services and to plan, implement, and evaluate health programs;
4. Acquire skills to coordinate health services and act as a resource person in health education and health services;

HUMAN
POTENTIAL
AND
PERFORMANCE

5. Develop competency to select and utilize methods most effective for all aspects of health and to understand and use appropriate evaluation procedures;
6. Develop competency to understand, interpret, and apply research findings and to have a knowledge of research technique suitable for the evaluation of program effectiveness;
7. Gain knowledge of teaching and learning theory in health education as demonstrated in laboratory and internship experiences;
8. Acquire skills to conduct needs assessments, design, implement, and evaluate health education programs.

One of the most unique features of the Truman Health Science undergraduate experience is the opportunity to actively engage in research. A significant number of Health Science majors present their findings at international, national, state or local professional conferences, or publish their work nationally. Truman's Health Science curriculum has also been internationally recognized as the Association for Worksite Health Promotion's (AWHP) Undergraduate Curriculum of the Year for academic years 1996-97 and 1997-98.

A distinguishable feature of the Health Science program is its focus on accountability. In addition to the comprehensive testing program of the University, all required health courses incorporate pre/post testing to determine achievement of educational objectives. The Health Science graduate will also demonstrate a high level of health knowledge as well as skills based on the Seven Responsibilities of a Health Educator, as assessed by a senior exit examination. Health Science faculty and the University have selected and approved the Certified Health Education Specialist (CHES) examination as the measure of this competency. This feature affords our students to obtain validation of their education through a nationally recognized examination in their specialized field of study. Truman is among the handful of institutions in the country to provide this opportunity for their Health Science graduates.

The program culminates in a four-credit, 200-hour required field experience. Depending on the student's specialized interest, the field experience provides opportunities to design and implement programs in a organizational setting under the supervision of highly qualified professionals in the field, working in cooperation with a division supervisor. The experience allows for the application of theory and knowledge in a practical setting.

**HEALTH SCIENCE
BACHELOR OF SCIENCE**

	Semester	Hours
Liberal Studies Program Requirements		32-57
Missouri Statute Requirement		1-3
Required Support		11-32
Complete each of the following:		
BIOL 107 Introductory Biology I**		4
BIOL 108 Introductory Biology II (4) OR		
BIOL 353 Pathophysiology (3)		3-4
BIOL 325 Human Physiology		4
BIOL 365 Human Anatomy		3
BIOL 365 Human Anatomy Lab		1
Health option of the Personal Well-Being Liberal Studies Requirement**		2
MATH 192 Essentials of Calculus** OR		

MATH 194	LAS Calculus** OR	
MATH 198	Analytic Geometry and Calculus I**	3-5
PSYC 166	General Psychology**	3
SOAN 190	Sociological Inquiry** OR	
SOAN 191	Anthropological Inquiry**	3
STAT 190	Basic Statistics**	3

**May be used to fulfill LSP requirements

Bachelor of Science Requirements13

Complete each of the following:

BIOL 304	Microbiology	4
HLTH 150	Nutrition in Health & Wellness	3
HLTH 310	Methods for Health Educators	3
PSYC 369	Behavior Modification	3

MAJOR REQUIREMENTS36

Complete each of the following:

HLTH 190	Foundations of Health Science	3
HLTH 245	Substance Abuse Prevention	3
HLTH 260	Human Sexuality	3
HLTH 261	Mental Health	3
HLTH 270	Consumer Health	3
HLTH 334	Physiological Assessment	3
HLTH 346	Microcomputer Applications	3
HLTH 362	Environmental Health	3
HLTH 366	Community Health	3
HLTH 367	Introduction to Epidemiology	3
HLTH 440	Program Planning and Evaluation	3
ES 205	Community First Aid and CPR	2

Capstone Experience

HLTH 450	Senior Seminar	1
Pattern approved by advisor ♦		19-32
Electives to total minimum of		124

- Graduation Requirements**
1. An overall cumulative 2.0 GPA
 2. A 2.0 GPA in all courses completed at Truman
 3. A 2.5 GPA in select major, required support and BS requirements (see advisor or program office for specific courses)
 4. 40 hours of 300-400-500-level courses
 5. Grade of "D" or higher must be achieved in all required support, BS requirements, major and pattern requirements

HEALTH SCIENCE PATTERNS

♦ To provide the opportunity for students to explore and develop more specialized interests, the Health Science curriculum allows the selection of one career pattern ranging from 19-32 hours. Courses comprising the program patterns are based upon the recommendations of faculty members whose expertise is identified with these specialties. Individualized patterns may also be designed to meet personal goals. A copy of specific courses for each of the patterns can be obtained in the Health and Exercise Sciences Program office. A brief description of each pattern is provided below.

Community Health (19 Hours): The Community Health Educator may be employed as a disease prevention/health promotion specialist in voluntary agencies (Red Cross, American Lung Association, Women's Health Clinics, etc.), local agencies (private companies, HMO's, PPO's, hospitals, etc.), county or state agencies (health departments), or federal agencies (CDC, U.S. Department of Health, etc.).

The specific job may be a one-on-one approach (HIV/AIDS Educator) or it may involve an entire state, as in the case of coalition building. Leadership, ability to work independently, health knowledge, and a vast resource library are the principle ingredients that make up the Community Health Educator. It is not unlikely that a person in this position would be responsible for grant proposals or alternative sources of funding, especially when employed with voluntary agencies. In addition, the health educator may have some research and writing responsibilities. Therefore, this individual should have excellent writing and oral communication skills. The expectation of most employers is to minimize or eliminate illness and injury through the assessment, planning, implementation, and evaluation of quality health education/health promotion programs.

Health Administration (19 Hours): The individual interested in Health Administration must be able to effectively serve as a supervisor or leader while at the same time answer to the organization or governing body of the particular health facility or voluntary health agency. Managers and supervisors in health administration positions may be called upon anytime of the day or week to solve problems, therefore the individual must be willing to be responsible for a facility that remains open 24 hours per day/7 days per week. This graduate will manage a facility/organization/agency that employs a number of the community members from the higher socioeconomic groups (physicians, nurse managers, pharmacists, etc.). These are autonomous people working as a team to provide care for the sick, injured, and debilitated. Considering these facts, the legal concerns that come with the management of such facilities rivals any other form of management with regards to liability. The individual should be a highly motivated self-starter to resolve the daily management concerns associated with the health care industry. Additional qualities include a self-paced individual who stays in control under stress, one who possesses excellent communication skills, and has a good general knowledge of health facilities. Some of these qualities can be developed with time and education. Employment opportunities are found in voluntary agencies, health departments, hospitals, state agencies, and federal agencies. Refer to the descriptions above for specific employment opportunities. Entry-level positions may be found in some aspect of personal management or as an assistant administrator. To be successful, the graduate must have a solid background in human resources, legal aspects of health care, marketing, and health services. Expectations of the employer are to hire an individual who can lead a health care organization in a competent and professional manner. Successful completion of this pattern will result in a minor in Business Administration (assuming all courses are completed at Truman). Students must maintain a minimum GPA of 2.5 to remain in the pattern.

Pre-Medicine (32 Hours): The pre-medicine pattern within the Health Science major is designed to prepare a student to take the MCAT examination, which is required for admission to medical school. The pre-medicine pattern is a viable option for those who are interested in family practice, preventative medicine, or pediatrics. Students are required to take class work in biology, chemistry, and physics in addition to the program focus required of a health science major. The solid Health Science background with its emphasis on disease prevention and health promotion is excellent for a physician who will be working in a

rural area as a general practitioner. Students should maintain a 3.25 GPA to remain in the pattern.

Pre-Occupational Therapy (20-23 Hours): This pattern is designed to prepare a student for admission into a graduate program in Occupational Therapy. Students are required to complete a 200-hour clinical experience practicum. Course work includes human anatomy, courses in manual manipulation, kinesiology, and psychology. To be a viable candidate for admission to a graduate program in occupational therapy a student should maintain a GPA of 3.25 or higher. Graduate admission is generally granted to students with a 3.5 GPA or higher.

Pre-Physician's Assistant (26-28 Hours): The Pre-Physician's Assistant pattern is designed to prepare students for entry into an advanced degree program that would lead to certification as a Physician's Assistant. Physician Assistant (PA) programs prepare the student to operate as a mid-level practitioner in family practice, preventative medicine, or pediatric settings, under the supervision of a physician. In addition to course work in biology, chemistry, physics, and psychology, the student must plan to gain experience in a medical-related setting throughout the college experience. Physician Assistant graduate programs are now requiring 2000+ hours of experience in health settings prior to admission. It is strongly advised that the student start to develop a related work dossier upon entry to the university to be able to complete the required hours for admission into graduate schools. Students should maintain a 3.00 GPA to remain in this pattern.

Public Health/Epidemiology (19 Hours): Public Health is where many relate the origins of the other Health Education Programs. In many instances, some treat Public Health and Community Health in the same domain. In our case, we will treat Public Health separately from Worksite or Community Health. Public Health, at this University, is a program developed for those who are interested in research and an epidemiological approach to controlling and educating about chronic as well as communicable diseases and their associated health problems. It is expected that most who complete this program will continue on with a Masters in Public Health (MPH) program. However, there are several positions that might be considered by an individual with a Public Health emphasis at the Bachelors level. Local, state and federal agencies interested in collecting and compiling health data are continually looking for qualified individuals to function in entry-level positions. In these positions, the graduate will most likely be responsible for some aspect of a research study as assigned. This does not preclude obtaining a position as a Community Health Educator, given the same core of requirements is expected of all graduates in Health Science. With the completion of a MPH, the graduate will be qualified for many upper-level research and management tasks in Public Health. The U.S. Department of Health, Centers for Disease Control, state health departments, and universities all seek candidates with this credential. Specific employment opportunities include teaching, research, data collection, and data analysis. Public Health requires a strong background in the sciences, health sciences, and social sciences. Employer expectations of graduates are to identify, recommend, educate, and promote quality health care in the defined area of employment.

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

Worksite Health (19 Hours): The Worksite Health Educator may be employed in a business, company, corporation, or federal agency. The environment is somewhat different than that of the Community Health Educator. The environment for the Worksite Health Educator is to a large extent, contained within the facility of hire. However, this may involve many community outreach programs and health personnel outside of the agency. Therefore, the Worksite Health Educator must have expertise in health content, exercise science, and program planning. Employers expect that the Worksite Health Educator will reduce the cost of company health expenses, absenteeism, and overtime through assessment, planning, implementation and evaluation of illness and injury prevention programs. With these expectations, the graduate must have a wide background in the sciences, health content areas, social sciences, and exercise programming. They are expected to work independently and in a professional manner. The opportunities in this field have been steadily growing over the past decade and vary significantly among various businesses. For example, some companies expect the health educator to emphasize fitness programs while others expect a total commitment to health content and skill development. However, there are many opportunities found in-between these two extremes. The expectation of most employers is to minimize or eliminate illness and injury through the assessment, planning, implementation, and evaluation of quality health education/health promotion programs.

