College of Applied Sciences and Technology

www.bsu.edu/cast
Applied Technology Building 202, (765) 285-5818
Dean of the College: Nancy M. Kingsbury

Family and Consumer Sciences

www.bsu.edu/fcs
Applied Technology Building 150, (765) 285-5931
Chairperson: Alice A. Spangler
Graduate Advisor: Sue H. Whitaket
Graduate Faculty: Adams, Ahmadi, Altman, Birk, Burnett, Campbell, Chezem, Earhart, Friesen, Hall, Kandiah, Kingsbury, Kurtz, Leahy, Owens, Pike, Potts, Saiki, Sampson, Spangler, Thompson, Whitaker

The Department of Family and Consumer Sciences prepares diverse students to improve the quality of life for individuals, families, and communities and the environments in which they function.

Programs empower individuals and families across the life span to manage the challenges of living and working in a diverse, global society through the integration and application of knowledge, skills, attitudes, and behaviors from family and consumer sciences as well as a variety of other disciplines.

The department encourages professional and community service by its faculty and students. The graduate degree options are designed to provide individualization and flexibility for students with varying needs and interests. The master of science in family and consumer sciences and in dietetics and the master of arts in family and consumer sciences can be accomplished with a wide variety of courses. The following options are available also:

Master of Arts in Family and Consumer Sciences
- Apparel Design Option
- Fashion Merchandising Option
- Nutrition Option
- Residential Property Management Option

Master of Science in Family and Consumer Sciences
- Apparel Design Option
- Fashion Merchandising Option
- Residential Property Management Option

In addition, students can develop programs in education, family life, food management, and interior design.

PROGRAMS

Master of arts (MA) in family and consumer sciences; master of science (MS) in dietetics and in family and consumer sciences. In general, depending on the program of study, students should anticipate 18–24 months to complete a master's degree in family and consumer sciences or dietetics.

Admission

Applicants must meet the admission requirements of the Graduate School. All applicants must submit a letter of intent, a resume, and two letters of recommendation.

MASTER OF ARTS IN FAMILY AND CONSUMER SCIENCES

21–33 hours from family and consumer sciences major including a minimum of 9 hours to complete the research component:

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Research component			
9–12 hours from			
BIO	548	Biometry (3)	
	or		
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stat (3)	
	or		
HSC	687	Stat Mth HSc (3)	3
FCS	697	Res Methods	3
RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6
Family and consumer sciences courses or one of the options listed below			15
Electives inside or outside the Department of Family and Consumer Sciences (nutrition option students may include dietetic internship FCSFN 580, 581, 582)			6–9
			33 hrs
Apparel design option, 15 hours			
FCSFA	500	Adv Flat Pat	3
	501	Adv Tailor	3
	503	Adv Draping	3
	505	Adv CAD Appr	3
FCSFA elective			3
			15 hrs
Fashion merchandising option, 15 hours			
FCSFA	555	Adv Fash Anl	3
	565	Adv Designer	3
	570	Adv Fash Buy	3
	575	Adv Int Appr	3
FCSFA elective			3
			15 hrs
Nutrition option, 15 hours			
FCSFN	642	Nutr Assessm	3
	647	Cho Pro Lip	3
	648	Vit & Min	3
6 hours from			
FCSFN	643	Obes Wt Ctrl (3)	
	644	Nut Exer Spt (3)	
	650	Matrn Inf Nu (3)	
	651	Pediatr Ntr (3)	
	652	Geriatr Ntr (3)	6
			15 hrs
Residential property management option, 15 hours			
Foundation courses at the undergraduate level (FCSPM 104, 235, 275, 305) are required except when equivalent competency has been documented.			
FCSPM	535	Adv RPM Proj	3
	585	Adv Sim RPM	3
	635	Adv RPM T & I	3
6 hours from			
FCSPM	515	Adv Sr Hous (3)	
	525	Adv Gov Hous (3)	
FCSFC	680	Family Prob (3)	6
Students without an RPM undergraduate degree or with less than six months of industry experience must use 6 of the elective hours to complete FCS 569 Internship.			
			15 hrs

MASTER OF SCIENCE IN FAMILY AND CONSUMER SCIENCES

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Research component			
9–12 hours from			
BIO	548	Biometry (3)	
	or		
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stat (3)	
	or		
HSC	687	Stat Mth HSc (3)	3
FCS	697	Res Methods	3
THES	698	Thesis (1–6)	6
Family and consumer sciences courses or one of the options listed below			15

Electives inside or outside the Department of Family and Consumer Sciences			6–9
			33–36 hrs

Apparel design option, 15 hours

FCSFA	500	Adv Flat Pat	3
	501	Adv Tailor	3
	503	Adv Draping	3
	505	Adv CAD Appr	3
FCSFA elective			3
			15 hrs

Fashion merchandising option, 15 hours

FCSFA	555	Adv Fash Anl	3
	565	Adv Designer	3
	570	Adv Fash Buy	3
	575	Adv Int Appr	3
FCSFA elective			3
			15 hrs

Residential property management option, 15 hours

Foundation courses at the undergraduate level (FCSPM 104, 235, 275, 305) are required except when equivalent competency has been documented.

FCSPM	535	Adv RPM Proj	3
	585	Adv Sim RPM	3
	635	Adv RPM T & I	3
6 hours from			
FCSPM	515	Adv Sr Hous (3)	
	525	Adv Gov Hous (3)	
FCSFC	680	Family Prob (3)	6

Students without an RPM undergraduate degree or with less than six months of industry experience must use 6 of the elective hours to complete FCS 569 Internship.

15 hrs

MASTER OF SCIENCE IN DIETETICS

Admission

Applicants must meet the admission requirements of the Graduate School. All applicants must submit a letter of intent, a resume, and two letters of recommendation.

Those applying for the MS in dietetics must provide an original, signed American Dietetic Association Verification of Completion Statement from the Didactic Program in Dietetics director or a Declaration of Intent to complete a didactic program in dietetics that indicates that academic work is within the last five years. Courses for verification must be completed before the MS in dietetics is granted.

Dietetic Internship

The dietetic internship at Ball State University is a 26-week, full-time program that begins in January and June of each year. Students accepted into the program will have the opportunity to complete the requirements of the dietetic internship and at least 18 hours of the master's degree. The dietetic internship at Ball State University is currently granted accreditation by the Commission on Accreditation for Dietetics Education, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-0040. Students applying to the dietetic internship must provide a completed application form, a current resume, a letter of application, a letter of acceptance to the Ball State Graduate School, three original recommendations, and an American Dietetic Association Verification of Completion Statement or Declaration of Intent to complete a didactic program in dietetics, and must hold a baccalaureate degree from an accredited educational institution.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
BIO	548	Biometry (3)	
		or	
EDPSY	642	Interim Stat (3)	
		or	
HSC	687	Stat Mth HSc (3)	3
FCS	697	Res Methods	3
THES	698	Thesis (1–6)	6
FCSFN	642	Nutr Assessm	3
	647	Cho Pro Lip	3
	648	Vit & Min	3
6 hours from			
FCSFN	500	Cost Hosp Fd (3)	
	576	Event Mgt (3)	
	643	Obes Wt Ctrl (3)	
	644	Nut Exer Spt (3)	
	650	Matrn Inf Nu (3)	
	651	Pediatr Ntr (3)	
	652	Geriatr Ntr (3)	
	660	Adv F S Mgt (3)	6
9 hours from FCSFN dietetic internship sequence or other elective inside or outside the Department of Family and Consumer Science such as public health, patient education, and medical nutritional therapy interests			9
			36 hrs

FAMILY AND CONSUMER SCIENCES (FCS)

500 Field Studies in Family and Consumer Sciences. (1–6) Field study sites may either be domestic or international, and in any area of family and consumer sciences. Readings related to the field experience will be included.

Prerequisite: permission of the department chairperson.

A total of 6 hours of credit may be earned.

569 Internship in Family and Consumer Sciences. (3–6) Provides the opportunity for work in an established setting to gain professional experience in one's specific area of study.

Prerequisite: permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

594 Workshop: Family and Consumer Sciences. (1–3) Activity-oriented study of one topic in family and consumer sciences.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

595 Independent Study in Family and Consumer Sciences. (1–3) Investigation and exploration of a topic in family and consumer sciences. Emphasizes extensive reading and the development of research skills.

Prerequisite: permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

596 Seminar in Family and Consumer Sciences. (1–6) Seminar topics will focus on current issues in the family and consumer sciences profession. Using the seminar format students will research, discuss, and disseminate information gathered on a given topic.

Prerequisite: permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

697 Research Methodology in Family and Consumer Sciences. (3) Analysis and application of research procedures in the various areas of family and consumer sciences. The focus is on critiquing research completed by others and developing a research proposal.

Prerequisite: permission of the department chairperson.

Parallel: EDPSY 641 or 642 or BIO 548 or HSC 697.

FAMILY AND CONSUMER SCIENCES: EDUCATION (FCSED)

692 Family and Consumer Sciences Education Program Implementation. (3) Standards for and history and philosophy of family and consumer sciences education (FCSED) are featured. Techniques for implementing career and technical FCSED programs are included. Also incorporates strategies for developing leadership, youth organizations, public relations, and professionalism.

Not open to students who have credit in FCSED 492, except by permission of the department chairperson.

693 Curriculum in Family and Consumer Sciences. (3) A study of curriculum components. Features the principles of curriculum development and implementation in family and consumer sciences education. Existing curriculum standards at the state and national level are utilized in curriculum development.

Open only to students with an FCSED teaching license or by permission of the department chairperson.

694 Assessment and Evaluation in Family and Consumer Sciences Education. (3) Assessment used by effective teachers in FCS education. Use of forms such as checklists, rubrics, scorecards, and other measures are explored. Emphasizes ways to incorporate assessment that promotes student learning and develops student confidence. Includes means of assessment for unique students and/or teaching/learning settings.

Open only to students with an FCSED teaching license or by permission of the department chairperson.

695 Contemporary Methods for Teaching Family and Consumer Sciences Education. (3) Methods and techniques used by effective family and consumer sciences education teachers. Includes ways to incorporate methods that promote student directed learning, decision making, and the development of responsible citizens. Emphasizes methods that create an

appropriate teaching/learning classroom and develop a community of learners.

Open only to students with an FCSED teaching license or by permission of the department chairperson.

FAMILY AND CONSUMER SCIENCES: FASHION MERCHANDISING AND APPAREL DESIGN (FCSFA)

500 (FCSMR 500) Advanced Flat Pattern. (3) Fundamental principles of pattern modification using a basic pattern. Emphasis on pattern alteration and fitting of basic dress and pants. Use of computer-aided design to produce a pattern for a garment of original design.

501 (FCSMR 501) Advanced Tailoring. (3) Review of current trends in tailored garments. Construction of tailored garment using contemporary techniques.

503 (FCSMR 503) Advanced Design by the Draping Method. (3) Provides basic knowledge of apparel design using the draping method.

