College of Applied Sciences and Technology

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

Family and Consumer Sciences

www.bsu.edu/cast
Applied Technology Building 150, (765) 285-5932
Chairperson: Alice A. Spangler
Graduate Advisor: Alice A. Spangler
Graduate Faculty: Adams, Ahmadi, Altman, Beals, Birk, Box, Carr, Chezem, Earhart, Friesen, Harden, Kandiah, Kurtz, Lowe, McFadden, Ridgeway, Saiki, Schmidt, Sampson, Spangler, VanMatre, Whitaker, Young, Zeabart

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
- 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 (M.A.) in family and consumer sciences; master of science (M.S.) in dietetics and in family and consumer sciences

Admission

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

MASTER OF ARTS IN FAMILY AND CONSUMER SCIENCES

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
21–33 hours from family and consumer sciences major including a minimum of 6 hours to complete the research component:			
EDPSY	641	Statist Meth	3
FCS	697	Res Methods (3)	
		or	
RES	697	Research Ppr (1–3)	3
Minor and electives			0–12
Apparel design option, 33 hours			
FCSMR	500	Adv Flat Pat	3
	501	Adv Tailor	3
	503	Adv Draping	3
	505	Adv CAD Appr	3
FCSMR elective			3
Minor or other electives inside or outside the FCS department			12
			33 hrs
Fashion merchandising option, 33 hours			
FCSMR	555	Adv Fash Anl	3
	565	Adv Designer	3
	570	Adv Fash Buy	3
	575	Adv Int Appr	3
FCSMR elective			3
Minor or other electives inside or outside the FCS department			12
			33 hrs
Residential property management option, 33 hours			
FCSMR	535	Adv RPM Proj	3
	585	Adv Sim RPM	3
	635	Adv RPM T & I	3
6 hours from			
FCSMR	515	Adv Sr Hous (3)	
	525	Adv Gov Hous (3)	
FCSFC	680	Family Prob (3)	6
Minor or other electives inside or outside the FCS department			9–12
			33 hrs

MASTER OF SCIENCE IN FAMILY AND CONSUMER SCIENCES

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

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
21–33 hours from the family and consumer sciences major including a minimum of 6 hours to complete the research component:			
EDPSY	641	Statist Meth	3
FCS	697	Res Methods	3
THES	698	Thesis (1–6)	6
Minor and electives			0–12
Apparel design option, 33 hours			
FCSMR	500	Adv Flat Pat	3
	501	Adv Tailor	3
	503	Adv Draping	3
	505	Adv CAD Appr	3
Minor or other electives inside or outside the FCS department			9
			33 hrs
Fashion merchandising option, 33 hours			
FCSMR	555	Adv Fash Anl	3
	565	Adv Designer	3
	570	Adv Fash Buy	3
	575	Adv Int Appr	3
Minor or other electives inside or outside the FCS department			9
			33 hrs
Residential property management option, 33 hours			
FCSMR	535	Adv RPM Proj	3
	585	Adv Sim RPM	3
	635	Adv RPM T & I	3
3 hours from			
FCSMR	515	Adv Sr Hous (3)	
	525	Adv Gov Hous (3)	
FCSFC	680	Family Prob (3)	3
Minor or other electives inside or outside the FCS department			9
			33 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 résumé, and two letters of recommendation.

Those applying for the M.S. 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 M.S. in Dietetics is granted.

Dietetics Internship

The dietetics 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 dietetics internship and at least 18 hours of the master's degree. The dietetics internship at Ball State University is currently granted developmental accreditation by the Commission on Accreditation for Dietetics Education, 216 W. Jackson Boulevard, Chicago, IL 60606-6995, (312) 899-5400 of The American Dietetic Association, 216 W. Jackson Boulevard, Chicago, IL 60606-6995, (312) 899-4876. Students applying to the dietetics internship must provide a completed application form, a current résumé, a letter of application, a letter of acceptance to the Graduate School at Ball State University, 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*
23 hours from dietetics major including the following research component:			
EDPSY	641	Statist Meth	3
FCS	697	Res Methods	3
THES	698	Thesis (1–6)	6
FCSFN courses			12
12 hours from FCSFN sequence 580, 581, 582; Family and Consumer Sciences courses; or other support courses			12
			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. Focuses on critiquing research completed by others and developing a research proposal.

Prerequisite: permission of the department chairperson.

Parallel: EDPSY 641.

FAMILY AND CONSUMER SCIENCES: EDUCATION (FCSED)

692 Principles and Philosophy of Vocational Education. (2) Principles on which vocational family and consumer sciences is organized, administered, and supervised; description of programs; and federal and state regulations and guidelines.