Individualized: The individualized pattern is designed to support the development of special support areas not available from the normal selection. This pattern must be relevant to the career goals of the student and must be one that would logically follow from the courses included with the major. This pattern is not a "catch-all" for courses taken that do not fit the published degree requirements. Individualized patterns must be submitted to the Program Director by the academic advisor for approval. The individualized pattern should be agreed upon early to facilitate course sequence planning.

TEACHING CERTIFICATION FOR HEALTH SCIENCE MAJORS

At Truman State University, the professional teaching degree is the Master of Arts in Education, built upon a strong liberal arts and sciences undergraduate degree. Students who wish to become teachers should consult with their academic advisors as early as possible. The professional preparation component of the Master's degree program is administered in the Division of Education. Undergraduate preparatory procedures are available online at the Division of Education's Website.

Students interested in becoming Health Education teachers within the public school system should complete the Community Health pattern in addition to the following three Education courses: ED 389 Foundations of Education, ED 393 Clinical Experiences in Teaching, and ED 593 Psychological Foundations of Education. Health Science students completing any other pattern must complete one additional course, HLTH 360 School Health Programs, in addition to the three indicated Education classes. Because of the background required, it is strongly recommended that SOAN 190 be taken for the Required Support/Intercultural Perspective requirement. Students must also take HIST 104 or HIST 105 to meet the

Historical Mode of Inquiry, as well as POL 161 to meet the Missouri Statute requirement. Successful completion of the above classes would partially fulfill the undergraduate requirements for admission into the graduate MAE program in Health Education. For additional requirements, please see the MAE Admission requirements in the Graduate section of the catalog.

HEALTH EDUCATION MAE REQUIREMENTS

ED 601G	Measurement and Evaluation	3
ED 603G	Learning Strategies for Print Discourse . . .	2
ED 605G	Psychology of Exceptional Children	3
ED 607G	Applied Educational Psychology	3
ED 609G	Teaching Internship in Health Education .	8
ED 681G	Research Study in Education	0
ES 649G	Research Methods in Hlth & Exercise Science .	3
ES 650G	Individual Study in Health & Exercise Science .	3
HLTH 608G	Management of Instruction	3
6 hours of electives as determined by Health Advisor . . .		6

COURSE
DESCRIPTIONS

EXERCISE SCIENCE

INTERCOLLEGIATE PARTICIPATION

Maximum 1 hour credit in each sport toward graduation.

- ES 102 Varsity Football Participation.
- ES 103 Varsity Basketball Participation. (Men and Women)
- ES 104 Varsity Track Participation. (Men and Women)
- ES 105 Varsity Tennis Participation. (Men and Women)
- ES 106 Varsity Golf Participation. (Men and Women)
- ES 107 Varsity Cross Country Participation. (Men and Women)
- ES 108 Varsity Wrestling Participation.
- ES 109 Varsity Baseball Participation.
- ES 111 Varsity Softball Participation.
- ES 112 Varsity Volleyball Participation.
- ES 113 Varsity Swimming Participation. (Men and Women)
- ES 114 Varsity Soccer Participation. (Men and Women)

ELECTIVE COURSES

- ES 120 – Volleyball**
1 hour
Basic skills of power volleyball.
- ES 130 – Beginning Swimming**
1 hour
Basic water skills for non-swimmers to develop safety and confidence in water activities.
- ES 131 – Intermediate Swimming**
1 hour
Development of proficiency in various swimming strokes and forms of rescue and surface diving. Recommended prerequisite: ES 130. Instructor reserves the right to remove persons with insufficient skill level.

ES 132 – Basic Swimming for Senior Citizens

0 credit

Basic water skills for senior citizens to gain safety and confidence in water activities.

ES 133 – Lifeguard Training

2 hours (offered spring only)

Course is designed to teach lifeguards the skills and knowledge needed to prevent and respond to aquatic emergencies. Course continuation requirement: (1) minimum age of 15, (2) swim 500 yards (200 yards front crawl with rhythmic breathing and stabilizing kick, 100 yards breaststroke, and 200 yards either front crawl with rhythmic breathing and stabilizing kick or breaststroke), and (3) 20 yards front crawl or breaststroke; dive to bottom of pool with retrieval of 10 pound object; swim 10 pound object 20 yards return holding with both hands. Successful completion of all critical course skills and passing required exams with a score of 80% or better could result in American Red Cross certification.

ES 134 – Lifeguard Training Instructor

2 hours (fall only)

Course is designed to train instructor candidates to teach Lifeguard Training (including first aid and CPR for the professional rescuer, Community Water Safety, and Lifeguarding Instructor Aide). Course continuation requirements: minimum age of 17, evidence of having completed Fundamentals of Instructor Training course, and successful completion of lifeguard training skills, CPR for the Professional Rescuer Skills, and Lifeguard Training knowledge exam with a grade of 80% or better. Successful completion of the instructor course requirements can result in certification as an ARC Lifeguarding Instructor.

ES 135 –Water Safety Instructor

2 hours (offered spring only)

This course is designed to train candidates to teach Infant and Preschool Aquatics Program, the seven levels of the Learn to Swim Program, Community Water Safety, and Water Safety Instructor Aide courses. Course continuation requirements: (1) minimum age of 17, (2) evidence of having completed Fundamentals of Instructor Training Course, (3) successful completion of tests of water safety and swimming skills and knowledge with a minimum grade of 80%.

ES 143 – Beginning Tennis

1 hour

Fundamental tennis skills, rules, and mechanical principles.

ES 144 – Intermediate Tennis

1 hour (fall only)

Instruction in intermediate strokes and strategy applied to singles and doubles play. Recommended prerequisite: ES 143. Instructor reserves the right to remove persons with insufficient skill level.

ES 146 – Beginning Racquetball

1 hour

Rules, techniques, and strategy of four-wall racquetball.

ES 151 – Irish Ceili Dance

1 hour

Activity oriented course providing instruction in Irish dance history, culture, music, and basic dance skills. Fundamental steps and regional styles provide the founda-

tion for various popular “ceile” (party) dances. Safe warm-up/cool-down practice, cardiovascular fitness, and flexibility are emphasized.

ES 154 – Ballroom Dancing

1 hour

Activity oriented course providing basic instruction in techniques, terminology, and stylization of ballroom dances. Dances regularly included are swing, waltz, cha-cha, foxtrot, and tango.

ES 156 – Beginning Tap Dancing

1 hour

Activity-oriented course providing basic instruction in tap technique, terminology, and choreography at a beginning skill level. Clogging will also be included.

ES 157 – Beginning Jazz Dance

1 hour

Activity oriented course providing basic instruction in fundamental jazz dance techniques, terminology, and combinations. Several jazz styles will be experienced.

ES 158 – Aerobic Dancing

1 hour

Incorporates muscle toning and the development of cardiovascular fitness through the medium of dance. Participants receive instruction concerning flexibility, warm-up, aerobic dance, and cool down routines.

ES 159 – Social and Country-Western Dance

1 hour

Activity oriented course providing basic instruction in techniques, stylization, and terminology of country-western dance. In addition to line and couple dances, social dance forms of swing, waltz, and Texas two-step are included.

ES 167 – Weight Training-Free Weights

1 hour

Scientifically founded isotonic weight training programs; development of muscular strength, endurance, and flexibility.

ES 168 – Weight Training–Nautilus

1 hour

Scientifically founded isotonic weight training programs; development of muscular strength, endurance, and flexibility utilizing Nautilus equipment.

PROFESSIONAL PREPARATION COURSES

Note: Analysis courses primarily are designed for Exercise Science majors. Other students **must have** consent of program director **before** enrolling in Analysis courses.

ES 170 – Analysis of Gymnastics-Men and Women

1 hour (Exercise Science majors only)

The course is designed to prepare exercise science majors to teach as well as perform basic gymnastic skills and routines. Emphasis is on understanding, performing, and analyzing basic moves and skills.

ES 172–Analysis of Swimming

1 hour (Exercise Science majors only)

The purpose of this course is to provide the exercise science student with the necessary knowledge and skill to

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

analyze and interpret the necessary skills associated with swimming. Consequent to this the student will obtain the necessary skills to teach basic swimming to children grades K-12 within a safe and positive environment.

ES 173 – Analysis of Football
1/2 hour (Exercise Science Majors only)

The intent of this course is to provide exercise science majors with learning experiences enabling them to develop the necessary pedagogical competencies required to teach and/or coach football. Emphasis is on understanding, performing, and analyzing the various football skills by position.

ES 174 – Analysis of Basketball
1/2 hour (Exercise Science Majors only)

The purpose of this course is to provide students with learning experiences allowing them to develop the necessary skills required for teaching basketball. Emphasis is placed on understanding, performing, and analyzing the basic fundamentals.

ES 176 – Analysis of Volleyball
1/2 hour (Exercise Science Majors only)

Introductory course providing instruction in volleyball history, technique, terminology, teaching, and analysis.

ES 177 – Analysis of Softball
1/2 hour (Exercise Science Majors only)
(fall only)

Development of softball skills necessary for analyzing and demonstrating purposes in teaching-coaching. Emphasis is on fundamental mechanics and teaching progressions.

ES 178 – Analysis of Soccer
1/2 hour (Exercise Science Majors only)

The intent of this course is to provide the student with the necessary skills and strategies required for teaching soccer. Emphasis is on understanding, performing and analyzing several basic soccer techniques, then applying these skills to match related situations.

ES 179 – Outdoor Activities
1/2 hour (Exercise Science majors only) (Fall only)

Course is designed to introduce the teaching and supervision of outdoor adventure programming, particularly for children and adolescents. Activities include canoeing, outdoor cooking, and emergency situation management. Some Saturday activities are required. Special course fee applies.

ES 180 – Analysis of Tennis
1/2 hour (Exercise Science Majors only)

Course designed for the development of tennis knowledge beyond the beginning level. Emphasis is on stroke mechanics and analysis as well as performance, terminology, history, rules, and scoring.

ES 181 – Analysis of Badminton
1/2 hour (Exercise Science Majors only)

Development of badminton skills necessary for analyzing and demonstrating purposes in teaching-coaching. Emphasis is on stroke mechanics and teaching progressions.