505 (FCSMR 505) Advanced Computer-Aided Design for Apparel. (3) Knowledge of the use of Computer-Aided Design (CAD) in fashion apparel designing.

555 (FCSMR 555) Advanced Fashion Product Analysis. (3) Study of factors that contribute to the quality of fashion-related merchandise. Provides an opportunity to become skillful in evaluating the materials and construction quality and techniques used in the textile and apparel industry. Includes investigation of current trends related to apparel quality and sourcing.

Prerequisite: permission of the department chairperson.

565 (FCSMR 565) Advanced Study of Fashion Designers and Forecasting. (3) Study of present and historical fashion designers from around the world. Emphasis on understanding their contributions to the fashion industry and their influence in today's fashion markets. An understanding of the process of fashion forecasting is stressed.

Prerequisite: permission of the department chairperson.

570 (FCSMR 570) Advanced Fashion Buying and Merchandising. (3) Review of current trends in fashion merchandising. Building a knowledge base to make decisions on buying and merchandising to satisfy customers and maintain an adequate profit level.

Prerequisite: permission of the department chairperson.

575 (FCSMR 575) Advanced International Apparel Markets. (3) Provides an overview of the global textile and apparel industries. Considers the U.S. textile complex and market within an international context. Investigation of current trends in the international apparel marketplace.

Prerequisite: ECON 201 or 509; MKG 300 or 505; permission of the department chairperson.

FAMILY AND CONSUMER SCIENCES: FAMILY AND CHILD (FCSFC)

680 Family Problems. (3) Survey of the major problems experienced by families. Emphasizes whole-family functioning rather than individual functioning. Preventive measures, treatment approaches, and appropriate agencies and services are identified.

FAMILY AND CONSUMER SCIENCES: FOODS AND NUTRITION (FCSFN)

500 Cost Control in Hospitality and Foodservice Industry (3) Controlling cost from a management perspective in the hospitality and foodservice industry.

Prerequisite: ACC 201.

Not open to students who have credit in FCSFN 300.

530 Advanced Experimental Foods. (3) Study of the effects of various conditions and ingredients on products and their qualitative and quantitative properties. Review and evaluation of research; individual study and planning, implementing, analyzing, and reporting of research.

Prerequisite: FCSFN 220; CHEM 100 or 111 or permission of the department chairperson.

Not open to students who have credit in FCSFN 430 or equivalent undergraduate course.

540 Human Nutrition. (3) Addresses the principles of nutrition, life-cycle nutrition, and the relationship of diet to health and disease.

Not open to students who have credit in FCSFN 340, 445, 545 or equivalent.

545 Advanced Nutrition. (3) Emphasizes the use and metabolism of nutrients at the cellular level in the human body. Current research in the field of nutrition is examined. Update for graduate dietetics majors.

Prerequisite: FCSFN 340; CHEM 360 or permission of the department chairperson.

Not open to students who have credit in FCSFN 445.

571 Computer Applications in Family and Consumer Sciences. (3) Emphasizes applications of computer utilization in food management and hospitality, nutrition, and other family and consumer sciences professions. Software, including spreadsheet, database, presentation, publication, word processing, and the Internet, is employed. Includes selection and application of software specific to food management and hospitality, nutrition, and other family and consumer sciences professions.

Not open to students who have credit in FCSFN 371.

572 Nutrition Assessment, Counseling, and Education. (3) Assessment methods, techniques of nutrition counseling, nutrition education principles and implementation, and development of nutrition counseling materials. Includes nutrition assessment of various populations and counseling experiences. Additional projects required.

Prerequisite: FCSFN 340.

Not open to students who have credit in FCSFN 375.

575 Catering for Profit. (3) Fundamentals of planning, organizing, preparing, and serving profitable and unique catering functions. Emphasizes menu development, customer service, marketing, and food production.

Prerequisite: FCSFN 400 or permission of the department chairperson.

Not open to students who have credit in FCSFN 475.

576 Event Management. (3) Management of hospitality and business-related activities such as conventions, professional and social events, catered activities, and their intra-industry interactions.

Not open to students who have credit in FCSFN 476.

580 Supervised Practice in Clinical Dietetics. (3) Application of management principles involved in the acquisition, production, quality control, distribution, and service of quality food in an acute care environment; development of a philosophy of excellence in administrative leadership through supervision of foodservice personnel (360 hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

581 Supervised Practice in Nutrition Therapy. (3) Application of the health care team approach of dietary management to human pathophysiologic status through assessing, planning, documenting, and counseling individuals and educating groups in an acute care environment (360 clock hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

582 Supervised Practice in Community/ Nutrition/Business/Entrepreneur. (3) Application of concepts and methodologies of nutrition and health practices as related to the family and people in the community; provision of education programs for specific populations and the public through community agencies and related business and private organizations (240 clock hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

642 Nutrition Assessment. (3) Techniques needed to evaluate nutritional status and plan appropriate nutrition intervention. Includes assessment of dietary intake, body composition, nutrient requirements, and laboratory indices of nutritional status. Development of appropriate nutrition therapies will be addressed.

Prerequisite: FCSFN 446, 447 or equivalent.

643 Energy Balance, Obesity, and Weight Control. (3) In-depth study of the components of energy balance, theories regarding the etiology of obesity, and the impact of obesity and dieting on health. Includes evaluation of current weight control techniques and identification of the best methods for maintaining optimal body weight.

Prerequisite: FCSFN 340 or 345, 346 or equivalent.

644 Nutrition for Exercise and Sport. (3) Examination and integration of the principles of nutrition and energy metabolism as they apply to athletes and

active individuals. Dietary recommendations for athletes participating in various sports will be reviewed. Current research in sports nutrition will be discussed.

Prerequisite: FCSFN 340 or 345, 346 or equivalent.

Not open to students who have credit in FCSFN 444.

647 Carbohydrates, Proteins, and Lipids. (3) Advanced study of carbohydrates, proteins, and lipids in humans. Includes macronutrient metabolism and the relationship of these dietary components to health and disease.

Prerequisite: FCSFN 345 or equivalent.

648 Vitamins and Minerals. (3) Advanced study of vitamins and minerals in humans including micronutrient metabolism and the relationship of these dietary components to health and disease.

Prerequisite: FCSFN 346 or equivalent.

650 Maternal and Infant Nutrition. (3) Nutrition during pregnancy, lactation, and infancy. Includes nutrient needs, growth and development, and common complications. Emphasizes reading in current professional publications.

Prerequisite: FCSFN 345, 346 or equivalent.

651 Pediatric Nutrition. (3) Principles of pediatric nutrition (preschool through adolescence). Nutritional needs of children in normal and therapeutic nutrition will be investigated. Current research in pediatric nutrition will be discussed.

Prerequisite: FCSFN 345, 346 or equivalent.

652 Geriatric Nutrition. (3) Nutritional needs of older adults in consideration of physiological and social changes and research in the field. Review recent literature, evaluate nutrition status of elderly persons in selected situations, and study and evaluate nutrition programs designed for older adults.

Prerequisite: FCSFN 340 or 540 or permission of the department chairperson.

660 Advanced Food Service Administration. (3) Identification and application of advanced foodservice management and marketing concepts; development of skills required of dietitians and other upper level managers.

Prerequisite or parallel: FCSFN 363 or permission of the department chairperson.

690 Nutrition Counseling Practicum. (1–3) Integrates nutrition knowledge and techniques of nutrition counseling. Includes information gathering, assessment of problems, and development of methods and materials for nutrition counseling intervention.

Prerequisite or parallel: FCSFN 340 or 540, 375 or 572; permission of the department chairperson.

A total of 3 hours of credit may be earned.

696 Seminar in Foods and Nutrition. (3–6) Student presentations and discussions of trends and issues related to food and nutrition. Emphasizes in-depth knowledge of current research findings and policy issues. Basic knowledge of food and nutrition required.

Prerequisite: permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

FAMILY AND CONSUMER SCIENCES: INTERIOR DESIGN (FCSID)

514 (FCSMR 514) Evolution of Interiors. (3) Study of interior styles from their beginning to the present and the factors that influenced their development.

Prerequisite: AHS 100; permission of the department chairperson.

Not open to students who have credit in FCSID 325.

524 (FCSMR 524) Advanced Computer-Aided Design for Interiors. (3) Computer application in interior design using drafting skills and design procedures. Implementing advanced technical CAD skills.

Prerequisite: advanced drafting skills and CAD experience; permission of the department chairperson.

544 (FCSMR 544) Portfolio Development for Interior Design. (1) Provides the opportunity to develop a portfolio of projects completed in previous design courses to be used for job interviews. Emphasizes visual aesthetics of the projects and presentation techniques.

Prerequisite: permission of the department chairperson.

Not open to students who have credit in FCSID 444.

FAMILY AND CONSUMER SCIENCES: MERCHANDISING (FCSMR)

596 Seminar in Merchandising. (3) Exploration and integration of concepts related to the various elements of merchandising.

Prerequisite: permission of the department chairperson.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

FAMILY AND CONSUMER SCIENCES: RESIDENTIAL PROPERTY MANAGEMENT (FCSPM)

515 (FCSMR 515) Advanced Senior Housing: Design, Marketing, and Management. (3) Exploration of the principles that guide the design, marketing, and management of housing for older adults. Conceptual development of these principles, applicable to a local setting.

525 (FCSMR 525) Advanced Management of Government-Assisted Housing. (3) Investigation of government-assistd housing programs and the role of management in meeting the needs of owners, residents, and regulatory agencies.

Not open to students who have credit in FCSPM 405.

535 (FCSMR 535) Advanced Residential Property Management Project. (3) Provides students with an advanced, hands-on opportunity to use industry standards to analyze an apartment community. The resulting project provides the management company with information to remain competitive and profitable in the apartment market.

585 (FCSMR 585) Advanced Simulation in Residential Property Management. (3) Application of advanced residential property management skills practiced through a simulation activity. Opportunity to research common problems in the industry to arrive at a solution.

635 (FCSMR 635) Advanced Trends and Issues in Residential Property Management. (3) Explores and analyzes the current trends and issues affecting the residential property management industry.

Prerequisite: FCSPM 235.

NURSING

www.bsu.edu/nursing
Cooper Science Complex 418, (765) 285-5571
Director: Linda Siktberg
Graduate Advisors: Nagia Ali, Kay Hodson-Carlton, Marilyn Ryan
Graduate Faculty: Ali, Bantz, Dillard, Hodson-Carlton, Kelsey, Ryan, Siela, Siktberg, Thomas, Twibell, Wieseke, Wolfe, Worrell-Carlisle

PROGRAM

MASTER OF SCIENCE (MS) IN NURSING

Admission

Applicants must meet the admission requirements of the Graduate School. Applicants must also

- be a graduate of a National League for Nursing (NLN) or Association of Colleges of Nursing (CCNE) accredited nursing program. Registered nurses holding baccalaureate degrees in another field who demonstrate successful completion of an upper-division major in nursing may qualify.
- have earned overall grade point average (GPA) of 2.80 on a 4.0 scale or 3.0 upper-division GPA in the baccalaureate program.
- have earned a grade of *C* or better in at least 2-quarter, or -semester, hours in an undergraduate research course.