Not open to students who have credit in FCSED 392 or 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: 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 (640) 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) An overview of event management. Content will focus on conventions, professional and social events, catering activities, and their intra-industry interaction.

Prerequisite or parallel: FCSFN 475 or 575.

Not open to students who have credit in FCSFN 476.

580 Supervised Practice in Food Systems Management. (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 (320 hours).

Prerequisite: permission of the department chairperson.

Open only to AP4 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 dietetics 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.

Prerequisite: permission of the department chairperson.

Open only to dietetics 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. Includes laboratory experience.

Prerequisite: FCSFN 445 or 545.

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 540 or permission of the department chairperson.

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 540 or permission of the department chairperson.

647 Carbohydrates, Proteins, and Lipids. (3) Advanced study of carbohydrates, proteins, and lipids in humans. Includes nomenclature, structure; laboratory analysis techniques; recommended and actual intakes; dietary assessment methods; normal digestion, absorption, and metabolism; and related diseases and genetic disorders.

Prerequisite: FCSFN 445 or 545.

648 Vitamins and Minerals. (3) Advanced study of vitamins and minerals in humans; review and discuss current literature and findings related to nomenclature, function, metabolism, nutrient interactions, requirements, assessment, toxicity, and deficiency states of population groups and relationship to health and disease.

Prerequisite: FCSFN 340 or 540.

650 Maternal and Infant Nutrition. (3) Principles of maternal, prenatal, and infant (birth to thirty-six months) nutrition; nutritive requirements of expectant mothers and infants. Emphasizes reading in current periodicals.

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

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 340 or 540 or permission of the department chairperson.

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 Food and Nutrition. (3) Student presentations and discussions of trends and issues related to food and nutrition. Emphasizes in-depth knowledge of current research findings and concerns. 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: MERCHANDISING (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 Advanced Tailoring. (3) Review of current trends in tailored garments. Construction of tailored garment using contemporary techniques.

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

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

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

Prerequisite: FCSMR 124, 150; AHS 100; permission of the department chairperson.

Not open to students who have credit in FCSMR 325.

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.

Prerequisite: permission of the department chairperson.

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.

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

Prerequisite: FCSMR 235.

Not open to students who have credit in FCSMR 405.

535 Advanced Residential Property Management Project. (3) Provides 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.

Prerequisite: FCSMR 275, 305.

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: FCSMR 234 or permission of the department chairperson.

Not open to students who have credit in FCSMR 444.

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 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 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 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.

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.

Prerequisite: FCSMR 275, 305.

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.

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: FCSMR 235.

INDUSTRY AND TECHNOLOGY

www.bsu.edu/itech
Applied Technology Building, 131, (765) 285-5642
Chairperson: Jack Wescott
Graduate Advisor: Jack Wescott
Graduate Faculty: Cotton, DeKeyser, Flowers, Kirkwood, Rose, Shackelford, Warner, Wescott

PROGRAMS
Master of arts (M.A.) in technology education and in career and technical 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 and to professionalize their Indiana teaching licenses. The degree requires 30 graduate hours with courses in education, technology education, and research, as well as electives. Students select a thesis or non-thesis option. As a part of this degree, students with an Indiana license may professionalize their teaching licenses by enrolling in the required professional education courses.

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	Matl Tch T Ed	3
	694	Curric Devel	3
	698	Seminar T Ed	3
Research requirements			
ITEDU	699	Research I Ed (3)	
THES	698	Thesis (1–6)	3–9
3 hours from			
EDSEC	534	Class Mgt (3)	
	600	Workshop Sec (2–6)	
	690	Prctm Sec Ed (1–9)	
	695	Dyn Sec Clrm (3)	
EDTEC	550	Currie Tec (3)	3

To professionalize a standard Indiana senior high, junior high / middle school license select 3 hours from

EDCUR	620	Sec Sch Cur (3)	
EDFON	631	Philosopy Ed (3)	
	651	Ed Sociology (3)	
EDGEN	692	Super St Te (3)	
EDMUL	660	Mlti Clt Eth (3)	
EDPSY	600	Adv Ed Psy (3)	
	603	Human Devel (3)	
	640	Methodology (3)	
EDSEC	676	Res Sec Ed (3)	0–3
Electives			0–9
			30 hrs

ITEDU 699 is the prerequisite to THES 698. Substitutions cannot be made to satisfy requirements in the professional or research categories. Students using departmental courses that are scheduled on an arranged basis to fulfill their elective requirement must gain approval for the course before enrolling in the class.