ES 183 – Analysis of Fencing
1/2 hour (Exercise Science Majors only)
(fall only)

The purpose of this introductory course is to provide theoretic and practical experience in foil fencing. Students will be instructed in techniques for teaching and evaluating the fundamentals of foil fencing.

ES 184 – Analysis of Golf
1/2 hour (Exercise Science Majors only)

The intent of this course is to provide exercise science majors with learning experiences enabling them to develop the necessary pedagogical competencies required for teaching golf. Emphasis is on understanding, performing, and analyzing the basic golf shots.

ES 185 – Analysis of Weight Training
1/2 hour (Exercise Science Majors only)

The intent of this course is to provide exercise science majors with learning experiences enabling them to develop the necessary pedagogical competencies required to teach weight training.

ES 186 – Outdoor Venture Activities
1/2 hour (Exercise Science Majors only)

This course is designed to introduce low to medium risk outdoor venture activities that challenge the student's abilities in a non-traditional setting. Activities can include ropes course work, climbing, rappelling, and orienteering. Saturday labs are generally required. Course fee applies.

ES 187 – Analysis of Wrestling
1/2 hour (Exercise Science Majors only)

The intent of this course is to provide the students with learning experiences enabling them to learn the basics of wrestling. Skill performance, analysis, and mechanics will be emphasized in helping the student develop a better understanding of wrestling.

ES 188 – Analysis of Racquetball
1/2 hour (Exercise Science Majors only)

This course is designed to develop racquetball skills necessary for analyzing and demonstrating purposes in teaching. Emphasis is on stroke mechanics and teaching progressions.

ES 189 – Analysis of Track and Field
1/2 hour (Exercise Science Majors only)

This course is designed to develop track and field skills necessary for analyzing and demonstrating purposes in teaching/coaching. Emphasis is on fundamental mechanics and teaching progressions.

ES 190 – Foundations of Exercise Science (Exercise Science Majors only)

3 hours
This course investigates the nature, scope and philosophy of exercise science, as well as historical influences on the field. Also examined are biological, physiological, psychological and sociological interpretations of exercise science. Career opportunities and the corresponding professional responsibilities related to exercise science are also explored.

ES 200 – Techniques of Aerobic Dance

1 hour

Provides instruction designed to develop aerobic dance competencies and related health and exercise concepts necessary for analyzing and teaching aerobic dance. Emphasis is on learning through practical teaching experiences.

ES 205 – Community First Aid and CPR

2 hours

Course designed to teach standard First Aid and personal safety skills as well as Cardiopulmonary Resuscitation.

ES 211 – Folk and Social Dance

1 hour

Instruction in beginning and intermediate folk and social dance techniques, stylization and terminology. The unique cultural heritage of a variety of nations will be understood and appreciated.

ES 212 – Modern Dance

1 hour

Introduction in beginning modern dance techniques, elements of composition and philosophy. Basic movement concepts and approaches to creative expression will be studied.

ES 214 – Elementary Ballet

1 hour

Introduction to basic ballet techniques, creative composition, and style of ballet.

ES 215 – Intermediate Ballet

1 hour

Intermediate course to further develop ballet technique, terminology and choreography attained in elementary ballet. Recommended prerequisite: ES 214. Instructor reserves the right to remove persons with insufficient skill level.

ES 232 – Sport Management

3 hours (Exercise Science majors only)

This class provides a foundation for the management of sport organizations. General management skills such as philosophy development, leadership, decision-making, motivation, evaluation, marketing, public relations and risk management are taught. In addition, the class covers legal concerns in the field of exercise science. Special attention is given to writing and the communication process throughout the class.

ES 235 – Physical Activity for the Young Child

2 hours

Organization, planning, and administration of physical education programs for the elementary schools. Teaching methods, identification of growth and development patterns and their effect on behavior and movements, motivation techniques, and safety in conducting elementary school physical education.

ES 236 – Creative Dance for Children

1 hour

Introduction to and analysis of developmental movement patterns and activities, creative movement concepts, dance elements, and their interrelationships.

ES 247 – Data Interpretation in Exercise Science

2 hours (Exercise Science Majors only)

The application of fundamental statistical processes as they apply to the collection, analysis, and interpretation of exercise science data are discussed. Emphasis is placed on the practical application of statistical procedures for research purposes. (ES 247 replaces ES 447.) Prerequisites: STAT 190.

ES 250 – Practicum I

1-3 hours

Clinical experience in a physical education or coaching related activity. Desirable options are serving as a teacher aid, assisting in the training room or Human Performance Laboratory, supervisory roles in intramurals, assisting in city recreation programs, coaching youth sports, volunteer assistance in public or private schools, church programs, or summer camps. Junior or senior status and consent of academic advisor and program director required. Prerequisite: ES 190, D or higher.

ES 256 – Intermediate Tap Dancing

1 hour

Activity course providing instruction in intermediate tap technique, terminology, shorthand tap notation, and choreography. Funk tap and Irish step dancing will be explored. Recommended prerequisite: ES 156. Instructor reserves the right to remove persons with insufficient skill level.

ES 257 – Intermediate Jazz Dance

1 hour

Activity course providing instruction in intermediate jazz technique, terminology, and choreography. Additional jazz styles covered include funk, lyrical, Afro-Haitian and Broadway/musical comedy. Recommended prerequisite: ES 157. Instructor reserves the right to remove persons with insufficient skill level.

ES 261 – Applied Sport Psychology in Human Performance

2 hours (spring only, even calendar years)

This course will examine various psychological principles that affect human performance. Students will learn psychological theories and techniques that have been used to effectively enhance the performance and personal growth of participants from all levels of sport and physical activity. The course will maintain an applied perspective with an emphasis of major psychological barriers including anxiety, confidence, motivation, and burnout. Prerequisites: ES 190, D or higher; PSYC 166, D or higher.

ES 270 – Research Methods in Exercise Science (Exercise Science Majors only)

2 hours

The purpose of this course is to help students gain a basic understanding of the research process, become critical consumers of published work, and to be competent in the application of basic research methodology in a variety of exercise science settings.

ES 280 – Principles of Athletic Training

3 hours (Exercise Science Majors only) (spring only)

This course is an introduction to the profession of Athletic Training. The role and responsibilities of a certified athletic trainer and the educational requirements for entrance into the profession are discussed. Students will be introduced to injury classification and recognition, basic care, and

rehabilitation. Skill acquisition will focus on splinting, spine boarding, assessment of vital signs, taping, and basic injury evaluation. The NATA's Athletic Training Educational Competencies serve as a guideline for knowledge that each student should obtain in this academic course. (ES 280 replaces ES 500.) Prerequisite: BIOL 365, D or higher (or concurrent).

ES 290 – Athletic Training Practicum: Equipment-Intensive Experience

1 hour (Exercise Science Majors only)

This course is designed to provide students with the opportunity to obtain directed clinical experience in an equipment-intensive setting. This experience will take place before and during practices and games of the Truman State University football team. Students will practice their skills relating to the proper fitting, maintenance, and construction of protective equipment. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association. Consent of instructor and approval of Athletic Training Staff required. Prerequisites: previous or concurrent enrollment in ES 280 with "D" or higher.

ES 291 – Athletic Training Practicum: Upper Extremity

1 hour (Exercise Science Majors only)

This course is designed to provide students with the opportunity to obtain directed clinical experience in a setting that involves injuries to the upper extremity. This experience will take place before and during practices and games of the Truman State University swimming, volleyball, baseball, softball, wrestling, and tennis teams. Students will practice their skills relating to the evaluation, treatment, and rehabilitation of injuries to the upper extremity. Emphasis is placed on the evaluation of skills defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers' Association. Consent of instructor and approval of Athletic Training Staff required. Prerequisite: ES 280 "D" or higher.

ES 301 – Theory of Coaching Football

1 hour (spring only, odd calendar years)

This course is designed to provide a methodology for those students interested in coaching football to organize and implement the total program. Emphasis is on job selection, location, coordination of medical staff and coaches, offensive and defensive schemes, and the kicking game.

ES 302 – Theory of Coaching Basketball

1 hour (fall only, even calendar years)

Course provides instruction in coaching techniques of basketball, basketball terminology, history, and on the floor instruction in offense and defense.

ES 304 – Theory of Coaching Track and Field

1 hour (spring only, even calendar years)

Investigates the history of track and field, coaching and leadership, training theories and their application, meet management, practice planning and organization, event rules, technique, training, and athlete selection.

ES 307 – Theory of Coaching Volleyball

1 hour (spring only, even calendar years)

Offensive and defensive strategies, practice organization, team drills, scouting, and player management.

ES 308 – Theory of Coaching Softball

1 hour (spring only, odd calendar years)

Offensive and defensive strategies, practice organization, team drills, and player management.

ES 311 – Theory of Coaching Soccer

1 hour (spring only, even calendar years)

Theory and practice in coaching soccer; offensive and defensive skills and strategies; organization and administration.

ES 330 – Advanced Sport Management

3 hours (offered spring only, odd calendar years)

(Exercise Science majors only)

The class is designed to facilitate interdisciplinary learning in the fields of sport and recreation management through use of applied methods. Students are expected to bring knowledge of marketing, law, organizational behavior and finance to the class. Students will have the opportunity to synthesize their knowledge with advanced concepts in the field of sport management. These concepts will focus on problem analysis, problem solving, risk management, facility management, advertising, leadership, and event management. Prerequisite: ES 232.

ES 334 – Physiological Assessment

3 hours (Exercise Science majors only)

This course is designed to introduce students to the functional assessment of human fitness and performance. Students will be actively involved in the measurement and evaluation of components of body composition, cardiorespiratory, musculoskeletal, and skill-related fitness. Prerequisites: ES 190 and STAT 190.

ES 342 – Concepts of Biomechanics

3 hours (Exercise Science or Health Science majors only)

Concepts of Biomechanics investigates the anatomical and mechanical bases of human movement. The anatomical component focuses on the skeletal, articular, and neuromuscular systems as they affect movement. The mechanical component focuses on kinematic and kinetic principles and their relationship to human movement. Prerequisites: ES 190 or HLTH 190 with grades of "D" or higher, and Elementary Functions Essential Skills requirement.

ES 343 – Motor Learning and Control

2 hours (Exercise Science Majors only)

Investigates the neuropsychological principles and factors affecting the acquisition and retention of motor skills, teaching styles, and the inter-relationship of teaching styles and motor skill acquisition and retention. Course also introduces the student to basic research principles and the problems inherent to data collection and interpretation. NOTE: Must be concurrently enrolled in lab. Prerequisites: ES 190, ES 247, ES 270 with grades of "D" or higher.