- have had a physical assessment course (required for clinical majors).
- hold an unencumbered license as a registered nurse in state of practice.
- show evidence of training in standard precautions.
- have health clearance.
- clear criminal background checks.
- have minimum of one year clinical experience before enrolling in clinical courses for new graduates.
- have recent clinical experiences (three of past five years) before enrolling in clinical courses for experienced nurses.

This program is delivered via the World Wide Web and requires computer access.

NUR 605 Nursing Information Technology is required for all students.

Retention Standards
An overall scholastic ratio of 3.0 (*B* average) must be attained before admission to candidacy and the final awarding of any master's degree. No course with grades below *C* (2.0) may be counted toward any degree program.

Registered Nurse to Master of Science Nursing Mobility
This program is designed for nurses holding an associate degree in nursing and a baccalaureate degree in another field. Contact the School of Nursing for more information.

All students take the following research and nursing core courses.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Research core			
EDPSY	641	Statist Meth (3)	
	or		
NUR	607	Data Anly (3)	3
	604	Research	3
			6 hrs
Nursing core			
NUR	603	Nur Theory	3
	605	Nur Info	2
	610	Concp Anls 1	3
	611	Concp Anls 2	3
			11 hrs

Complete one of the following tracks:

Clinical Nurse Specialist Adult Health Track, 46 hours

Research core			6
Nursing core			11
NUR	614	Concp Anls 3	3
	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Adv Adult	7
RES	697	Research Ppr (1–3)	3
			46 hrs

Nursing Leadership Track, 33 hours

Research core			6
Nursing core			11
Role core			9

Select from one role core option

Administrative core

NUR	640	Nur Adm Theo (3)
	642	Adm Mgt Nurs (3)
	643	Fin Mgt (3)

Educator core

NUR	620	Curr Designs (3)
	622	Teach in Nur (3)
	626	Prog Eval (3)

Clinical core, 3 courses from

NUR	630	Clin Role (3)
	632	Pathophys (3)
	634	Hl Assessmnt (3)
	638	Pharm (3)

Practicum

NUR	672	Role Expct	4
Scholarship option			
RES	697	Research Ppr (1–3)	3
			33 hrs

Nurse Practitioner (Adult/Family), 43–50 hours

Adult Nurse Practitioner

Research core			6
Nursing core			11
NUR	614	Concp Anls 3	3
	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Adv Adult	7
			43 hrs

Family Nurse Practitioner
To extend degree to Family Practitioner the following courses are required.

NUR	682	Prim Child	4
	684	Prim Women	3
			50 hrs

Post-Master's Certificate Nurse Practitioner (Adult/Family), 25–32 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Adult Nurse Practitioner			
NUR	605	Nur Info	2
	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Adv Adult	7
			25 hrs

Family Nurse Practitioner
To extend certificate to Family Practitioner the following courses are required:

NUR	682	Prim Child	4
	684	Prim Women	3
			32 hrs

Post-Master's Certificate Nurse Educator, 15 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
NUR	605	Nur Info	2
	620	Curr Designs	3
	622	Teach in Nur	3
	626	Prog Eval	3
	672	Role Expct	4
			15 hrs

Post-Master's Certificate for Certified Nurse Practitioners (Adult or Gerontology)

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
NUR	605	Nur Info	2
	672	Role Expct	4
	682	Prim Child	4
	684	Prim Women	3
			13 hrs

Post-Baccalaureate Certificate Program in Nursing Education

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
NUR	603	Nur Theory	3
	605	Nur Info	2
	620	Curr Designs	3
	622	Teach in Nur	3
	626	Prog Eval	3
			14 hrs

Post-Baccalaureate Certificate Program in Evidence-Based Clinical Practice

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
NUR	603	Nur Theory	3
	604	Research	3
	605	Nur Info	2
	607	Data Anly	3
RES	697	Research Ppr (1–3)	3
			14 hrs

CERTIFICATE PROGRAM IN EVIDENCE-BASED CLINICAL PRACTICE

Admission requirements

- Graduate from a baccalaureate program, accredited by the National League for Nursing or the Commission on Collegiate Nursing Education, that included an upper-division nursing major.
- Meet requirements for admission to graduate study at Ball State University.
- Have earned a minimum overall cumulative grade point average (GPA) of 2.8 on a 4.0 scale or upper-division nursing GPA of 3.0 in the baccalaureate program.
- Complete an undergraduate research course, 2.0 quarter/semester hours, completed with a grade of *C* or above.
- Evidence of completion of a physical assessment course (for Clinical, NP Track).
- Hold current license as a registered nurse in state of practice.
- Have own professional liability insurance.
- Have a minimum of two full years of experience in professional nursing for full-time study.
- Have evidence of training in standard (universal) precautions.
- Health clearance.

NURSING (NUR)

603 Nursing Theory. (3) Exploration and analysis of theory development in the field of nursing, emphasizing current research, conceptual models, and theory development in nursing.

604 Research. (3) Research methodology in nursing emphasizing the critical evaluation of research and its applicability to practice.
Prerequisite or parallel: graduate statistics.
Open only to graduate nursing students.

605 Nursing Information Technology. (2) Evaluates the impact of information and

health care technology in relationship to advanced nursing. Experiences include the utilization of computer hardware and software and initiating a line of inquiry via database use.

606 Nursing and Computer Technology 2. (2) Builds on experience in the use of computers. Emphasizes a further exploration of computer integration in nursing practice, service administration, education, or research. Computer laboratory experience included.

Prerequisite: NUR 605 or equivalent.

607 Data Analysis in Nursing Research. (3) Emphasizes the interpretation and application of descriptive, inferential, and advanced statistical analyses of data. Critical examination of data collection, data analyses, and interpretation of quantitative and qualitative nursing studies will be the focus.

610 Concepts Analysis 1. (3) Analyzes selected nursing concepts and related research with a focus on health promotion. Relationship of concepts to advanced practice models is explored. Clinical experience focuses on application of research findings to clinical populations in various stages of the life cycle.

Prerequisite recommended: full admission to program; NUR 603, 604.

611 Concept Analysis 2: Decision Making. (3) Builds on analysis of concepts from NUR 610. Emphasizes ethics and clinical decision making to facilitate client transition from acute illness to optimal health. Nursing theory and research-based interventions are incorporated into clinical experiences.

Prerequisite: NUR 603, 604, 610.

614 Concepts Analysis 3: Concepts Issues in Chronic Illness and Aging. (3) Builds on NUR 610 and 611 concepts and issues of chronic illness and aging are applied. Research findings are analyzed related to quality care. Impact of fiscal management health care policies and technology are explored.

Open only to nursing master's candidates.

618 Application of Clinical Concepts in Community-Based Settings. (3) Applies nursing process, primary health care principles, and primary and secondary prevention with community-based populations. Explores community practice models and the effect of health policy on health care delivery. Clinical focus includes interdisciplinary and intersectoral collaboration in addressing consumer health needs.

Prerequisite: NUR 603, 604.

620 Curricular Designs in Nursing. (3) Opportunity to develop, implement, and/or evaluate student-selected aspects of existing nursing curricula. Emphasizes a group experience in assessing a curricular problem and applying current theory of practice in seeking solutions to a practical curriculum issue.

Prerequisite: NUR 603.

622 Teaching in Nursing. (3) Focuses on teacher behaviors that promote student learning, including course development and use of technology in a variety of post-secondary nursing environments. Includes faculty roles and responsibilities in nursing education.

626 Program Evaluation. (3) Focuses on program evaluation of a nursing unit by exploring the components of a systematic evaluation plan and identifying evaluational tools for educational assessment using collaborative strategies.

Prerequisite: NUR 620, 622; or previous teaching experience and permission of the instructor.

630 Advanced Practice Nursing and Role Theory. (3) Nursing and related theories analyzed as the roles of advanced practice nurses are explored. Professional practice issues are examined through the synthesis of professional and research literature. A conceptual model to guide practice is developed.

Prerequisite recommended: NUR 604, 610, 611, 614.

632 Pathophysiology and Nursing Practice. (3) Provides a comprehensive scientific background and understanding of pathophysiology as it relates to client assessment across the lifespan in a variety of health care settings. Forms the basis for advanced nursing practice.

Prerequisite: NUR 603, 604.

634 Advanced Health Assessment. (3) Practice of advanced health assessment techniques across the lifespan. Emphasizes the use of critical thinking and decision-making abilities to formulate differential diagnosis and a plan of care based on assessment data.

Prerequisite: admission to program; NUR 603, 604.

638 Advanced Clinical Pharmacology. (3) Provides principles of advanced pharmacology based on pharmacotherapeutics, pharmacokinetics, and pharmacodynamics of broad categories of drugs. Emphasizes pharmacological management of clients across the lifespan in diverse settings.

640 Nursing Administration in Complex Organizations. (3) Introduction to administration of nursing. Relates organizational and administrative theories to the delivery of nursing care with emphasis on the health care environment.
Prerequisite: NUR 604.

642 Administrative Management for Nurses. (3) Introduction to organizational planning, budgeting, human resources management, conflict management issues, quality management, and ethics.
Prerequisite: NUR 604, 640.

643 Financial Management for Nurses. (3) Introduction to economic and budgeting processes and the impact of costs on nursing care delivery systems. Includes laboratory experience with budgets.
Prerequisite: NUR 604, 640, 642.
Open only to graduate nursing students.

672 Practicum of Role Expectations. (4) Practicum in (clinical/educational/administrative/nurse practitioner) setting of student's selected functional role. Seminars for guidance and analysis of role relationships. Topics include teacher in nursing; administrator in nursing; role of clinical nurse in advanced practice; nurse practitioner.
Prerequisite: all required role courses.

680 Advanced Care of Adult. (7) Focuses on the application and evaluation of advanced practice knowledge and skills required for the care of adults.
Prerequisite: NUR 630, 632, 634, 638.
Open only to nurse practitioner or clinical nurse specialist students.

682 Primary Care of Children. (4) Focuses on the application and evaluation of advanced nursing practice knowledge and skills required for the care of children and their families.
Prerequisite: all courses required for adult nurse practitioner program.
Open only to family nurse practitioner students.

684 Primary Care of Women. (3) Focuses on the application and evaluation of advanced nursing practice knowledge and skills required for the care of women and their families.
Prerequisite: all courses required for adult nurse practitioner program.
Open only to family nurse practitioner students.

690 Special Studies in Nursing. (1–4) Group study of topics of special interest in nursing.
A total of 4 hours of credit may be earned.