MASTER OF ARTS IN CAREER AND TECHNICAL EDUCATION

Designed for students who wish to professionalize the standard teaching license in career and technical education laboratory certification. The degree is also designed for persons in industry seeking a program that includes training, safety, and technical courses.

Admission

Applicants must meet the admission requirements of the Graduate School.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Professional courses			
ITEDU	550	CTE Stu Orgnz (3)	
	551	Trd Ocp Anls (3)	
	552	CTE Rel Cntn (3)	
	568	Prin CTE Ed (3)	
	569	Org Crd CTE (3)	
	691	Matl Tch T Ed (3)	
	696	Tech Coop Ed (3)	

ITMFG	560	Indst Safety (3)	
	590	Dev Hum Res (3)	9–15
Research requirements 3–9 hours from			
ITEDU	699	Research I Ed (3)	
THES	698	Thesis (1–6)	3–9
Departmental electives			0–6
			18 hrs
Professional education courses 3 hours from			
EDSEC	534	Class Mgt (3)	
	600	Workshop Sec (2–6)	
	690	Prctm Sec Ed (1–9)	
	695	Dyn Sec Clrm (3)	
EDTEC	550	Curric Tech (3)	3
Electives			0–9
			30 hrs

ITEDU 550, 551, 568, 569, and ITMFG 560 are required for career and technical education certification in Indiana. ITEDU 699 is the prerequisite to THES 698.

INDUSTRIAL TECHNOLOGY: EDUCATION (ITEDU)

510 Technology: Use and Assessment. (3) Analyzes the use and assessment of technology. Topics include decision making in adopting technologies, design for use, usability testing, user surveying, technology assessment techniques, environmental impact assessment, and forecasting.

550 Career and Technical Education Student Organizations. (3) Emphasizes the implementation, maintenance, and evaluation of career and technical education student organizations.

Not open to students who have credit in ITEDU 290.

551 Trade and Occupational Analysis. (3) The fundamentals of analyzing trades and occupations. Techniques of identifying occupations by a breakdown into components of jobs, tasks, and processes will be examined.

Not open to students who have credit in ITEDU 390.

552 Career and Technical Education Related Class Content. (3) The sources of related materials and techniques for developing and using these materials.

Not open to students who have credit in ITEDU 392.

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. Ten to twenty hours spent in contact with children.

568 Principles and Philosophy of Career and Technical Education. (3) Introduction to the foundation and operation of various career and technical education programs. Analyzes legislation in the light of past and present issues of career and technical education and its role as a vital component of the total educational system.

Not open to students who have credit in ITEDU 292.

569 Organization and Coordination of Career and Technical Education. (3) The organizational structure, responsibilities, and roles recognized in the operation of career and technical education programs with major emphasis on state functions.

Not open to students who have credit in ITEDU 492.

635 Implementing Technology Education. (3) A laboratory-based experience that emphasizes strategies for implementing 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) Historical development and philosophical foundations of current trends in technology education with emphasis on content bases, objectives, teaching methods, and evaluation.

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 construction with the intent to develop a technology education program for the secondary school.

696 Techniques in Coordinating Cooperative Education. (3) Cooperative part-time education programs with attention given to governing laws, problems in coordination, initiating programs, classes in related subjects, and selection of instructional materials.

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) Current problems and issues in technology education and facility design with particular attention given to the more recent developments in many of the more progressive programs throughout the country.

699 Research in Industrial Education. (3) A review of existing research in technology education and career and technical education with reference to its scope and usefulness. Analyzes selected studies. Design of individual and 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 Industrial Safety and Health. (3) Study of the practices used to ensure a safe and healthful environment for industrial personnel. Includes the requirements of safety- and health-regulating agencies and hazard recognition and correction.

Not open to students who have credit in ITDPT 360.

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.

Not open to students who have credit in ITMFG 363.

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.

Not open to students who have credit in ITDPT 390.

601 Computer-Integrated Manufacturing. (3) Overview of the major elements in a Computer-Integrated Manufacturing System. Topics include computer fundamentals, automated machines, process monitoring and control, and systems integration. Substantial laboratory work is required.

Prerequisite: calculus, physics, and a programming language.

602 Materials and Processes in Manufacturing. (3) Intensive introduction to the materials and processes used in manufacturing. Substantial laboratory work is required.

Prerequisite: calculus, chemistry.

625 Manufacturing Systems for Plastics. (3) Application of computer-integrated manufacturing in the plastics industry. Topics include product, process, and quality control. Required laboratory work will include design, development, and implementation of a production molding system.