ES 343 – Motor Learning and Control Lab

1 hour (Exercise Science Majors only)

This class is designed to allow the student to have hands on experience with research equipment associated with Motor Learning. Students are expected to engage in mini-research project related to reaction/movement time, anticipation time, kinesthesia, gross body stability, fine motor coordination, tracking, optical impression, multiple-choice reaction time and proprioception. NOTE: Must be concurrently enrolled in lecture. Prerequisites: ES 190, ES 247, ES 270 with grades of "D" or higher.

ES 344 – Growth and Motor Development

3 hours (Exercise Science Majors only)

This course is an introduction to the physical growth and motor development of children with emphasis on those systems and body composition changes related to motor performance and exercise stress. During the course, discussion will focus on such topics as the nature of growth and development and implications of growth for motor performance and fitness development. (Recommended: ES 334.) Prerequisites: ES 247, ES 270.

ES 345 – Introduction to Exercise Physiology

3 hours (Exercise Science or Health Science Majors only)

The purpose of this course is to survey the acute and chronic responses and adaptations of the human body to exercise stress. Emphasis is placed on the practical application of theoretical findings from the research literature. Recommended: BIOL 107, BIOL 108, ES 334. Prerequisites: ES 247, ES 270 with grades of “D” or higher.

ES 346 – Microcomputer Applications

3 hours (Exercise Science or Communication Disorders Majors only)

The course is a study of microcomputer applications and operations in our modern society. Included in the course is an overview of how professional people use microcomputers in planning, communicating written material, calculating, manipulating data, and making graphic presentations. Activities for the course will include the use of word processing, desktop publishing, spreadsheet, database, graphics programs, and statistical programs.

ES 348 – Adapted Physical Education

3 hours (offered spring only, odd calendar years)

Philosophy and role of physical education for individuals with disabilities. Etiology and its implications for setting up various programs for the exceptional along with specific teaching activities and aids are emphasized. Prerequisite: ES 235.

ES 350 – Practicum II

1-3 hours

Clinical experience in a physical education or coaching related activity. Extension of options included in ES 250. Consent of academic advisor and program director required. Prerequisite: ES 250 with “D” or higher.

ES 370 – Field Experience in Exercise Science

4 hours (Exercise Science Majors only) (offered summer only)

This course is designed to provide Exercise Science majors with the opportunity to apply career-oriented skills in an off-campus internship setting for a minimum of 200 contact hours. The student must follow the procedures in the application process before enrolling. The student may not be enrolled in more than one additional class during the field experience. Mandatory attendance at two informal sessions, junior or senior status, consent of advisor and Program Director, minimum 2.0 cumulative GPA, and minimum 2.5 major GPA required. See Program Office or <http://hes.truman.edu/fieldexp.shtml> for complete enrollment procedures.

ES 375 – Independent Studies in Exercise Science

1-4 hours (Exercise Science Majors only)

Individualized study in specialized areas of Exercise Science. Consent of academic advisor and Program Director required. Prerequisite: ES 190.

ES 390 – Athletic Training Practicum: Lower Extremity

1 hour (Exercise Science Majors only)

This course is designed to provide students with the opportunity to obtain directed clinical experience in a setting that involves injuries to the lower extremity. This experience will take place before and during practices and games of the Truman State University cross-country, track, soccer, basketball, and cheerleading. Students will practice their skills relating to the evaluation, treatment, and rehabilitation of injuries to the lower extremity. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers’ Association. Consent of instructor, and approval of Athletic Trainees Staff required. Prerequisite: ES 280, grade of “D” or higher.

ES 391 – Athletic Training Practicum: General Medical

(Exercise Science Majors only)

1 hour

This course is designed to provide students with the opportunity to obtain directed clinical experience in a general medical setting. This experience will take place in a physician’s office. Students will practice their skills relating to the evaluation, treatment, and rehabilitation of injuries to the lower extremity. Emphasis is placed on the evaluation of skills as defined by the clinical proficiencies delineated and published by the Education Council of the National Athletic Trainers’ Association. Consent of instructor and approval of Athletic Training staff required. Prerequisite: ES 280, grade of “D” or higher.

ES 430 – Principles of Coaching

2 hours (Exercise Science Majors only)

(offered fall only, odd calendar years)

The intent of this course is to develop students’ knowledge and skills for coaching sports. The course is designed to reflect and incorporate several humanistic and social values. Although theory-based, the course is task-oriented for practical application.

ES 431 – Injury Care of Active People

2 hours (Exercise Science Majors only)

Techniques, principles and theories underlying prevention, care and rehabilitation of injuries to athletes. Supportive taping and injury evaluation procedures are taught in a lab situation. Prerequisite: BIOL 365 and ES 190.

ES 433 – Therapeutic Modalities

3 hours (Exercise Science Majors only) (offered fall only)

This course provides students with the knowledge and skills to utilize a variety of therapeutic modalities. Students will acquire a detailed understanding of the psychological and physiological processes of pain and healing. Theories, principles, and techniques of thermal, electrical, mechanical, light, and alternative therapies will be included. A laboratory portion will address proficiency in the application of these modalities. Prerequisites: ES 280 OR ES 431, grades of D or higher.

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

ES 434 – Physical Rehabilitation for Athletic Injuries
3 hours (Exercise Science Majors only) (offered fall only)

This course involves the study in the appropriate use of therapeutic rehabilitation techniques for athletic injuries, encompassing scientific and physiological rationales, selection criteria, indications and contraindications of exercise, and return to activity guidelines. Techniques and skills provided to both classroom and laboratory experiences will address range of motion, strengthening, proprioception, cardiovascular fitness, and joint-specific protocols. Prerequisites: ES 280 OR ES 431, grades of D or higher.

ES 435 – Athletic Training Room Management
3 hours (Exercise Science Majors only)
(spring only, even calendar years)

This course provides students the knowledge and skills necessary for the administration of an athletic training program. Course content will include administrative components of athletic training, physical exams, legal issues, emergency planning, record keeping, budgeting, athletic training room management, and administrative/leadership skills. Professional development and the role and structure of NATA are also discussed. Prerequisite: ES 280, grade of D or higher.

ES 436 – Athletic Injury Evaluation
3 hours (Exercise Science Majors only) (fall only)

Students will acquire competency and proficiency in the knowledge, techniques, and skills of assessment of structural, joint, muscle, and nerve injuries to athletes. Prerequisite: ES 280.

ES 450 – Senior Seminar
1 hour (Exercise Science Majors only)

Class is designed to allow students to gain valuable knowledge and information relative to interview procedures, résumé construction, statement of career goals, types of application letters, and portfolio development. Budget planning, tax calculation, credit card risk, and various forms of insurances will also be covered. Junior or senior status required; application for graduation must be filed. Must obtain permission from Program Office before enrolling.

ES 465 – Special Topics in Exercise Science
1-4 hours (Exercise Science Majors only)

This course allows a student to pursue an area of academic study that may not be reflected in normal curricular offerings. Specific subject matter and evaluation should be negotiated between the student, academic advisor, and potential instructor. Course content and evaluation must be approved by the program director. Course requirements are at the discretion of the instructor. Must obtain permission from Program Office before enrolling.

ES 470 – Research in Exercise Science
1-4 hours (Exercise Science Majors only)

Directed student research in Exercise Science. Consent of academic advisor, research mentor, and Program Director is required. Prerequisites: STAT 190, ES 247, ES 270 with grades of “D” or higher.

ES 501 – Advanced Exercise Physiology
3 hours (Exercise Science Majors only) (spring only)

Fundamental physiological processes resulting from acute and chronic exercise stress. Emphasis is on integrating sys-

tems and organs into a functional whole. Laboratories provide experience in evaluating exercise stress by modern methods and equipment. Prerequisite: Either BIOL 315 or BIOL 325, ES 345.

ES 502 – Social Problems in Sport
3 hours (Exercise Science Majors only)

The purpose of this course is to critically examine several problems that exist in contemporary American sport. Particular emphasis will be placed on using sociological theory as a lens in which to examine the various social problems identified. Topics covered reflect student interest but typically include race, gender equity, violence, and youth sport. This course will also emphasize the development of writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations on the researched material. Prerequisite: ES 270 with grade of D or higher.

ES 503 – Exercise and Sport Psychology
3 hours (Exercise Science Majors only)

The purpose of this course is to develop a basic understanding of sport and exercise psychology. Particular emphasis will be placed on the psychology of exercise including determinants, meaning, adherence, injury rehabilitation, mood state fluctuations, and pathology. Students will develop a thorough understanding of the role of psychology in the exercise context and be exposed to a variety of techniques designed to facilitate the exercise experience in a broad range of physically active populations. This course will also emphasize the development of technical writing and presentation skills. The student will be expected to research selected topics and make both written and oral presentations of the researched material. Prerequisite: ES 270 with grade of D or higher.

ES 505 – Advanced Biomechanical Analyses
3 hours (Exercise Science Majors only)

Students are introduced to the principle mechanical analysis of sport activities. Students will be taught a scientific and applied approach to analysis of human movement. Prerequisites: BIOL 365, ES 342, and ES 270.

ES 509 – Advanced Athletic Training
3 hours (Exercise Science Majors only)
(spring only, odd calendar years)

This course serves as a culmination of the athletic training program. Students will scrutinize topics including: documentation, pharmacology, nutrition, cardiopulmonary diseases, viral and bacterial illnesses, dermatology, and environmental illness. A laboratory portion will address proficiency with various diagnostic instruments including an ophthalmoscope, otoscope, and stethoscope. Prerequisites: ES 433, ES 434, and ES 436 with grades of D or higher.

ES 515 – Exercise Testing and Prescription
3 hours (Exercise Science or Health Science Majors only)

This course is designed to train exercise scientists in the skills of assessment, planning, implementation, and evaluation relevant to the development of individualized exercise prescriptions. Prerequisite: ES 345

ES 532 – Cardiac Pathophysiology
3 hours (Exercise Science majors only) (offered fall only)

An advanced course in cardiac physiology and the mechanisms of cardiac, pulmonary, and some metabolic dis-

ease. Includes extensive work on electrocardiogram interpretation, cardiac pharmacology, and disease intervention programs. Prerequisites: ES 345 and BIOL 325.