699 Independent Study. (1–3) Independent study under the direction of a faculty member. May involve experimental inquiry, independent exploration of literature and resources, or development of special techniques.
Prerequisite: permission of the coordinator of graduate studies in nursing and the department chairperson.
A total of 3 hours of credit may be earned.

School of Physical Education, Sport, and Exercise Science

www.bsu.edu/physicaleducation

Health and Physical Education Building 205, (765) 285-8753
Chairperson: Mitchell H. Whaley
Coordinator of Graduate Programs: Bruce Craig

Coordinator of Sport and Physical Education Graduate Studies in Exercise Science: Bruce Craig
Graduate Faculty: Bell, Buck, Burgess, Costill, Craig, Dugan, Harber, Ignico, Ivan, Johnson, Judge, Jutte, Kaminsky, King, Maguire, Mahon, Nagelkirk, Pearson, Petersen, Smith, S. Trappe, T. Trappe, Vidoni, Weidner, Whaley

PROGRAMS

Master of arts (MA) or master of science (MS) in exercise science with specialization in clinical exercise physiology, biomechanics, sports performance, and exercise physiology; master of arts (MA) or master of science (MS) in physical education with specialization in sport management, sport and exercise psychology, sport administration, adapted physical education, coaching, and teacher education; doctor of philosophy (PhD) in human bioenergetics.

MASTER OF ARTS OR MASTER OF SCIENCE IN EXERCISE SCIENCE

Admission

Applicants must meet the admission requirements of the Graduate School; have bachelor's degrees from regionally accredited institutions in education, physical education, biology, or other appropriate majors; have grade point averages (GPA) of at least 2.75 on a scale of 4.0; and submit transcripts, three letters of recommendation, resumes, and the exercise science application form. Applicants for the exercise science division must obtain approval from a review board in the area of specialization. A student with a GPA of less than 2.75 on a 4.0 scale must take the Graduate Record Examination (GRE) general test. Students with satisfactory scores on the GRE will be considered for admission to the program. Any deficiencies must be made up through course work taken in addition to degree requirements.

Degree Requirements

Students must complete a minimum of 33 hours of graduate courses including 6 hours of a thesis project (THES 698) for the master of science or 3 hours of a research project (RES 697) for the master of arts degree. Students electing THES 698 must take a final oral examination covering the thesis to be given by the thesis committee. In the exercise physiology and biomechanics specializations, the MS is the only degree option.

Clinical Exercise Physiology

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
EXSCI	603	Exer Phys 1	3
	611	Res Design	3
	622	Found Adu Pf	3
	623	Prin Ex Test	3
	630	Exer Phys 2	3
	637	Appl Physl	3
	638	Electcard	3
	639	Sem Cr P R	3
Research requirement			
RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6
3–6 hours from			
EXSCI	633	Sem Ex Sci (2–6)	
	634	Mechan Anls (3)	
	640	Ex Prev Reha (3)	
	698	Fit Cardiac (1–3)	
CPSY	634	Behv Medicin (3)	
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stat (3)	
FCSFN	644	Nut Exer Spt (3)	
HSC	683	Epidemiology (3)	
PHYSL	514	Cardiovsculr (3)	3–6
			33 hrs

Biomechanics

Core requirements			
EXSCI	611	Res Design	3
	634	Mechan Anls	3
	651	Lab Tech Bio	3
EDPSY	641	Statist Meth	3
3–6 hours from			
EXSCI	652	Clinical Bio (3)	
	655	Adv Biomechn (3)	3–6
4–6 hours from			
EXSCI	633	Sem Ex Sci (2–6)	4–6
Research requirement			
THES	698	Thesis (1–6)	6

3–9 hours from electives			
EXSCI	603	Exer Phys 1 (3)	
	604	Ess Res Trng (3)	
PUMET	111	Statics (3)	
	213	Dynamics (2)	
BIO	548	Biometry (3)	
EDPSY	642	Interim Stat (3)	
CS	699	Read Honor (3)	3–9
			33–34 hrs

Sports performance

EXSCI	603	Exer Phys 1	3
	604	Ess Res Trng	3
	634	Mechan Anls	3
PEP	600	Internship (1–3)	3
	609	Sp & Ex Psy	3
	696	Ath Training	3
FCSFN	644	Nut Exer Spt	3
12 hours from one area			
THES	698	Thesis (1–6)	6
EXSCI	611	Res Design	3
Electives			3
RES	697	Research Ppr (1–3)	3
PEP	601	Res Methods	3
Electives			6
SPTAD	601	Resh Pract	3
EDSPY	641	Statist Meth	3
Electives			6
			12 hrs
			33 hrs

Exercise Physiology

Core requirements			
EXSCI	603	Exer Phys 1	3
	611	Res Design	3
	630	Exer Phys 2	3
	637	Appl Physl	3
6–10 hours from			
EXSCI	633	Sem Ex Sci (2–6)	
CHEM	563	Prn Biochm 1 (3)	
	564	Prn Biochm 2 (3)	
	or		
	560	Essen Biochm (4)	6–10
Research requirements			
THES	698	Thesis (1–6)	6
6–9 hours from electives			
EXSCI	634	Mechan Anls (3)	
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stat (3)	
BIO	557	Molecular (4)	
PHYSL	514	Cardiovsculr (3)	6–9
			33–34 hrs

MASTER OF ARTS OR MASTER OF SCIENCE IN PHYSICAL EDUCATION

Admission

Applicants must meet the admission requirements of the Graduate School and complete an application from the Department of Sport and Physical Education. Applicants must also have a bachelor's degree from accredited institutions in education, physical education, biology, or other appropriate majors; grade point average (GPA) of at least 2.75 on a scale of 4.0; and submit a statement of purpose, three letters of recommendation, resume, and other supporting documents.

A student with a GPA of less than 2.75 on a 4.0 scale must take the Graduate Record Examination (GRE) general test. Students with satisfactory scores on the GRE will be considered for admission under probationary status to the program. Any deficiencies must be made up through course work taken in addition to degree requirements.

Degree requirements

All students must complete a minimum of 33 hours of graduate courses. In order to earn a master of science degree these courses must include 6 hours of a thesis project (THES 698). In order to earn a master of arts degree these courses must include 3 hours of research project (RES 697) except students in sport administration (higher education and public school) and sport management have an additional option that includes 9 hours of internship (SPTAD 698). Students electing RES 697 or THES 698 must make a final oral defense.

Sport Management, 33–36 hours

(*Not open to* undergraduate majors in business)

Core requirements			
PEP	692	Sp Superv	3
SPTAD	603	Ethics Phil	3
	615	Sport Law	3
	676	Sp Admin	3
Research requirements			
PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Master of Arts			
Choose one			
Master of Arts, option 1			
SPTAD	601	Resh Pract (3)	

	698	Intern Sptad (6–9)	12
Master of Arts, option 2			
PEP	601	Res Methods (3)	
RES	697	Research Ppr (1–3)	6
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9

Minor in General Foundations of Business

12 or more hours from			
ACC	501	Fin Acct (3)	
ECON	509	Survey Econ (3)	
FIN	500	Corporation (3)	
MGT	500	Mng Org Beh (3)	
MKG	505	Survey Mrktg (3)	
	or		
SPTAD	611	Sp Marketing (3)	12

Students who have credit in any equivalent undergraduate course may substitute the following in the above minor:

MGT	601	Int Mkg (3)	
	661	Hman Res Mgt (3)	
Directed electives			
BL	560	Survey B L (3)	
PEP	600	Internship (1–3)	
	609	Sp & Ex Psy (3)	
	628	Compar Intsp (3)	
PR	660	Pr Theories (3)	
	664	Pr Eval Tech (3)	
SPTAD	605	Org Ad Rec (3)	
	606	Aqua Fac Mgt (3)	
	607	Aqua Prog (3)	
	611	Sp Marketing (3)	0–3
			33–36 hrs

Sport and Exercise Psychology, 33 hours

Core requirements			
PEP	609	Sp & Ex Psy	3
	644	Psy Soc SPA	3
	660	Psy Ex Hlth	3
	690	Sp Sociology	3
AT	577	Psy Inj Rhb	3
Research requirements			
Master of Arts			
PEP	601	Res Methods (3)	
EDPSY	641	Statist Meth (3)	
RES	697	Research Ppr (1–3)	9
Master of Science			
PEP	601	Res Methods (3)	
EDPSY	641	Statist Meth (3)	
THES	698	Thesis (1–6)	12
Directed electives			
ANTH	559	Ethno Method (3)	
CPSY	621	Theo Tch Cou (3)	
EDPSY	603	Human Devel (3)	
	640	Methodology (3)	
	642	Interim Stat (3)	
	646	Tests Meas (3)	
	742	Statist Tech (3)	
EXSCI	603	Exer Phys 1 (3)	
PEP	600	Internship (1–3)	
	608	Motor Learn (3)	
	612	Motor Dvlpt (3)	
SPTAD	610	Psych Coach (3)	
PSYSC	613	Developmentl (3)	
	615	Learn Motiva (3)	
	616	Percp Cognit (3)	
	623	Theor Persnl (3)	
	632	Abnormal (3)	6–9
			33 hrs

Requirements for graduation (sport and exercise psychology)

- Students must have a minimum of 6 hours of prerequisites in physical education and psychology.
- Students must be a member of one of the professional associations such as the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD); Association for the Advancement of Applied Sport Psychology (AAASP); or an advisor-approved sport psychology-related organization (e.g., American College of Sports Medicine).
- Students must attend a sport psychology-related conference while registered as a student in the sport and exercise psychology specialization.