Prerequisite: ITMFG 601, 602.

635 Expert Systems in Manufacturing. (3) Design of intelligent systems applied to manufacturing. Involves identifying manipulating, and creating expert systems for the manufacturing environment. Topics will include artificial intelligence, robotics, vision, and information retrieval.

Prerequisite: ITMFG 601, 602.

651 Production Control in Manufacturing. (3) Methods and models necessary for manufacturing production. Topics include product determination and forecasting, plant location and layout, production processes, work design, scheduling, inventory, and quality control. Computer modeling will be used.

Prerequisite: a course in management, statistics, and computer science.

653 Manufacturing Resources Control. (3) Theoretical, computational, and applications of aggregate schedule and inventory control in manufacturing. Includes aggregation and disaggregation of production plans and deterministic and stochastic inventory management models and systems.

Prerequisite: ITMFG 651 or ISOM 551.

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, Campbell, Halley, Hodson-Carlton, Kelsey, Kerrigan, Pietrzak, Ryan, Siela, Siktberg, Twibell, Wieseke, Wolfe

PROGRAM

MASTER OF SCIENCE (M.S.) IN NURSING

Admission

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

- have health clearance.
- have criminal background checks.
- have graduated from a National League for Nursing (NLN) or Commission on Collegiate Nursing Education (CCNE) accredited baccalaureate program that included an upper division nursing major. 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 averages of 2.8 on a 4.0 scale or upper division 3.0 grade point average 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.
- hold current licensure as a registered nurse in the state of practice.
- hold professional liability insurance.
- have a minimum of two full years of experience in professional nursing (if enrolling for full-time study).
- show evidence of training in standard precautions.
- show evidence of completion of a physical assessment course for clinical and nurse practitioner tracks.
- have a minimum of one year of clinical experience before enrolling in clinical courses for new graduates.
- have recent clinical experiences (three of the past five years) before enrolling in clinical courses for experienced nurses.

This program is delivered via the Web and requires computer access. NUR 605, Nursing Information Technology, is required for all students.

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.

Retention Standards

A grade of *C-* or lower in any nursing course leading to a master of science degree with a major in nursing is unacceptable, and the student who receives one will be dropped from the program. The student may apply to the Graduate Admissions and Progressions Committee for readmission.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Research core			
EDPSY	641	Statist Meth	3
NUR	604	Research	3
			6 hrs
Nursing core			
NUR	603	Nur Theory	3
	605	Nur Info	2
	610	Concp Anls 1	3
			8 hrs
Administrative core			
NUR	640	Nur Adm Theo	3
	642	Adm Mgt Nurs	3
	643	Fin Mgt	2
	672	Role Expct	4
			12 hrs

Complete one of the following tracks

Administrative Track (with Business Minor), 44 hours

Research core			6
Nursing core			8
Administrative Core			12
THES	698	Thesis (1-6)	6
Business minor, 12 hours from			
ACC	501	Fin Acct (3)	
BL	560	Survey B L (3)	
MGT	500	Mng Org Beh (3)	
	661	Human Res Mgt (3)	
MKG	505	Survey Mrktg (3)	
MBA	601	Leadership (3)	12
			44 hrs

Not open to undergraduate majors in business.

Administrative Track (without Business Minor), 35 hours

Research core			6
Nursing core			8
Administrative core			12
NUR	611	Concp Anls 2	3
THES	698	Thesis (1–6)	6
			35 hrs

Clinical Specialist Adult Health Track, 49 hours

Research core			6
Nursing core			8
NUR	611	Concp Anls 2	3
	614	Concp Anls 3	3
	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Prim Adult	7
THES	698	Thesis(1–6)	6
			49 hrs

Nursing Leadship Track, 33 hours

Research core			6
Nursing core			8
NUR	611	Concp Anls 2	3
	614	Concp Anls 3	3
	672	Role Expct	4
Role electives			6
Scholarship options			
RES	697	Research Ppr (3)	
	or		

EDAC	697	Grantsmnshp (3)	3
			33 hrs

Practitioner (Adult/Family), 41–47 hours

Research core (Thesis is optional)			6
NUR	603	Nur Theory	3
	610	Concp Anls 1	3
	611	Concp Anls 2	3
	614	Concp Anls 3	3
	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Prim Adult	7
THES	698	Thesis (1–6)	0–6
			41–47 hrs

To extend certification to Family Practitioner the following courses are required.