ES 545 – Exercise Physiology Seminar

3 hours (Exercise Science Majors only) (spring only)

Emphasis will be placed on reviewing and integrating information from current literature in exercise physiology, biomechanics, sports psychology, cardiac rehabilitation, athletic injuries, and exercise biochemistry.

(Recommended: ES 501 and ES 515.) Prerequisites: ES 334, ES 344, and ES 345 with grades of D or higher.

ES 608G – Management of Instruction

3 hours (Exercise Science Majors only) (offered spring only)

Management of Instruction investigates the techniques of effective teaching and relationships between teacher and learner. The course is designed to allow the teaching internship in the Master of Arts in Education to gain practical experience necessary for becoming an effective instructor of physical education. The purpose is to provide students with a systematic understanding of how to structure knowledge in physical education. Prerequisites: ED 389, ED 393, and ED 593 or concurrent enrollment.

ES 647G – Analysis and Interpretation of Data

3 hours (Exercise Science Pre-Education Majors only)

The methods of data analysis employed in health and physical education research such as t-tests, chi-square, correlations, analysis of variance and multiple regression analysis are examined.

ES 649G – Research Methods in Health and Exercise Science

3 hours (Exercise Science Pre-Education or Health Science Pre-Education Majors only)

The course focuses upon research procedures utilized in experimental, descriptive, historical and other methodologies as they apply to health.

ES 650G – Individual Study in Health and Exercise Science

3 hours (Exercise Science Pre-Education or Health Science Pre-Education Majors only)

Written investigation of a problem within Health, Physical Education, Recreation, or Coaching under the supervision of a faculty advisor.

HEALTH SCIENCE

HLTH 150 – Nutrition in Health and Wellness

3 hours (Health Science or Exercise Science majors only)

Interdependence of human nutrition and food in the health and behavior of consumers. Diet analysis, controversies, and issues. (HLTH 150 is equivalent to NU 311.)

HLTH 190 – Foundations of Health Science

3 hours (Health Science majors only)

This course will aid in the development of a basic foundation of awareness, knowledge, and skills from which to apply subsequent health education and health promotion principles. The course is based on the Seven Responsibilities of a Health Educator, which include assessing needs; planning, implementing, and evaluating health programs; coordinating provisions of services; act-

ing as a resource person; and communicating health education needs.

HLTH 194 – Lifetime Health and Fitness

2 hours

The purpose of this course is to integrate material from human physiology, psychology, sociology and nutrition to present an interdisciplinary framework for disease prevention and health promotion. Students will be instructed in and perform cardiovascular and strength training programs which will empower them to design a fitness program and provide a basis for lifetime health promotion. Fifty percent of the course entails regular physical activity, lab participation, and fitness evaluation.

HLTH 245 – Substance Abuse Prevention

3 hours (Health Science or Exercise Science-Physical Education/Health/ Coaching Majors only)

This course is designed primarily for health science and exercise science/pre-MAE majors to convey the impact of drug use and/or abuse on the lives of ordinary people. It will assist students in gaining a realistic perspective of drug-related problems in our society. Topics explored will include the history of drugs; how and why drug abuse occurs; how drug abuse relates to each profession; and drug abuse prevention.

HLTH 250 – Practicum I

1-3 hours

Course is designed to allow students to obtain practical experience in an area related to their major or pattern. Students may engage in an investigation, work in an allied field, or a combination of the two. Student is expected to complete a daily log and submit a written report detailing their experience as it relates to the major or pattern. Consent of academic advisor and Program Director required. Prerequisite: HLTH 190 with grade of "D" or higher.

HLTH 260 – Human Sexuality

3 hours (Health Science or Exercise Science-Physical Education/Health/ Coaching Majors only)

Course discussions include anatomy/physiology, decision-making skills, disease outcomes, relationships, parenting, birth control, and sexual expression.

HLTH 261 – Mental Health

3 hours (Health Science or Exercise Science-Physical Education/Health/ Coaching Majors only) (offered fall only)

In this course, we will draw the parameters of mental health, examine Healthy People 2010 and the Surgeon General's Report of Mental Health, explore current schools of thought that dominate the field, and determine the role that positive mental health plays in the achievement of optimal health and wellness. Selected topics include: positive mental health, self-esteem, emotional health, non-violent conflict resolution/peer mediation, stress and stress management, problems of everyday living, community-based mental health services, and health counseling skills. Prerequisite: HLTH 190 or ES 190 with grades of "D" or higher.

HLTH 270 – Consumer Health

3 hours (Health Science Majors only)

This course meets the major requirements for the BS degree in Health Science. The course provides an overview

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

of the complex health marketplace in order to assist consumers in selecting health products and services intelligently. Topics explored include fraud/quackery, fact/fiction, self-care, advertising, cancer, healthcare facilities, insurance, aging/death and dying consumer issues and more.

HLTH 310 – Methods for Health Educators
3 hours (Health Science majors only)

The course actively involves the student in the development and selection of materials, methods, and techniques for communicating health and health education information to individuals and populations. Students will select a health education agency/organization and a health topic/issue to communicate a mass media/multi-media persuasive health communication message/campaign to a targeted population in a community. The student will demonstrate proficiency in communicating this health information/targeted message via multiple media methods. Prerequisites: HLTH 346, HLTH 366 with grades of "D" or higher.

HLTH 325 – Health Promotion Management and Marketing
3 hours (Health Science Majors only)

Introduction to the skills and principles necessary for marketing, strategic planning and leadership/ management of successful health promotion programs. Prerequisites: HLTH 190, STAT 190.

HLTH 334 – Physiological Assessment
3 hours (Health Science Majors only)

This course is designed to introduce students to the functional assessment of human fitness and performance. Students will be actively involved in the measurement and evaluation of components of body composition, cardiorespiratory, musculoskeletal, and skill-related fitness. Prerequisites: HLTH 190 and STAT 190.

HLTH 346 – Microcomputer Applications
3 hours (Health Science or Communication Disorders Majors only)

The course is a study of microcomputer applications and operations in our modern society. Included in the course is an overview of how professional people use microcomputers in planning, communicating written material, calculating, manipulating data, and making graphic presentations. Activities for the course will include the use of word processing, desktop publishing, spreadsheet, database, graphics programs, and statistical programs.

HLTH 350 – Practicum II
1-3 hours

Practical experience in an area related to major or pattern. Extension of options included in HLTH 250. Consent of academic advisor and Program Director required. Prerequisite: HLTH 250 with grade of "D" or higher.

HLTH 360 – School Health Programs
3 hours (Health Science or Exercise Science-Physical Education/Health/ Coaching Majors only) (offered spring only)

In this course, we conduct advocacy for Coordinated School Health Programs (CSHPs), design a program plan for a CSHP, prepare a lesson project for Comprehensive School Health Education, review the MO School Assessment Program, and evaluate health education curriculum and materials. Prerequisite: HLTH 366 with grade of "D" or higher.

HLTH 362 – Environmental Health
3 hours (Health Science Majors only) (offered fall only)

The course actively involves the student in the determination of environmental health concerns. We will examine the impact of the environment on individual and population health, Healthy People 2010 objectives for environmental health, and the sources/etiology, effects, and control measures for selected environmental and personal safety hazards. Prerequisite: HLTH 190 with grade of "D" or higher.

HLTH 366 – Community Health
3 hours (Health Science or Exercise Science-Physical Education/Health/Coaching Majors only)

In addition to an overview of the theories and models of community health/individual and population health, the course will explore issues pertinent to the community health educator: core public health functions (assessment, policy development, assurance), community health assessment/mobilization/ promotion, culturally competent health promotion, health education programming in the community setting, and legislative advocacy/grant writing for health education issues. Prerequisites: HLTH 190, HLTH 245, HLTH 260, HLTH 270 with grades of "D" or higher.

HLTH 367 – Introduction to Epidemiology
3 hours (Health Science majors only) (offered spring only)

Increasing an understanding of epidemiological concepts, practices, and methods is a primary focus. Topics covered during the course are history of epidemiology, disease etiology, measures of morbidity and mortality, descriptive means of epidemiology, data uses in the field, study designs, measures of effect, data interpretation issues, screening guidelines, and epidemiological aspects of infectious diseases, work and the environment. A separate focus will be placed on the practice of analyzing data in epidemiological investigations. Prerequisite: HLTH 366 with grade of "D" or higher.

HLTH 370 – Field Experience in Health Science
4 hours (Health Science majors only) (offered summer only)

This course is designed to provide Health Science majors with the opportunity to apply career-oriented skills in an off-campus internship setting for a minimum of 200 contact hours. The student must follow the procedures in the application process before enrolling. The student may not be enrolled in more than one additional class during the field experience. Mandatory attendance at two informational sessions, junior or senior status, consent of academic advisor and Program Director, minimum 2.0 cumulative GPA, and minimum 2.5 major GPA are required. See Program Office or <http://hes.truman.edu/fieldexp.shtml> for complete enrollment procedures.

HLTH 374 – Independent Study in Health Science
1-4 hours (Health Science Majors only)

Individualized study in specialized areas of health science. Consent of academic advisor and Program Director required. Prerequisite: HLTH 190.

HLTH 405 – Global Public Health
3 hours (Health Science Majors only)

Course explores disease prevention and health promotion in the global community. Current global health issues will be addressed. Prerequisite: HLTH 366.

HLTH 440 – Program Planning and Evaluation in Health

3 hours (Health Science Majors only) (offered spring only)

This course is designed to develop a more complete understanding of the skills and abilities needed by health educators/promoters for program planning, implementation, and evaluation. The student will be exposed to a wide variety of learning activities and discussions that focus on the core competencies for entry level health educators. In addition, topics will be presented that further the concept of planning, implementation, evaluation, and replanning as a cyclic event. Prerequisite: HLTH 366 with grade of "D" or higher.

HLTH 450 – Senior Seminar

1 hour (Health Science Majors only)

Class is designed to allow students to gain valuable knowledge and information relative to interview procedures, résumé construction, statement of career goals, types of application letters, and portfolio development. Budget planning, tax calculation, credit card risk, and various forms of insurance will also be covered. Junior or senior status; graduation application filed. Must obtain permission from Program Office before enrolling.

HLTH 470 – Research in Health Science

1-4 hours (Health Science Majors only)

Directed student research in Health Science. Consent of academic advisor, research mentor, and Program Director is required. Prerequisite: STAT 190.

HLTH 480 – Worksite Health

3 hours (Health Science Majors only) (offered spring only)

The course will examine worksite health promotion and health protection on the educational, organizational, and environmental levels. The student will design, implement, and evaluate a comprehensive worksite health promotion program and occupational safety and health program; provide a rationale for worksite health promotion and safety programs, and create a comprehensive occupational safety and health manual and corresponding training program. Prerequisite: HLTH 366 with grade of "D" or higher.