Sport Administration, 33 hours

Choose one option

Public school option, 33 hours

Core requirements

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
PEP	613	Phys Fit Sem	3
	692	Sp Superv	3
SPTAD	603	Ethics Phil	3
	615	Sport Law	3
	676	Sp Admin	3

Professional requirements

6 or more hours from			
PEP	594	Tec PE Disab (3)	
	616	Motor Behavr (3)	
	695	Tch Methodol (3)	
EDTEC	550	Curric Tech (3)	
EDSEC	534	Class Mgt (3)	
EDPSY	600	Adv Ed Psy (3)	
EDMUL	660	Mlti Clt Eth (3)	
EDFON	631	Philosphy Ed (3)	6

Research requirements			
Master of Arts			
Choose one			
Master of Arts, option 1			
SPTAD	601	Resh Pract (3)	
	698	Intern Sptad (6–9)	12
Master of Arts, option 2			
PEP	601	Res Methods (3)	
RES	697	Research Ppr (1–3)	6
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9
Directed electives			
PEP	609	Sp & Ex Psy (3)	
	628	Compar Intsp (3)	
	630	Eval P E (3)	
	644	Psy Soc SPA (3)	
	685	P E Curr (3)	
	690	Sp Sociology (3)	
	696	Ath Training (3)	
EDAD	600	Intro Ed Led (3)	
	630	Humn Resourc (3)	
	640	Public Rel (3)	
	686	School Law (3)	
	687	Legal Aspect (3)	
	688	Sch Bldg Grs (3)	
	698	Semnr Theory (3)	
EDFON	631	Philosphy Ed (3)	
PR	660	PR Theories (3)	
	664	PR Eval Tech (3)	
SPTAD	605	Org Ad Rec (3)	
	606	Aqua Fac Mgt (3)	
	607	Aqua Prog (3)	
	611	Sp Marketing (3)	0–6
			33 hrs

Higher education option, 33 hours

Core requirements			
PEP	692	Sp Superv	3
SPTAD	603	Ethics Phil	3
	615	Sport Law	3
	676	SP Admin	3
Research requirements			
Master of Arts			
Choose one			
Master of Arts, option 1			
SPTAD	601	Resh Pract (3)	
	698	Intern Sptad (6–9)	12
Master of Arts, option 2			
PEP	601	Res Methods (3)	
RES	697	Research Ppr (1–3)	6
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9
Directed electives			
PEP	600	Internship (1–3)	
	609	Sp & Ex Psy (3)	
	613	Phys Fit Sem (3)	
	628	Compar Intsp (3)	
	630	Eval P E (3)	
	644	Psy Soc SPA (3)	
	685	P E Curr (3)	
	690	Sp Sociology (3)	
EDAD	600	Intro Ed Led (3)	
	630	Humn Resourc (3)	
	640	Public Rel (3)	
	686	School Law (3)	
	687	Legal Aspect (3)	
	688	Sch Bldg Grs (3)	
	698	Semnr Theory (3)	
EDFON	631	Philosphy Ed (3)	
PR	660	PR Theories (3)	
	664	PR Eval Tech (3)	
SPTAD	605	Org Ad Rec (3)	
	606	Aqua Fac Mgt (3)	
	607	Aqua Prog (3)	
	611	Sp Marketing (3)	9–15
			33 hrs

Adapted Physical Education, 33 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core requirements			
EDPSY	641	Statist Meth	3
PEP	619	Intro to APE	3
SPCED	600	Except Child	3
Professional requirements			
9 hours from one option			
Educational option			
PEP	594	Tec PE Disab (3)	
	612	Motor Dvlpt (3)	
	621	Assess in APE (3)	
Clinical option			
EXSCI	604	Ess Res Trng (3)	
	634	Mechan Anls (3)	
PEP	660	Psy Ex Hlth (3)	9
Research requirements			
Master of Arts			
PEP	601	Res Methods (3)	
RES	697	Research Ppr (1–3)	6
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9
Electives (approved by program coordinator)			6–9
			33 hrs

Coaching, 33–36 hours

Core requirements			
PEP	600	Internship (1–3)	3
SPTAD	604	Phy Prep Con	3
	610	Psych Coach	3
	612	Grw Dev	3

	618	Skill Tact	3
	632	Phil Ethic	3
	670	Sp Saf Inj	3
	675	Teach Motiv	3
	692	Org Admin	3
Research requirements			
Master of Arts			
PEP	601	Res Methods	3
Choose one			
SPTAD	688	Cur Is Co Re (3)	
	or		
RES	697	Research Ppr (1–3)	3
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9
			33–36 hrs

Teacher Education, 33 hours

Core requirements			
PEP	612	Motor Dvlpt	3
	613	Phys Fit Sem	3
	616	Motor Behavr	3
	630	Eval P E	3
	685	P E Curr	3
	695	Tch Methodol	3
Professional requirements			
6 hours from			
EDTEC	550	Curric Tech (3)	
EDSEC	534	Class Mgt (3)	
EDPSY	600	Adv Ed Psy (3)	
EDMUL	660	Mlti Clt Eth (3)	
EDFON	631	Philosphy Ed (3)	6
Research requirements			
Master of Arts			
PEP	601	Res Methods (3)	
RES	697	Research Ppr (1–3)	6
Master of Science			
PEP	601	Res Methods (3)	
THES	698	Thesis (1–6)	9
Directed electives			
PEP	594	Tec PE Disab (3)	
	608	Motor Learn (3)	
	609	Sp & Ex Psy (3)	
	690	Sp Sociology (3)	
EXSCI	634	Mechan Anls (3)	
EDPSY	641	Statist Meth (3)	0–3
			33 hrs

DOCTOR OF PHILOSOPHY IN HUMAN BIOENERGETICS

The doctor of philosophy (PhD) degree in human bioenergetics is designed to prepare students for research careers in exercise science. The doctoral degree will require approximately three years to complete and will give students the competencies necessary to deal with biochemical and physiological problems in exercise physiology. It is conducted in cooperation with the Department of Biology.

Admission

Applicants must meet the admission requirements of the Graduate School; have a master's degree from an accredited institution in physical education, biology, or other appropriate majors; have a grade point average (GPA) of 3.2 on a scale of 4.0; complete the Graduate Record Examination (GRE); submit three letters of recommendation; demonstrate interest and ability to conduct independent research; and obtain the approval of the Human Performance Laboratory selection committee.

Degree Requirements

Students must complete a minimum of 90 hours of graduate work including the dissertation and master's degree hours. In addition to the core requirement, one 24-hour cognate or two 15-hour cognates in such related fields as biology, physiology, and chemistry are required. Students must complete the dissertation (DISS 799) for 10 hours on research problems that will contribute new knowledge to the field. Candidates will take final oral examinations given by their PhD committees when the dissertation is completed.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core requirements			
EXSCI	603	Exer Phys 1	3
	630	Exer Phys 2	3
	637	Appl Physl	3
Cognate(s)			24–30
Dissertation			10
Electives			8–13
Master's degree hours (maximum allowed)			30
			90 hrs

Students with two 15-hour cognates will complete 10 elective hours; students with one cognate (24 hours) will complete 15 elective hours.

PHYSICAL EDUCATION: PROFESSIONAL (PEP)

560 Development of Exercise Program for the Older Adult. (3) Characteristics of the older adult and the implications of the aging

process for exercise potential. Students will plan, implement, and evaluate a program of activity based upon the special needs of the older adult.

Not open to students who have credit in EXSCI 312.

594 Teaching Physical Education to People with Disabilities. (3) Understanding of the various physical (orthopedic, muscular-skeletal, cardiovascular, and postural) defects and sensory (hearing and sight) disorders in relation to physical education programming and activities.

595 Medical Aspects of Sport and Physical Activity. (3) A collection of knowledge, skills, and values that the entry-level certified athletic trainer must possess to recognize, treat, and refer, when appropriate, the general medical conditions and disabilities of athletes and others involved in physical activity.

Prerequisite: AT 370, 371, 372, 373; permission of the instructor.

Open only to athletic training and nursing majors.

600 Internship in Sport and Physical Education. (1–3) An in-depth practical experience in the application of knowledge and skills related to one of the specialization areas within sport and physical education.

Prerequisite: permission of the department chairperson.

A total of 3 hours of credit may be earned.

601 Research Methods in Sport and Physical Education. (3) Focuses on research methods employed in sport and physical education. Emphasis placed on selecting a research topic, five-chapter writing format, and presentation of proposal.

602 Technology Applications in Sport and Physical Education. (3) An introduction to technology and its application in sport and physical education. Emphasis placed on cutting-edge hardware and software available to the practitioner.

608 Motor Learning. (3) A study of the relationship between principles of psychology and the learning of motor activities. Classroom and laboratory experience.

609 Introduction to Sport and Exercise Psychology. (3) Introduces the field of sport and exercise psychology, emphasizing the role of psychological phenomena in behavior in sport and physical activity settings and how participation in sport and physical activity influences the psychological characteristics of the individual.

612 Motor Development. (3) Lifespan human motor development emphasizing major theoretical viewpoints, research methodology, and conditions affecting motor development including physical growth, physiological change, perceptual change, cognitive change, sociocultural practices, and intervention.

613 Physical Fitness Seminar. (3) The role of physical fitness in society today with emphasis on scientific principles and methods for developing physical fitness. Promotion and future directions of physical fitness programs.

616 Developing Motor Behavior: Theory and Practice. (3) Focus on the theory and practice of movement skill learning with emphasis on Laban's movement analysis framework, stages of learning, teaching styles, and application of research findings to the instructional setting.

619 Introduction to Adapted Physical Education. (3) Designed to expand graduate students' knowledge in the area of adapted physical education activity. Framed around the national standards, or APENS, and prepares students to take the national certification exam.

620 Physical Education Workshop. (1–8) Workshop offerings: physical education and sports, athletic training, officiating and judging, athletic administration, and specialized coaching.

A total of 8 hours of credit may be earned.

621 Assessment in Adapted Physical Education. (3) Students will review how to establish appropriate program placement in the least restrictive environment (LRE) for students with disabilities in physical education. Students will administer, interpret, plan, and develop appropriate programming using their assessment data. Students will develop a top-down plan based on their assessment results.

628 Comparative Physical Education and Sport. (3) A comparative analysis of physical education and sports of world regions—aims, objectives, and programs; the involvement of national governments in sports and physical education of selected countries.

630 Evaluation in Physical Education. (3) Designed to acquaint learners with various types of performance-based assessments and show how they can be integrated into the curriculum to enhance student learning.

644 Psycho-Social Processes of Sport and Physical Activity. (3) Focuses on dynamic nature and function of sport teams and physical activity groups. Topics include group structure, norms, and roles; motivation and climate; and group/team identity, cohesion, and leadership. Introduces concepts, principles, theories, and practical applications.

660 Psychology of Exercise and Health. (3) Provides an overview of psychological and social issues related to exercise and health behavior. Emphasizes understanding concepts, principles, and theories, and their application in the practice of promoting and supporting regular exercise participation and positive health behaviors.

685 Curriculum Development in Physical Education. (3) Curriculum development in physical education focusing on current theories and models including conditions affecting the curriculum, proper scope and sequence, scheduling, implementation and change theories, and curriculum evaluation techniques.

690 Sport Sociology. (3) An insight into America's heritage of sports and physical education and how this and various cultural and social institutions influence contemporary sports in the United States.

692 Sport Supervision. (3) Development of supervision policies and procedures for use with coaches and other athletic personnel.

695 Current Teaching Methodology in Physical Education. (3) The sequential experiences of public school children, special problems encountered, and methods for improving the effectiveness of teaching physical education.

696 Advanced Techniques in Athletic Training. (3) Study in the administration of and techniques involved in athletic training practice.

699 Independent Study. (1–3) Designed for students who wish to conduct independent study in physical education.

Prerequisite: permission of the director of physical education graduate studies through formal petition.

A total of 3 hours of credit may be earned.

ATHLETIC TRAINING (AT)

577 (PEP 577) Psychology of Injury Rehabilitation. (3) Presents the psychological impact of musculoskeletal injury and related factors involved in the rehabilitation process. Includes the sociocultural, mental, emotional, and physical behaviors of patients involved in injury rehabilitation.

Prerequisite: AT 373 or PEP 609.

Not open to students who have credit in AT 477.

EXERCISE SCIENCE (EXSCI)

600 Internship in Exercise Science. (1–3) An in-depth practical experience in the application of knowledge and skills related to one of the specialization areas within exercise science.

Prerequisite: permission of the program coordinator.

A total of 3 hours of credit may be earned.

Open only to exercise science majors.

603 Exercise Physiology 1. (3) Advanced study of the physiological responses to exercise. Emphasis is on the neuromuscular, metabolic, and cardiorespiratory responses.

Prerequisite: permission of the program coordinator.

Open only to exercise science students.

604 Essentials of Resistance Training and Conditioning. (3) Designed to give the scientific basis of resistance training and conditioning and the ability to apply that knowledge with specific training techniques.

Prerequisite: permission of the director.

611 Research Design and Data Analysis for the Exercise Science. (3) Focuses on research methods used in exercise science. Emphasizes selecting a research topic, writing and presenting a research proposal, and using appropriate statistical methods.

Open only to exercise science majors.

622 Foundations of Adult Physical Fitness. (3) Introduction to the exercise specialist curriculum. Provides the foundation for acquiring the philosophy, principles, and guidelines for establishing and directing adult fitness programs.

Prerequisite: permission of the program director.

Open only to exercise science majors.

623 Principles of Exercise Testing and Interpretation. (3) Involves the study of the

theoretical bases for exercise testing and the practical procedures used in pre-exercise screening and exercise testing. Students will learn how to interpret information from pre-exercise screening and apply this to the selection of appropriate exercise test protocols. Interpretation of results from various exercise test protocols will be emphasized using a case-study approach.

Prerequisite: permission of the program director.

Open only to exercise science majors.

630 Exercise Physiology 2. (3) Examines the physiological adaptations resulting from aerobic and anaerobic exercise training as well as from environmental stress.

Prerequisite: permission of the program coordinator.

Open only to exercise science majors.

633 Seminar in Exercise Science. (2) In-depth study of a selected physiological parameter in relation to exercise and the environment. Specific topics include respiratory physiology, fluid-electrolyte balance, muscle physiology, environment, and exercise: one topic per semester.

Prerequisite: permission of the program director.

A total of 6 hours of credit may be earned, but no more than 2 in any one semester or term.

Open only to exercise science majors.

634 Mechanical Analysis of Motor Skills. (3) Applications of the principles of mechanics to the analysis of motor skills; study of methods of execution of various athletic and sporting skills.

Prerequisite: permission of the program director.

Open only to exercise science majors.

637 Applied Physiology. (3) A concise summary of physiology as applied to human bioenergetics using an organ–system approach.

Prerequisite: permission of the program coordinator.

Open only to exercise science majors.

638 Electrocardiography. (3) A concise summary of cardiac electrophysiology. Identification of normal and abnormal resting and exercise electrocardiograms (ECG). Effects of various cardiac medications on resting and exercise ECG will be discussed.

Prerequisite: permission of the program director.

Open only to exercise science majors.

639 Seminar in Cardiac and Pulmonary Rehabilitation. (3) Study of the characteristics of contemporary cardiac and pulmonary rehabilitation programs. Includes an overview of routine diagnostic assessments, exercise prescription principles, and program administration issues associated with these rehabilitation programs. Also includes a review of current research related to cardiac and pulmonary rehabilitation.

Prerequisite: EXSCI 622, 623, 638; permission of the program coordinator.

Open only to exercise science majors.

640 Exercise in Prevention and Rehabilitation of Chronic Diseases. (3) Covers the role of regular aerobic exercise and/or resistance training in the prevention and rehabilitation of various chronic diseases through discussions of disease etiology and review of available exercise training literature.

Prerequisite: permission of the program director.

Open only to exercise science majors.

651 Laboratory Techniques in Biomechanics. (3) Theoretical and practical applications of data recording methods commonly used in biomechanical analysis.

Prerequisite: permission of the program director.

Open only to exercise science majors.

652 Clinical Biomechanics. (3) Biomechanical concepts related to disorders of the skeletal system.

Prerequisite: permission of the program director.

Open only to exercise science majors.

655 Advanced Biomechanics. (3) Biomechanical analyses emphasizing research techniques and procedures.

Prerequisite: EXSCI 634; permission of the program director.

Open only to exercise science majors.

698 Internship in Fitness and Cardiac Rehabilitation. (1–3) Gives credit for work in adult fitness or cardiac rehabilitation.

Prerequisite: permission of the program director.

A total of 3 hours of credit may be earned.

699 Independent Study. (1–3) Designed for students who wish to conduct independent study in exercise science.

Prerequisite: permission of the program coordinator.

Open only to exercise science majors.
A total of 3 hours of credit may be earned.

SPORT ADMINISTRATION (SPTAD)

601 Research for the Sport Practitioner. (3) Examination of research related to sport studies. Emphasis placed on the critical evaluation of research and its applicability to practice.

603 Seminar in Ethics and Philosophy in Sport Administration. (3) The ethical and philosophical concepts that determine the direction and reputation of amateur and professional sport programs. Major current issues and problems in sports will be studied.
Prerequisite: permission of the sport studies program director.

604 Physical Preparation and Conditioning. (3) Study of the response of physiological systems to training and conditioning, design training and conditioning programs, the effects of nutrition on health and performance, and the use and abuse of drugs in athletes.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

605 Organization and Administration of Recreation Programs. (3) Study of the general functions and overall operations of recreational programs, services, and facilities.

606 Aquatic Facility Management. (3) An investigation of elements involved in managing an aquatic facility. Topics discussed include management strategies, budgeting, programming, staffing, safety, and professional development.

607 Aquatic Programming. (3) A study of aquatic special events and daily programs. Includes discussion of staff budgeting, safety, marketing, registration, and organization of events.

610 Psychology of Coaching. (3) Study of the social psychological forces that have profound effects on the interactions of coach and athlete.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

611 Sport Marketing. (3) The application of the principles of promotion and marketing to the sport and fitness industry including the area of professional sports, corporate fitness, college/high school athletics, clubs, and resorts.

612 Growth and Development for Coaches. (3) Study of the physical, social, and emotional development of athletes from youth through adulthood, providing experiences appropriate to the development period.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

615 Sport Law. (3) The study of legal issues related to all aspects of amateur sports and the professional sports industry.

618 Skills and Tactics for Coaches. (3) Study of competitive tactics and strategies, scouting, practice planning, and some analysis in athletics.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

625 Evaluation in Coaching. (3) Includes development of athlete, team, athletic personnel, and program evaluation procedures.

632 Philosophy and Ethics. (3) The study of methods to reinforce and advocate for positive opportunities resulting from sport involvement, values to be developed through sport involvement, ethical conduct, and how to facilitate social and emotional growth of athletes.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

670 Sport Safety and Injury Prevention. (3) Includes methods for recognizing and ensuring safe playing conditions; role of protective equipment and proper conditioning procedures for injury prevention; management of injuries.
Prerequisite: permission of the sport studies program director.
Open only to students in coaching specialization.

675 Teaching and Motivation for Coaches. (3) The study of the use of effective teaching methods to introduce and refine sport principles and technical skills and to appropriately and effectively motivate athletes.
Prerequisite: permission of the sport studies program director.

Open only to students in coaching specialization.

676 (PEP 676) Sport Administration. (3) Administrative theory and guidelines for the operation of sports programs at the interscholastic and intercollegiate levels. An overview of changing emphasis in the operation of sports programs, administrative theory as the framework for decision making, a look at athletics in current societal thought, and consideration of sound practices in the various areas of athletic administration.

688 Current Issues in Coaching Research. (3) In-depth study of emerging research in coaching athletic teams. Special emphasis on collecting, analyzing, and applying research from related disciplines for application to future research on coaching.

Prerequisite: PEP 601.

Open only to students in coaching specialization.

692 Organization and Administration for Coaches. (3) Studies the development of objective and effective procedures for the evaluation and selection of personnel involved in athletic programs and for program reviews, facilitation of appropriate emergency care procedures, legal responsibilities associated with coaching, and organization required for implementing sport programs.

Prerequisite: permission of the sport studies program director.

Open only to students in coaching specialization.

698 Internship in Sport Administration. (6–9) A field assignment with an appropriate sport administration organization or agency.

Prerequisite: permission of the coordinator of graduate studies in sport and physical education; completion of 18 credits in the program.

TECHNOLOGY

www.bsu.edu/technology
Applied Technology Building, 131, (765) 285-5642
Chairperson: Jack Wescott
Graduate Advisor: James Flowers
Graduate Faculty: Chattopadhyay, Cotton, Flowers, Rose, Seymour, Shackelford

PROGRAMS

Master of arts (MA) in technology education and in career and technical education; an alternative license in technology education

MASTER OF ARTS IN TECHNOLOGY EDUCATION

Designed for students whose educational goals are to increase and update their knowledge and skills in technology education. The degree requires 30 graduate hours with courses in technology education, research, and directed electives. Students select a thesis or nonthesis option.

Admission

Applicants must meet the admission requirements of the Graduate School.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Professional Courses			
ITEDU	635	Impl Tech Ed	3
	690	Hist Tech Ed	3
	691	Mat Tch T Ed	3
	694	Curric Devel	3
	698	Seminar T Ed	3
Research requirements 3–9 hours from			
ITEDU	699	Rsrch Tch Ed (3)	
THES	698	Thesis (1–6)	3–9
Directed electives (with approval of program advisor)			6–12
			30 hrs

ITEDU 699 is a program requirement and a prerequisite for those seeking the thesis option.

MASTER OF ARTS IN CAREER AND TECHNICAL EDUCATION

The program is designed for students who wish to acquire an advanced level teacher license in career and technical education or to add a career and technical area to a current teacher license of another area. The degree is also designed for post-secondary educators of trade-related programs or persons in industry seeking a program that includes training techniques, safety, and technical courses.

Admission

Applicants must meet the admission requirements of the Graduate School.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Professional courses: must complete at least 9 hours			
ITEDU	550	CTE Stu Orgn (3)	
	552	Strt Mat CTE (3)	
	568	Prin CTE Ed (3)	
	569	Org Crd CTE (3)	
	696	Cond Coop Ed (3)	
ITMFG	560	Occp Safety (3)	9–18
Research requirements 3–9 hours from			
ITEDU	699	Rsrch Tch Ed (3)	
THES	698	Thesis (1–6)	3–9
Directed electives (with approval of program advisor)			3–18
			30 hrs

All professional courses in the CTE program are required for Indiana Career and Technical Education teacher license in a trade and industrial program area. ITEDU 699 is a program requirement and a prerequisite for those seeking the thesis option.

ALTERNATIVE LICENSE IN TECHNOLOGY EDUCATION

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
ITEDU	635	Impl Tech Ed	3
	691	Mat Tch T Ed	3
	694	Curric Devel	3
	697	Prob Tech Ed (1–3)	3
ITMFG	508	Prob in CADD	3
Directed elective			3
			18 hrs

Open only to Indiana-licensed educators.