HUMAN POTENTIAL AND PERFORMANCE

HPP 200 – Medical Terminology

1 hour

Medical Terminology allows the student to develop mastery with terminology that is used in Allied Health occupations. In the process of developing mastery with medical terminology, a student will have the opportunity to preview or review the fundamentals of anatomy, evaluate a medical brief, and learn proper pronunciation of medical terms. The course is designed as a programmed learning and self-paced approach by body systems.

FACULTY CREDENTIALS

Note: Date in parentheses indicates year of employment at Truman. *Indicates graduate faculty.

Jeffrey Arabas

Director of Aquatics, Instructor in Health and Exercise Sciences
BS, Central Connecticut State University; MA, Northern Arizona University. (1999)

Alf Bilbao

Head Men's Soccer Coach; Instructor in Health and Exercise Sciences.
BS, Northeast Missouri State University. (1998)

Evonne Bird

Instructor in Health and Exercise Sciences
BS, Eastern Montana College; MS, Texas Tech University. (1995)

Michael Bird

Associate Professor of Exercise Science*
BA, MS, Purdue University; PhD, University of North Carolina-Greensboro. (1995)

Michelle Boyd

Head Athletic Trainer; Instructor in Exercise Science
BS, University of Illinois-Urbana; MS, University of Pittsburgh. (1994)

Mike Cannon

Head Women's Soccer Coach; Instructor in Health and Exercise Sciences
BA, Northeast Missouri State University. (1993)

John Cochrane

Head Women's Cross-Country and Track Coach;
Instructor in Health and Exercise Sciences
BS, Iowa State University; MA, Northeast Missouri State University. (1986)

Mary Lou Cole

Instructor in Health and Exercise Sciences
BS, MAE, Truman State University. (2000)

Matt Copeland

Assistant Football Coach; Instructor in Health and Exercise Sciences
BA, MAE, Truman State University. (1997)

Carolyn Cox

Associate Professor of Health
BS, Slippery Rock University of Pennsylvania; MEd Shippensburg University of Pennsylvania; PhD, The Pennsylvania State University. (1994)

Timothy Deidrick

Assistant Men's Basketball Coach, Instructor in Health and Exercise Sciences
BS, MAE, Truman State University. (2000)

2
0
0
3
-
2
0
0
5

**HUMAN
POTENTIAL
AND
PERFORMANCE**

HUMAN
POTENTIAL
AND
PERFORMANCE**Joseph Fanthorp**

Assistant Swim Coach; Instructor in Health and Exercise Sciences
BS, University of Kentucky. (2002)

Marne Fauser

Assistant Women's Basketball Coach, Instructor in Health and Exercise Sciences
BS, Truman State University. (2000)

Troy Garrett

Assistant Athletic Trainer, Instructor in Health and Exercise Sciences
BS, Truman State University; MS, University of Oklahoma. (2000)

Eric Horning

Assistant Athletic Trainer; Instructor in Health and Exercise Sciences
BS, University of Toledo; MS, Michigan State University. (2002)

Jennifer Eldridge Houser

Assistant Professor of Health
BS, University of Iowa; MS, Nebraska Methodist College of Nursing and Allied Health. (2002)

Jeremy Houser

Assistant Professor in Health and Exercise Sciences
BS, University of Iowa; MS, University of Nebraska-Omaha. (2002)

Jeff Jacques

Assistant Football Coach; Instructor in Health and Exercise Sciences
BS, Truman State University; BA, Buena Vista College. (2002)

Melody Jennings

Instructor in Health and Exercise Sciences
BSE, MA, Northeast Missouri State University. (1984)

Elizabeth Jorn

Instructor in Health and Exercise Sciences
BS, MAE, Truman State University. (2000)

Pete Kendall

Head Men's and Women's Tennis Coach, U.S.P.T.A.; Instructor in Health and Exercise Sciences
BA, William Penn College; MA, Ball State University. (1992)

Alexander Koch

Assistant Professor of Exercise Science
BS, MS, Appalachian State University; PhD, University of Kansas. (2000)

Erik Kruppe

Assistant Football Coach; Instructor in Health and Exercise Sciences
BA, Illinois Wesleyan University; MA, Northeastern Illinois University. (2002)

Christopher Lantz

Associate Professor of Exercise Science; Director of Health and Exercise Sciences*
BA, West Virginia Wesleyan College; MA, University of Northern Carolina-Chapel Hill; PhD, West Virginia University. (1995)

Regina Lindhorst

Assistant Professor of Exercise Science
BSE, MA, Northeast Missouri State University; Graduate Study, University of Wisconsin. (1964)

Carrie Lundy

Instructor in Health and Exercise Sciences/Assistant Volleyball Coach
BS, Lincoln Memorial University; MS, Northwest Missouri State University. (2003)

Jerry Mayhew

Professor of Exercise Science*
BS, Appalachian State University; MS, PhD, University of Illinois. (1975)

Colleen Murphy

Head Swim Coach;
Instructor in Health and Exercise Sciences
BA, Oakland University; MA, University of Kentucky. (1999)

Matthew Nelson

Assistant Football Coach;
Instructor in Health and Exercise Sciences
BS, Northeast Missouri State University; MA, Truman State University. (1999)

James Padfield

Associate Professor of Exercise Science
BS, MS, University of Utah; PhD, University of Missouri-Columbia (1996).

Fontaine C. Piper

Division Head of Human Potential and Performance;
Professor of Exercise Science*
BSE, Northeast Missouri State University; MS, Southern Illinois University; EdS, Northeast Missouri State University; PhD, University of Illinois. (1971)

Lacey Schanz

Head Softball Coach; Instructor in Health and Exercise Sciences
BS, Georgia Institute of Technology. (2002)

Edward Schneider

Head Men's Track and Cross Country Coach; Instructor in Health and Exercise Sciences
BSE, MA, Northeast Missouri State University. (1974)

Jack Schrader

Head Men's Basketball Coach; Instructor in Health and Exercise Sciences
BA, Arizona State University; MA, Northeast Missouri State University. (1994)

David Schutter

Head Wrestling Coach; Instructor in Health and Exercise Sciences
BS, Indiana State University. (1991)

Larry Scully

Head Baseball Coach, Instructor in Health and Exercise Sciences
BA, Western Kentucky University; MSS, United States Sports Academy. (2000)

John Sloop, IV

Head Women's Basketball Coach; Instructor in Health and Exercise Sciences
BS, Maryville University; Graduate Study, St. Louis University. (1995)

Qi Wang

Head Volleyball Coach; Instructor in Health and Exercise Science.
BEd, Beijing University of Physical Education of China; MA, Eastern New Mexico University (1997).

John Ware

Head Football Coach; Instructor in Health and Exercise Science
BA, Drake University; MS, Northeast Missouri State University. (1986)

JoAnn Weekley

Assistant Professor of Health and Exercise Science
BSE, MA, Northeast Missouri State University. (1966)

Dan Zimmer

Director of Intramurals; Instructor in Exercise Science
BSE, MA, Northeast Missouri State University. (1988)

NURSING

The curriculum is designed to prepare beginning practitioners of professional nursing who will provide safe, effective nursing care to patients and clients of all ages in a variety of health care settings—hospital, home, community. It is characterized by a liberal education foundation at the lower level on which the upper division Nursing major is built. Lower division courses are foundational and are drawn from the sciences and humanities disciplines. The upper division courses provide knowledge of the theory and practice of Nursing. Concomitant to them are opportunities for courses which enhance the Nursing component, add depth and scope to the core curriculum, and/or promote a more cosmopolitan individual. The baccalaureate nursing graduate is prepared to function as a generalist in beginning positions in all areas of nursing practice, including maternal, child, mental, adult, and community health nursing. The curriculum provides a foundation for graduate study in Nursing. Graduates who meet the requirements of section 335.066 of the State of Missouri Nursing Practice Act are eligible to apply for the registered nurse licensing examination. The Nursing Program is approved by the Missouri State Board of Nursing. The baccalaureate degree Nursing Program is accredited by the Commission on Collegiate Nursing Education.

MISSION STATEMENT

The mission of the Truman State University Nursing Program is to offer an exemplary community-based baccalaureate nursing education grounded in the liberal arts and sciences to support and prepare caring nurse scholars to practice in a diverse and rapidly changing healthcare environment.

ADMISSION TO NURSING

Only a limited number of Nursing Program applicants are accepted into the program. The Nursing Admissions Committee seeks to select the most qualified applicants for admission.

In addition to acceptance to the University, applicants to the Nursing major must be accepted by the Nursing program. A special application for admission to Nursing is available from the Nursing office. The completed application and a summary of career goals should be sent directly to Nursing Student Affairs Committee. As a part of the admissions process, the Nursing Student Affairs Committee reviews transcripts and test scores, and places applicants at the appropriate level in the program based on the student's qualifications and space availability. (See the most recent Nursing Student Handbook for current policies and the suggested program.)

NURSING

BACHELOR OF SCIENCE IN NURSING

	Semester Hours
Liberal Studies Program Requirements	32-57
Missouri Statute Requirement	1-3
Required Support Courses	15-29
BIOL 100 Biology** OR	4
BIOL 107 Introductory Biology I**	4
BIOL 214 Anatomy and Physiology I	4
BIOL 215 Anatomy and Physiology II	4
CHEM 100 Chemistry for Contemporary Living** OR	4
CHEM 120 General Chemistry I** OR	4
CHEM 120 Chemical Principles I**	5
ED 250 Life Span Development OR	3
PSYC 377 Developmental Psychology	3
PHRE 188 Ethics**	3
PSYC 166 General Psychology**	3
STAT 190 Basic Statistics**	3
**May be used to fulfill LSP requirements.	
Bachelor of Science Requirements	9
BIOL 204 Introductory Microbiology	3
BIOL 353 Pathophysiology	3
NU 311 Human Nutrition	3
NURSING MAJOR REQUIREMENTS	50
NU 180 Introduction to Human Care Nursing	2
NU 221 Nursing Informatics	1
NU 240 Nursing Therapeutics I	3
NU 280 Nursing Therapeutics II	3
NU 310 Pharmacotherapeutics	3
NU 325 Physiological Processes	5
NU 355 Gerontological Nursing	2
NU 365 Chronic Illness	2
NU 375 Maternal/Neonatal Nursing	4
NU 385 Child/Family Nursing	4
NU 410 Introduction to Nursing Research	3
NU 425 Community Mental Health Nursing	5
NU 445 Clinical Elective	2
NU 470 Care Coordination	2
NU 475 Critical Care Nursing	3
NU 485 Rural Public Health Nursing	5
Capstone Experience	
NU 498 Professional Socialization	1
Electives to Total	128

SUGGESTED PROGRAM

(Courses in **BOLD** are major requirements.)

FRESHMAN YEAR-FALL SEMESTER

Truman Week	.....	1
BIOL 100	Biology	.....4
CHEM 100	Chemistry for Contemporary Living	.....4
PSYC 166	General Psychology	.....3
MATH 186	Elementary Functions	.....3
NU 221	Nursing Informatics	.....1
		16

SPRING SEMESTER

NU 180	Introduction to Human Care Nursing	.....2
BIOL 214	Anatomy and Physiology I	.....4
ENG 190	Writing as Critical Thinking*	.....3
COMM 170	Public Speaking*	.....3
HLTH 194	Lifetime Health and Fitness*	.....2
Elective	.....	1
		15

SOPHMORE YEAR-FALL SEMESTER

NU 240	Nursing Therapeutics I	.....3
MATH 194	LAS Calculus*	.....3
BIOL 215	Anatomy and Physiology II	.....4
ED 250	Life Span Development	.....3
Foreign Language Requirement*	.....	3-4
		16-17

SPRING SEMESTER

NU 280	Nursing Therapeutics II	.....3
NU 311	Human Nutrition	.....3
BIOL 204	Introductory Microbiology	.....3
BIOL 353	Pathophysiology	.....3
Foreign Language Requirement*	.....	3-4
		15-16

All the following courses must be completed before entering the junior level nursing courses: BIOL 100, BIOL 214, BIOL 215, BIOL 204, BIOL 353, CHEM 100, NU 311, ED 250, NU 180, NU 240, NU 280, PSYCH 166, and Elementary Functions Mathematics requirement.

JUNIOR YEAR-FALL SEMESTER

NU 310	Pharmacotherapeutics	.....3
NU 325	Physiological Processes	.....5
NU 355	Gerontological Nursing	.....2
HIST 298	American Institutional History*	.....1
Junior Interdisciplinary Writing Enhanced Seminar*	.....	3
PHRE 188	Ethics	.....3
		17

SPRING SEMESTER

NU 365	Chronic Illness	.....2
NU 375	Maternal/Neonatal Nursing	.....4
NU 385	Child/Family Nursing	.....4
STAT 190	Basic Statistics*	.....3
Aesthetic: Fine Arts Mode of Inquiry*	.....	3
		16

SENIOR YEAR-FALL SEMESTER

NU 410	Introduction to Nursing Research	.....3
NU 425	Community Mental Health Nursing	.....5
NU 445	Clinical Elective	.....2
NU 498	Professional Socialization	.....1
Aesthetic: Literature Mode of Inquiry*	.....	3
Elective	.....	3
		17

SPRING SEMESTER

NU 470	Care Coordination2
---------------	--------------------------	--------

NU 475	Critical Care Nursing	.....3
NU 485	Rural Public Health Nursing	.....5
	Intercultural Perspective*	.....3
	Historical Mode of Inquiry*	.....3
		16
		128

*LSP Courses. These are just suggestions. Course choice is up to student and scheduling needs/interest.

NURSING ACADEMIC REQUIREMENTS

Cumulative and Nursing Major GPA:

To remain in the program, the following policies apply to all students who have been accepted in the Nursing Program:

- At the end of the Freshman year and every successive end of semester, students must have a cumulative grade point average of 2.75 or above.
- At the end of the Sophomore year and every successive end of semester the student.
 - Must have a grade point average of 2.50 or above for Nursing Major Requirements.
 - Must have achieved a "C" or better grade in all Required Support and BS requirements, as well as NU 180.
- For the Nursing Major Courses NU 240, 280, 310, 311, 325, 355, 365, 375, 385, 425, 445, 470, 475, 485.
 - Must attain a minimum of a "C" grade competency on all examinations.
 - Must attain a "C" or better to advance within the Nursing Major Requirements. (Also applies to NU 180, NU 221, NU 410, and NU 498.)

Progression Policies

Following enrollment in junior level courses, if a student's overall GPA falls below 2.75 or the overall Nursing Major requirements GPA falls below 2.50, the student may be continued for one semester on probation. Probation status is based upon approval of Nursing faculty.

Any student who withdraws from or fails to complete any one of the following Nursing major courses will not be eligible to continue as a Nursing major: NU 240, 280, 310, 311, 325, 355, 365, 375, 385, 470, 475, 485, 425, 445.

Students should be aware that space availability in nursing courses limits change of program opportunities.

Comprehensive Examinations

All students are required to take a national normed exam during the junior and senior year. The test completed in the senior year is considered the Senior Comprehensive Exam. Students must achieve at a pre-established score or will be required to complete an approved review program at a pre-determined level to pass senior-level clinical nursing courses.

Graduation

- Must have a nursing major requirements cumulative grade point average of 2.50 or above.
- Must have a total cumulative grade point average of 2.50 or above.
- Must have a "C" or better in all Nursing courses.

Special Circumstances

Occasionally circumstances alter a student's ability to achieve goals within a specified time frame. If an unusual problem should occur, the student is to contact his/her advisor in order to explore the student's options. A peti-

tion which enables the student to explain circumstances surrounding a problem is available from advisors.

Each student's situation is considered on an individual basis. The procedure is to meet with the advisor and to petition for faculty approval, clearly stating the rationale for the request. Failure to meet all academic requirements of the nursing program may result in withdrawal from the nursing major. (See Nursing Student Handbook.)

Dropping Back

Students who decide they would like to drop back to another class are advised that space availability and each student's pattern of achievement are major factors in the approval of such a change. Competition for space in each class mandates that, as spaces become available, they are filled with those most qualified. Usually this means that a qualified student will be advanced from a lower class. There are situations, however, where it is justifiable that a student drops back. (See Nursing Student Handbook.)

Reinstatement

Students who are requesting to be reinstated into the nursing program must submit the following information to the Student Affairs Committee:

- a. A new admission/application form.
- b. One letter of recommendation from Truman faculty or academic advisor.
- c. An up-to-date transcript.
- d. A letter (in lieu of petition) regarding resolution of problems that necessitated withdrawal. Additional information may be required to support problem resolution (i.e. letter of recommendation from employer or copy of employment evaluation). These materials are to be sent to the Student Affairs Committee.
(See Nursing Student Handbook.)

Special Equipment

Nursing students will be expected to have the following equipment: tape recorder, stethoscope, sphygmomanometer, complete uniform, watch with capability for measuring seconds, bandage scissors, name pin, pen light, malpractice insurance, and access to an automobile (beginning with the fall semester of the junior year). (See syllabi and Nursing Student Handbook.)

Health Policy

Prior to initial entry into clinical courses, students are required to demonstrate compliance with nursing program health policies as outlined in the Nursing Student Handbook. Students absent from the program for more than one (1) year are required to submit updated evidence of health status. All students in clinical courses are instructed in the use of procedures for the prevention of transmission of infectious diseases.

Missouri State Board of Nursing Licensure Information

According to Section 335.066, Missouri Statutes, completion of Nursing Program requirements does not guarantee eligibility to write the licensure examination (for the complete provisions see Chapter 335, RSMo, the Nursing Practice Act). Applicants for Registered Nurse licensure in Missouri must "be of good moral character and have completed at least the high school course of study, or the equivalent thereof as determined by the state board of education, and have successfully completed the basic professional curriculum in an accredited or approved school of nursing" (See

Section 355.046, Missouri Statute). In compliance with the Missouri Nurse Practice Act (Chapter 335 of the Missouri Statutes, section 335.066), nursing program applicants should be aware that the Missouri State Board of Nursing may refuse to issue a license for specific reasons related to moral aptitude, intemperate use of alcohol or drugs, or conviction of a crime.

Additional Expenses

- Clinical Course fees
- Community Health travel expense
- Field trip travel
- Nursing Student Association participation
- School Pin, upon graduation
- Licensure, following graduation

Additional Requirements

Agencies where students are assigned for clinical experiences may have additional requirements of students, including completion of a criminal background check. Students must meet Missouri State Board of Nursing requirements for functional abilities. (See Nursing Student Handbook.)

Registered Nurse Application

Registered Nurse applicants should initiate the university admissions process as outlined for all students. Upon receipt of the application, an appointed faculty advisor for RN students will work with applicants throughout the Nursing placement process. If the applicant is accepted, the advisor will continue to assist the RN in planning and carrying out the educational program. Registered nurse students are required to do the following:

1. Meet the academic policies of the program.
2. Provide evidence of current RN licensure in Missouri
3. Complete University Liberal Arts and Sciences Core requirements.*
4. Complete required support courses, BS degree liberal arts and sciences courses, and nursing major required courses.*
5. Be formally admitted to Nursing before applying to take validation examinations.
6. Applications for validation exams are due by March 1 of each year.
7. Contract for dates of validation examinations and graduation.

*Transfer of credit policy is applicable

Placement into the Program is determined on the basis of available space and review of applicants' materials. Registered Nurses have the option of seeking advanced standing through validation examinations and submission of a portfolio. Through this process, the registered nurse may demonstrate competency in some of the instructional areas included in freshman, sophomore and/or junior level nursing courses of the curriculum.

All Nursing course validation examinations are given through the Nursing Program and students pay a set fee for each examination. Students must have completed discipline-directed and BS degree liberal arts and sciences courses prior to applying for validation examinations of junior level courses.

Validation examinations must be completed in sequence with a minimum score at a pre-established level. A clinical exam may be required for Registered Nurses who have not practiced nursing in the past four years.

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

HUMAN
POTENTIAL
AND
PERFORMANCE

Course syllabi and study guides are available to students at a minimal charge. A fee of \$10 per credit hour will be charged for validation process.