INDUSTRIAL TECHNOLOGY: EDUCATION (ITEDU)

510 Technology: Use and Assessment. (3) Analyzes the use and assessment of technology. Topics include usability testing, user surveying, technology assessment techniques, environmental impact assessment, and forecasting.

550 Career and Technical Education Student Organizations. (3) Emphasizes the development, operation, and evaluation of career and technical education student organizations, with a concentration on co-curricular organizations.

552 Strategies and Materials for Career and Technical Education. (3) A study of resources, instructional materials, and strategies for career and technical education programs.

564 Practicum in Technology Education for Elementary Grades. (3) Study and field practice of the philosophy, psychology, and objectives of integrating technology education in the elementary and special education classes. Students develop and integrate technology-based curricula in the classroom. Strategies related to classroom organization, physical planning, and tool and material acquisition are discussed and implemented. 10 to 20 hours spent in contact with children.

568 Principles and Philosophy of Career and Technical Education. (3) Principles and philosophies of career and technical education programs are investigated. The role of legislation is analyzed.

Not open to students who have credit in ITEDU 690.

569 Organization and Coordination of Career and Technical Education. (3) Examines organizational structures, responsibilities, programs, and facilities dedicated to career and technical education. Current legislation directly impacting these programs will also be examined.

600 Special Topics. (1–3) The title and description are determined for each offering, allowing students to engage in relevant investigations in the changing field of technology.

Prerequisite: permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

635 Implementing Technology Education. (3) A laboratory-based experience that emphasizes the implementation of technology education.

636 Implementing Communication Technology Education. (3) A study of the concepts and strategies used in teaching communication technology classes (grades 6–12). Emphasizes graphic, electrical, visual, acoustic, and mass-communication systems and their effects on people and society.

637 Implementing Construction Technology Education. (3) A study of the concepts and strategies used in teaching construction technology classes (grades 6–12). Emphasizes designing and constructing structures and community planning activities and their effects on people and society.

638 Implementing Manufacturing Technology Education. (3) A study of the concepts and strategies used in teaching manufacturing technology classes (grades 6–12). Emphasizes industrial materials, processes, and management systems; their application to industrial enterprises; and their effects on people and society.

639 Implementing Transportation Technology Education. (3) A study of the concepts and strategies used in teaching transportation technology classes (grades 6–12). Emphasizes the design, use, and effects of transportation systems and related energy-conversion techniques in modern society.

690 History and Philosophy of Technology Education. (3) An examination of the historical development and philosophical foundations of technology education.

Not open to students who have credit in ITEDU 568.

691 Strategies and Materials for Teaching Technology Education. (3) A study of individualized and group teaching and learning strategies and the selection, production, and use of instructional materials to support them.

694 Curriculum Development in Technology Education. (3) A review of the philosophical, sociological, and psychological bases for curriculum analysis and development in technology education.

696 Coordinating and Conducting Cooperative Education Programs. (3) Examines the regulations and guidelines governing the coordination of cooperative education programs and unique methods and strategies used to facilitate work-based learning.

697 Problems in Technology Education. (1–3) Independent study in advanced industrial or professional techniques.

Prerequisite: permission of the department chairperson.

A total of 3 hours of credit may be earned.

698 Seminar in Technology Education. (3) An exploration of current problems and issues in technology education.

699 Research in Technical Education. (3) A review of existing research in technology education and career and technical education with reference to its scope and usefulness. Design and interpretation of individual or group research is required.

INDUSTRIAL TECHNOLOGY: MANUFACTURING (ITMFG)

508 Problems in Computer-Aided Design and Drafting. (3) Emphasizes two- and three-dimensional modeling applications in design and manufacturing using a CAD system.

Prerequisite: a technical drawing course or permission of the department chairperson.

526 Advanced Plastics Technology. (3) Individual investigation of problems and new developments in the plastics (synthetics) industry. Problem solving, research, and experimentation with product design and associated mold making is encouraged. Prior experience in plastics is essential.

Prerequisite: ITMFG 225 or the equivalent.

530 Problems in Metals. (3) Intensive study of special concerns of metal processing not covered in other courses. Manufacturing is emphasized. Problem solving, research, and experimentation are encouraged.

560 Occupational Safety and Health. (3) Study of the practices used to ensure a safe and healthy environment for industrial and educational sectors. Examines hazard recognition and correction and the impact of safety and health regulating agencies.

563 Manufacturing Operations. (3) Focuses on activities associated with the design and installation of industrial

production methods and facilities. Laboratory activities offer opportunities to perform basic tasks associated with developing a production system.

570 Advanced Studies in Electronics. (3) Individual study of major problems in electronics. Applies new techniques and developments to these problems and experiments.

580 Advanced Studies in Graphic Arts. (3) Individual study of new developments in graphic arts. Provides opportunities to study new developments in light-sensitive materials, computer applications in graphic arts processes, and current industry trends.

590 Developing Human Resources. (3) Activities, roles, and competencies of human resource developers in industrial organizations. Emphasizes activities that allow for the development of selected HRD competencies.

Fisher Institute for Wellness and Gerontology

www.bsu.edu/wellness

Health and Physical Activities Building, PL 225, (765) 285-8259
Director: David Gobble
Coordinator for Academic Studies:
Program Director for Wellness Management: Jane Ellery
Program Director for Gerontology: Kathleen Segrist
Graduate Faculty: Ellery, Gobble, Haber, Segrist

The Fisher Institute for Wellness and Gerontology sponsors two distinct but related programs in Wellness Management and Applied Gerontology. Each program has academic, research, and service components. Academic programs include master's degrees in wellness management and a master's degree, an undergraduate minor, and certificate programs in applied gerontology. Services include wellness residence halls, faculty and staff health assessment and screening, and campus and community health screening and educational programs. One such community educational program is the annual Kirkpatrick Memorial Conference on Aging. Graduate students assist in the provision of all services offered through the institute.

The research mission of the institute is to assist corporations, community agencies, and health care facilities in designing, implementing, and evaluating programs dedicated to lifespan wellness. Major research topics of the institute include development and investigation of a multidimensional systems model for lifespan wellness and the application of the Ball State Model for Wellness in assessment of individuals, worksite programs, health care facilities, and community organizations. Research interests also include effective techniques for reducing health care costs, motivating people to practice wellness-related activities, and the effects of health behaviors on longevity, morbidity, and mortality.

In general, the institute is concerned with the processes of maintaining well being for people, organizations, communities, and societies. Both faculty and student

research are related to this broad focus on keeping people well and developing techniques for achieving higher levels of functioning across the lifespan.

Students receiving degrees in wellness management and/or applied gerontology will enter a rapidly expanding job market for wellness and gerontology professionals. Typical work settings include corporations, hospitals, YMCAs, entrepreneurial businesses, health care facilities, governmental agencies, and educational institutions. Graduates will be challenged to solve the difficult problems of meeting the wellness needs of people and organizations in an aging society. The challenges and opportunities are limited only by the energy, talent, and imagination of each graduate.

PROGRAMS

Master of arts (MA) and master of science (MS) in wellness management; master of arts in applied gerontology

MASTER OF ARTS IN APPLIED GERONTOLOGY

Admission

Applicants must meet the admission requirements of the Graduate School. A grade point average (GPA) of 3.0 on a scale of 4.0, a combined score of 900 on the verbal and quantitative sections of the Graduate Record Examination (GRE), and/or approval of the program director for gerontology are required for acceptance into the program.

Degree Requirements

The minimum requirement for the degree is 36 hours, including a core of gerontology courses, a research experience, and electives in related areas.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
15 hours from			
GERON	535	Aging Commun	3
	605	Aging Well	3
	630	Hlth Wel Age	3
	635	Adp Late Lif	3
	640	Servc Learn	3
3–9 hours from			
EDPSY	641	Statist Meth (3)	
WELNS	670	Well Res Dgn (3)	
RES	697	Research Ppr (1–3)	
THES	698	Thesis (1–6)	3–9
12–18 hours from			
Electives either from Track 1 or Track 2			
Track 1—Aging well electives, 12–18 hours			
GERON	540	Women Aging (3)	
	598	Seminr Geron (3)	
	610	Public Policy (3)	
	620	Guid Lif Rev (3)	
	625	Ch Heal Beh (3)	
	641	Pract Applic (3)	
	699	Intern Geron (1–6)	
FCSFN	652	Geriatr Ntr (3)	
PHYSL	515	Physio Aging (3)	
WELNS	680	Eval Hlt Wel (3)	12–18
Track 2—Aging management electives, 12–18 hours			
GERON	515	Tech Aging (3)	
	598	Seminr Geron (3)	
WELNS	605	Wlns Mgt Adm (3)	
	645	Soc Mkt Wlns (3)	
	665	Technology (3)	
	680	Eval Hlt Wel (3)	
ACC	501	Fin Acct (3)	
BL	560	Survey B L (3)	
ECON	509	Survey Econ (3)	
	548	Health Econ (3)	
FIN	500	Corporation (3)	
MGT	500	Mng Org Beh (3)	
MKG	505	Survey Mrktg (3)	12–18
			36 hrs

The course work for the degree in applied gerontology may be completed in one year or it may be combined with another degree program in order to obtain a double major. For example, a student in an MA program in adult education, biology, counseling, physical education, wellness management, etc. may take the core course requirement in gerontology and then apply related electives and internship experience to a degree in applied gerontology.

The master's degree in applied gerontology is an interdisciplinary degree that provides the student with a broad-based overview of aging, as well as more focused training in a selected area of study. Faculty from wellness, health sciences, educational psychology, sociology, counseling, physical education, nutrition, nursing, and other

disciplines teach a variety of courses on special issues in aging and in serving an older population.

Educational programs are focused on three levels: exposure to information about processes of aging and the needs of an aging society for a wide variety of students and the general public; proficiency training of professionals and other service providers who are involved with serving older adults; and the development of expertise for professionals who are planning to specialize in geriatric services.

Research programs center on two aspects of gerontology: interdisciplinary studies of the processes of aging and applied research regarding the delivery of services and program evaluation.

The faculty provide consultation, training, and other resources for agencies serving an older clientele and for community groups of older adults.

In addition to the MA degree in applied gerontology, several other options are available for the study of gerontology, including an undergraduate minor, a graduate minor, an undergraduate certificate, and a graduate certificate. A curriculum advisor is available to discuss these options with any interested student.

MASTER OF ARTS AND MASTER OF SCIENCE IN WELLNESS MANAGEMENT

Admission

Applicants must meet the admission requirements of the Graduate School and have grade point averages (GPA) of 3.0 on a 4.0 scale, Graduate Record Examination (GRE) scores of at least 1000 (quantitative and verbal), and the approval of the director of the Fisher Institute for Wellness and Gerontology. Students who do not meet these standards may be admitted on probation at the discretion of the director. Students will be removed from academic probation upon successful completion (GPA of 3.0 or higher) of 9 semester hours of approved course work. As a prerequisite for entry into the program, all students without undergraduate course work in allied health will be required to complete up to three basic undergraduate courses in health-related disciplines. All students will be required to participate in selected university and community wellness activities as part of the wellness management major.