**BSN PROGRAM FOR REGISTERED NURSES
AT TRUMAN**

Credit possible through the validation process

NLN Mobility Profile II Examinations		Credit Hours
NU	325 Physiological Processes	.5
NU	310 Pharmacotherapeutics	.3
NU	375 Maternal/Neonatal Nursing	.4
NU	385 Child/Family Nursing	.4
NU	425 Community Mental Health	.5
Total credit possible by examination		.21
Credit by portfolio		
NU	180 Introduction to Human Care Nursing	.2
NU	240 Nursing Therapeutics I	.3
NU	280 Nursing Therapeutics II	.3
Total Credit possible by portfolio		.8
Total credit possible by validation process		.29

Nursing Credits to take at Truman		Credit Hours
NU	221 Nursing Informatics	.1
NU	410 Introduction to Nursing Research	.3
NU	470 Care Coordination	.2
NU	485 Rural Public Health Nursing	.5
Select from the following to total 21 credits:		
NU	355 Gerontology	.2
NU	365 Chronic Illness	.2
NU	445 Clinical Elective	.2
NU	475 Critical Care Nursing	.3
NU	498 Professional Socialization	.1
Total Nursing credits		.21
Liberal Studies		.77
Elective		.1
Missouri Statute		.1

Total Credit Hours for BSN Degree .128

HONORS PROGRAM

Eligibility:

1. Maintain a cumulative GPA and a nursing GPA of 3.50.
2. Produce a scholarly paper or project to be presented in a public seminar.
3. Achieve above the 50th percentile on the program comprehensive examination.
4. Receive approval of a majority of the nursing faculty.

**COURSE
DESCRIPTIONS**

**NU 180 – Introduction to Human Care Nursing
2 hours (offered fall, spring)**

Content focuses on increasing students' knowledge concerning the historical evolution of nursing and definition, scope and uniqueness of nursing practice and nursing as a profession. The structure and reform of the health care system and health care issues confronting nurses will be examined. Concepts presented are considered within the context of nursing as a human science, with human care nursing as the central focus of the course. Critical analysis

of caring and curing as opposing or complementary aspects of the health care system is emphasized.

NU 221 – Nursing Informatics

1 hour (offered spring semester)

Students will be given the opportunity to explore present and potential impact of informatics on the discipline and practice of nursing, the health care delivery system, and the client. In laboratory settings, students will explore various methods of electronic communication, information retrieval and analysis, and presentation using technologies such as data management and the Internet. Health information systems for the management of health care data will be examined.

NU 240 – Nursing Therapeutics I

3 hours (offered fall semester)

Nursing Therapeutics I introduces holistic caring strategies through integration of concepts of communication, client assessment, and nursing therapeutics. Emphasis is placed on transpersonal interactions between the nurse and client. Students will utilize the nursing process and the Science of Human Care Nursing to apply didactic material through clinical simulation. Prerequisite: NU 180 (can be taken concurrently).

NU 280 – Nursing Therapeutics II

3 hours (offered spring semester)

Nursing Therapeutics II is a continuation of the concepts taught in Nursing Therapeutics I. The focus is on increasingly complex therapeutic strategies utilizing experiential learning opportunities through clinical simulation. Prerequisites: NU 180 and NU 240.

NU 310 – Pharmacotherapeutics

3 hours (offered fall only)

Students are introduced to physiological and biochemical principles concerned with the actions of pharmacological agents. Therapeutically important classes of drugs are discussed in detail. Implications of drug therapy for nursing and health care are emphasized. Application of pharmacological principles is integrated with individualized caring strategies through simulated NCCA experiences. Prerequisite: Junior status in the Nursing Program.

NU 311 – Human Nutrition

3 hours (offered spring only)

Application of nutrition fundamentals essential to health from a physiological point of view; nutrient requirements, food sources and adequate diet selection. Prerequisites: CHEM 100 or CHEM 120, OR approval of instructor. (NU 311 is equivalent to HPP 311.)

NU 325 – Physiological Processes

5 hours (offered fall, spring)

Students will utilize the Science of Human Care Nursing in the provision of care for clients, families, and aggregates with actual or potential physiological alterations in acute care and community setting. Concepts of illness, illness prevention, and health promotion throughout the lifespan will be presented in the context of healing and caring nursing practice. Prerequisite: Junior status in the Nursing Program.

NU 355 – Gerontological Nursing

2 hours (offered fall, spring)

Students are introduced to the care of older clients experiencing the aging process and to the health care needs

related to aging. The Science of Human Care Nursing is applied in regard to needs of older adults as survivors. Vulnerable aggregates among this population, such as the old-old and the frail elderly will be explored. Prerequisite: Junior status in the Nursing Program.

NU 365 – Chronic Illness
2 hours (offered spring only)

This course will explore the impact of chronic conditions on clients, families, and communities. The Science of Human Care Nursing will be utilized to examine physiological and psychosocial concerns as related to chronic illness. Students will have opportunities to relate didactic concepts to lived human experiences. Prerequisite: Junior status in the Nursing Program.

NU 375 – Maternal/Neonatal Nursing
4 hours (offered fall, spring)

Concepts of human development and family-centered care are integrated in the nursing care of obstetrical, neonatal, and gynecological clients. Factors impacting the birth experience, maternal, neonatal and women's reproductive health will be explored. Students will utilize the nursing process and the Science of Human Care Nursing to apply didactic material throughout clinical learning opportunities. Prerequisite: Junior status in the Nursing Program.

NU 385 – Child/Family Nursing
4 hours (offered fall, spring)

Concepts of the Science of Human Care Nursing, family, and child development are integrated with the nursing care of well and ill children and adolescents. Factors impacting the health of the child and family will be explored. Students will utilize the nursing process and the Science of Human Care Nursing to apply didactic material throughout clinical learning opportunities. Prerequisite: Junior status in the Nursing Program.

NU 410 – Introduction to Nursing Research
3 hours (offered fall, spring)

Building upon critical thinking skills and the problem-solving approach utilized in earlier courses, this course focuses on the research process applied to nursing, on the development and writing of a research proposal. As a writing enhanced course, students will use writing as a method of communicating research information to an audience of research consumers. The relationships among nursing theory, research and practice are discussed and analyzed. Nursing theory, research and practice are evaluated within a framework of the fundamental patterns of knowing in nursing. Writing assignments emphasize critical evaluation of research, and understanding of research methods. This course meets the Writing-Enhanced requirement. Prerequisite: STAT 190 or faculty approval.

NU 425 – Community Mental Health Nursing
5 hours (offered fall, spring)

This course will provide integration of the science of human care nursing, caring communication, and the framework of psychiatric/mental health nursing. The focus will be illness, illness prevention and health promotion for individuals, families, groups and aggregates experiencing actual or potential alterations in mental health. The process of caring communication will be analyzed and practiced through the development of therapeutic relationships with individuals, families and groups in community-based clinical settings. Strategies of primary, secondary

and tertiary prevention will be explored for vulnerable populations such as the homeless, substance abusers, and the persistently mentally ill. This course meets the Communicative Mode of Inquiry requirement.

NU 445 – Clinical Elective
2 hours (offered fall, spring)

This course will provide applications of the science of human caring through comprehensive practice in the discipline of nursing. The focus will be illness, illness prevention and/or health promotion for individuals, families, groups, and communities through selected clinical experiences in a variety of settings in collaboration with a faculty mentor. Prerequisite: Senior status in the Nursing Program.

NU 470 – Care Coordination
2 hours (offered spring)

This course presents principles of organizations, leadership and management as related to the Science of Human Care Nursing. Emphasis is on coordination of care for client aggregates and health care personnel. Students will have the opportunity to apply a variety of management methodologies. Prerequisite: Senior status in the Nursing Program.

NU 475 – Critical Care Nursing
3 hours (offered fall, spring)

Students will utilize the Science of Human Care Nursing in the provision of nursing care for clients experiencing life threatening situations. Emphasis is placed on the development of knowledge and skills required for rapid and continuous assessments, and the appropriate interventions and evaluations throughout critical client and family episodes to promote healing and/or support resolution toward a peaceful death. Prerequisite: Senior status in the Nursing Program.

NU 485 – Rural Public Health Nursing
5 hours (offered fall, spring)

The course will provide integration of the Science of Human Care Nursing and public health concepts with a focus on the rural community as client. Emphasis will be placed on health promotion, levels of prevention, principles of epidemiology, population-focused practice, culture, vulnerable populations and community crisis. The rural health care system and problems of access to health care services unique to the rural community will be explored. Prerequisite: Senior status in the Nursing Program. This is a writing-enhanced course.

NU 491 – Directed Studies in Nursing
1-3 hours (offered fall, spring)

Independent organization of learning activities related to Nursing interest area in order to accomplish objectives mutually agreed upon by student and instructor. This course requires the instructor's approval.

NU 498 – Professional Socialization
1 hour (offered fall)

A senior seminar planned to aid the individual in role transition from student to professional practitioner. Discussion centers around current issues and their potential impact on nursing practice, preparation of a professional profile, and methods of socialization. Prerequisite: Senior status in the Nursing Program.

2
0
0
3
-
2
0
0
5

HUMAN
POTENTIAL
AND
PERFORMANCE

FACULTY CREDENTIALS

Note: Date in parentheses indicates year of employment at Truman.

Alice Davis

Lecturer in Nursing
BSN, Northeast Missouri State University; MSN, University of Missouri-Columbia. (2002)

Sarah Phelps Delaware

Assistant Professor of Nursing
BSN, University of Iowa; MSN, University of Arizona. (1980)

Pam Gardner

Assistant Professor of Nursing
BSN, Fitchburg State College; MSN, University of Missouri-Columbia. (2000)

Mariquit Hadwiger

Assistant Professor of Nursing
BSN, Central Philippines University; MSN, Texas Women's University. (1994)

Stephen Hadwiger

Associate Professor of Nursing
BSN, Northwestern Oklahoma State University; MSN, University of Oklahoma; Ph.D., University of Missouri-Columbia. (1993)

Jody Frame Kelly

Assistant Professor of Nursing
BSN, Webster University; MSN, University of Kansas. (2002)

Rebecca McClanahan

Assistant Professor of Nursing
BS, Northeast Missouri State University; MSN, University of Missouri-Columbia; Graduate Study, University of Kansas. (1975)

Sharon Ann McGahan

Assistant Professor of Nursing
BSN, University of Missouri-Columbia; MSN, University of Texas-Austin; EdS, Northeast Missouri State University; Graduate Study, University of Missouri-Kansas City. (1977)

Teak Nelson

Lecturer in Nursing
BSN, University of Missouri-Columbia; MSN, University of Michigan; Graduate study, University of Missouri-Columbia. (2002)

Stephanie Powelson

Nursing Program Director; Associate Professor of Nursing
BSN, University of Tennessee Center for Health Sciences; M.P.H., University of North Carolina-Chapel Hill; EdD, Spalding University. (1996)

Brenda Wheeler

Assistant Professor of Nursing
BSN, University of Kansas; MSN, University of Missouri-Columbia. (2000)

Corrie Willis

Lecturer in Nursing
BSN, Northeast Missouri State University; MSN, Wichita State University. (2003)