Students who have not completed an undergraduate major or minor in business and an undergraduate major or minor in a health-related discipline will be required to complete graduate course work in these areas in addition to the core course work. Students without an undergraduate major or minor in business are expected to complete the minor in general foundations of business for wellness majors.

Students without an undergraduate major or minor in an approved allied health field will be required to complete at least 9–12 hours in an approved graduate minor or specialization. Typical areas of specialization include, but are not limited to, applied gerontology, adult education, community education, health science, pre-counseling psychology, exercise leadership, and family and consumer sciences (nutrition).

Degree Requirements

MASTER OF ARTS IN WELLNESS MANAGEMENT

The requirement for the degree is 36 semester hours for students who have undergraduate majors or minors in business and a supporting undergraduate major or minor in allied health. Students entering the program without this background will be required to complete a minor in general foundations of business through the Miller College of Business and a 12-hour allied health minor. All students complete the wellness core.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core courses			
WELNS	605	Wlns Mgt Adm	3
	630	Hlth Pro Mgt	3
	650	Foundations	3
	660	Issues	3
	670	Well Res Dgn	3
	698	Intern Well	6
3 hours from			
RES	697	Research Ppr (1–3)	
HSC	687	Stat Mth HSc (3)	
EDPSY	641	Statist Meth (3)	3
Directed electives			12
			36 hrs

MASTER OF SCIENCE IN WELLNESS MANAGEMENT

The requirement for the degree is 39 semester hours for students who have undergraduate majors or minors in business

and a supporting undergraduate major or minor in allied health. Students entering the program without this background will be required to complete a minor in general foundations of business through the Miller College of Business and a 12-hour allied health minor. All students complete the wellness core.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
WELNS	605	Wlns Mgt Adm	3
	630	Hlth Pro Mgt	3
	650	Foundations	3
	660	Issues	3
	670	Well Res Dgn	3
	698	Intern Well	6
THES	698	Thesis (1–6)	6
Directed electives			12
			39 hrs

The master's degree in wellness management is an interdisciplinary degree that coordinates the university's strong resources to give students comprehensive training in wellness. Faculty from physical education, food and nutrition, psychological sciences, health science, and the Miller College of Business combine knowledge and skills in a well-rounded and challenging curriculum.

MINOR IN GENERAL FOUNDATIONS OF BUSINESS

For wellness majors only. Students must have an approved program of study on file in the Miller College of Business.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
ACC	501	Fin Acct	3
ECON	509	Survey Econ (3)	
	or		
	548	Health Econ (3)	3
MBA	601	Entr Ldrship	3
MGT	500	Mng Org Beh	3
MKG	505	Survey Mrktg	3
			15 hrs

Students who have credit in any equivalent undergraduate course may substitute the following:

BL	560	Survey B L	3
MGT	640	Entrep Innov	3
	661	Hman Res Mgt	3
FIN	500	Corporation	3

All substitutions will be approved by the Miller College of Business.

GERONTOLOGY (GERON)

515 Technology in Aging. (3) Explores the impact of assistive and other technologies on the lives of aging adults. Identification of technologies, utilization by and for aging adults, and implications for service delivery will be explored.

Not open to students who have credit in GERON 415.

535 Aging in Communities. (3) Focus on community aging as it applies to all the dimensions of life: biological, physiological, sociological, psychological, political, occupational, economical, educational, familial, and societal.

Not open to students who have credit in GERON 435.

540 Women and Aging. (3) Typical lifespan occurrences that largely impact women such as elder caregiving, familial systems maintenance, widowhood, health changes, and economic issues will be explored. Historical and theoretical perspectives; introduction to health, psychological and living issues; introduction to racial and ethnic diversity; and social relationships will also be covered.

Not open to students who have credit in GERON 440.

592 Workshop in Applied Gerontology. (1–10) Preservice or inservice education in selected topics in applied gerontology using a workshop format of concentrated study, presentations, demonstrations, and practice. Specific content will depend upon the problem or special interest with which the workshop is concerned. Learners are encouraged to work out a program of personal study with help from other workshop participants and resource persons.

Prerequisite: permission of the director. Credit may be applied to a major or minor in applied gerontology only with permission of the program director for gerontology.

A total of 10 hours of credit may be earned in this course or in combination with GERON 392.

598 Topical Seminar in Applied Gerontology. (3–6) Individual and group investigation of topics, problems, or issues in applied gerontology with discussion by all seminar participants under the guidance of the instructor.

Credit may be applied to a major or minor in applied gerontology only with permission of the program director for gerontology.

A total of 6 hours of credit may be earned in this course or in combination with GERON 398.

605 Aging Well: A Systems Approach. (3) An application of the Fisher Institute Wellness Model to the processes of aging well. Seven dimensions of wellness will be examined, highlighting the potential for successful aging. Emphasizes mid-life to late-life challenges and how the principles of systems theory deepen understanding of wellness and aging.

610 Public Policy and Aging. (3) Emphasis on the governmental infrastructure that facilitates the development and implementation of policy that impacts aging Americans and the public and private response to policy initiatives.

615 Wellness and Aging: Practical Applications for Health Professionals. (3) Evidenced-based wellness and aging content for health professionals. Experience leading intergenerational discussions and conducting health contracts with older adults.

620 Guided Life Review. (3) Learn the skill of helping older adults produce written components of a life review. These components include family of origin, marriage, children, grandchildren, work career, major historical events, retirement, health, meaning and purpose, aging and death, and major turning points.

625 Changing Health/Wellness Behaviors. (3) Focus on helping adult clients increase exercise, improve nutrition, stop smoking, and manage stress using the instructor's field-tested health contract/calendar technique. Also includes theory, assessment, support groups, cultural competency, health materials, and proposal writing. Special emphasis on older adults.

630 Health, Wellness, and Aging. (3) An overview of the aging process and old age with specific emphasis on health. The range of topics includes exercise, nutrition, clinical preventive services, health behavior, mental health, professional–client communication, model programs, diversity, and public policy.

635 Aging Well: Adaptations in Later Life. (3) Examination of the adaptations of the last half of the life span (i.e. ages 50–100+). Content includes the various theories of aging, multidimensional perspectives on changes in health and well-being, and strategies for coping with the change. Emphases are placed on developmental process, adaptations, and mental/emotional changes as people age.

Prerequisite: GERON 605.

640 Service Learning in Gerontology. (3) Students will take a leadership role in a community-based project and apply research, theory, knowledge, and skills.

Prerequisite: GERON 605 and at least one additional core course.

641 Practical Applications of Gerontological Programming. (3) Students will focus on applying research, knowledge, and skills to deliver gerontological programming. Techniques for delivery and management of gerontological programs and evaluating effectiveness of programs/interventions will be examined.

Prerequisite: GERON 605, 640, and one additional core course.

699 Internship in Gerontology. (1–6) Experience in one or more of the agencies, institutions, or programs now providing gerontological services or otherwise related to gerontology. Carried out under the joint supervision of the program director and a practitioner representing the agency, institution, or program. A student chooses the setting with guidance from a faculty sponsor and approval of the practitioner.

Prerequisite: permission of the program director.

A total of 6 hours of credit may be earned.

WELLNESS (WELNS)

605 Wellness Management Administration. (3) Improving the efficiency of administrative tasks and communication practices can greatly impact wellness management practice. This class focuses on computer skills and technologies important for wellness program administration, including developing budgets, communicating effectively, and writing and administering grants and contracts.

625 Community Collaboration and Service Learning in Wellness Management. (3) During this course, students assist in the administrative functions of community-based, professionally led wellness management projects.

630 Wellness Programming for Health and Productivity Management. (3) Examination of Health and Productivity Management (HPM) as a wellness program approach in the workplace. Techniques for delivery and management of HPM programs and cost effectiveness of interventions will be examined.

635 Wellness Coaching. (3) This course introduces theory, skills, and techniques related to guiding groups and individuals through meaningful lifestyle changes by emphasizing motivational strategies and behavioral and holistic practices. Features include lifestyle assessments, in-depth wellness and lifestyle change models, basic interviewing and referral skills, and contact with leaders in the wellness field.

640 Survey of Wellness Policy, Advocacy, and Ethics. (3) Understanding political and ethical issues impacting well-being plays a role in the success of both individual and system-level changes that lead to more holistic, health-promoting lifestyles. This class introduces wellness program managers and other health professionals to important issues that need to be considered during decision-making processes.

645 Social Marketing in Wellness Management Practice. (3) Social marketing is the use of marketing principles and a customer-driven approach when developing health behavior change strategies. This class focuses on helping wellness managers and other health professionals "think like a marketer" as they design, implement, and evaluate wellness-related programs.

650 Foundations of Wellness. (3) First-year introduction to a wide variety of concepts and foundational thinking associated with the notion of wellness. Encourages integrative thinking about the meaning and application of wellness in life and in relation to careers as managers in the wellness environment.

655 Practical Applications for Worksite Wellness. (3) Focuses on applying research, knowledge, and skills to manage the wellness process.

660 Critical Issues in Worksite Wellness. (3) An exploration of critical wellness management issues covering organizational, programmatic, and emerging events affecting wellness and health promotion at the work site.

665 Technology and Media for Wellness Managers. (3) Provides wellness professionals with the basic skills to initiate, maintain, and expand technology and media into daily business. Emphasizes obtaining resources, information, skills, and strategies through practical application.

670 Interdisciplinary Wellness Research Design. (3) An introduction to basic research design and its application to wellness programs. Emphasizes the interdisciplinary nature of research from wellness-related disciplines and focuses on creating research hypotheses, design, data collection, and analysis.

675 Alternative and Complementary Therapies. (3) A graduate seminar focusing on a cultural, philosophical, and intellectual analysis of a selective number of alternative, complementary "medical" delivery systems including their history. Key concepts, methods of delivery, effectiveness, and supportive research data will be reviewed emphasizing their potential for supporting wellness.

680 Evaluating Health and Wellness Initiatives. (3) Provides an introduction to logic-model driven program evaluation. The knowledge and skills developed will help participants systematically examine health and wellness initiatives, design data collection methods, analyze information gathered, and generate reports that can be used to improve program services and assess program outcomes.

697 Special Studies in Wellness. (1–3) Problems of special interest in wellness. Work under the direction of a staff member. May include one or more of the following: experimental work, attendance in special classes, wide reading, and development of special techniques or skills in wellness management.

Prerequisite: permission of the academic coordinator or the director of the institute.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

698 Internship in Wellness Management. (6) Full-time experience in an approved wellness program. Management experience will be offered at the work site under the joint supervision of a university faculty member and a wellness director responsible for program management.

Prerequisite: completion of the wellness management core requirement.