NUR	682	Prim Child	4
	684	Prim Women	3
			48–54 hrs

Educator Track, 41–42 hours

Research core			6
NUR	603	Nur Theory	3
	605	Nur Info	2
	610	Concp Anls 1	3
	611	Concp Anls 2	3
	614	Concp Anls 3	3
	620	Curr Designs	3
	622	Teach In Nur	3
	626	Prog Eval	3
	672	Role Expct	4
NUR electives			2–3
THES	698	Thesis (1–6)	6
			41–42 hrs

Post-Master's Certification Practitioner (Adult/Family), 23–30 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Adult Practitioner			
NUR	630	Clin Role	3
	632	Pathophys	3
	634	Hl Assessmnt	3
	638	Pharm	3
	672	Role Expct	4
	680	Prim Adult	7
			23 hrs

To extend certification to Family Practitioner the following courses are required.

NUR	682	Prim Child	4
	684	Prim Women	3
			30 hrs

Post-Master's Certification Program 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

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 healthcare 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 Concept Analysis 3: Evaluation of Client-Care Outcomes. (3) Builds on NUR 610 and 611. Client-care outcomes are evaluated using selected models of evaluation. Research findings are evaluated as they relate to outcomes of care with a focus on chronic illness. Effects of technology and economy on outcomes are explored. Clinical focus on development of an evaluation plan for a group of clients across the lifespan.
Prerequisite: NUR 610, 611.

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 the administration of nursing. Relates behavioral sciences and organizational and administrative theories to the delivery of nursing care, emphasizing organizational behavior.
Prerequisite: NUR 604.

642 Administrative Management for Nurses. (3) Management principles and process of planning are emphasized to illustrate the dimensions of nursing administrative practice. The dimensions of administrative practice are further expanded through the discussion of legal aspects, ethical issues, and labor relations.
Prerequisite recommended: NUR 604, 640.

643 Financial Management for Nurses. (2) Examines the planning, designing, and monitoring of a nursing budget with special emphasis on personnel, supplies, and capital equipment budgets. Specific financial problems of a nursing service department are addressed. Includes laboratory experience with simulated budgets.
Prerequisite recommended: NUR 604, 640, 642.

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 Primary Care of Adults. (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 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.

PHYSICAL EDUCATION

www.bsu.edu/physicaleducation

Health and Physical Education Building 223, (765) 285-8753
Chairperson: Mitchell H. Whaley
Coordinator of Graduate Programs: Valerie Wayda
Coordinator of Sport and Physical Education Graduate Studies in Exercise Science: Scott Trappe
Graduate Faculty: Buck, Carr, Costill, Craig, Curcio, Davis, Dooly, Edgren, Fawcett, Gallagher, Humphries, Ignico, Jemiolo, Kaminsky, King, Kwon, Lund, Mahon, Pauline, Pearson, Robbins, Trappe, Volek, Wayda, Weidner, Whaley, Woodard

PROGRAMS

Master of arts (M.A.) or master of science (M.S.) in exercise science with specialization in adult fitness/cardiac rehabilitation, biomechanics, and exercise physiology; master of arts (M.A.) or master of science (M.S.) in physical education with specialization in adapted physical education, administration in physical education and sports, coaching, sport management, sport and exercise psychology, teacher education; doctor of philosophy (Ph.D.) 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, résumés, and 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 General Test. Students with satisfactory scores on the G.R.E. 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 specialization, the M.S. is the only degree option.

Adult Fitness/Cardiac Rehabilitation

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
EXSCI	603	Ad Physl H P	4
	611	Res Design	3
	622	Found Adu Pf	3
	623	Prin Ex Test	3
	630	Meta Adap St	3
	637	Human Dynam	5
	638	Electcard	3
Research requirement			
RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6
3–6 hours from			
EXSCI	633	Seminar (2–6)	
	634	Mechan Anls (3)	
	639	Sem Cardiac (2)	
	640	Ex Prev Rehab (2)	
	698	Fit Cardiac (1–3)	
CPSY	634	Behv Medicin (3)	
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stats (3)	
FCSFN	644	Nut Exer Spt (3)	
HSC	683	Epidemiology (3)	
PHYSL	514	Cardiovsculr (3)	3–6
			33 hrs

Biomechanics

Complete one option

Sports Biomechanics

EXSCI	604	Ess Res Trng	3
	611	Res Design	3
	634	Mechan Anls	3
	651	Topics Bio (1-3)	3
	655	Adv Biomechn	3
BIO	548	Biometry	3
All approved electives			9–12
Research requirement			
RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6
			33 hrs

Clinical Biomechanics

EXSCI	604	Ess Res Trng	3
	611	Res Design	3
	634	Mechan Anls	3
	651	Topics Bio (1-3)	3
	652	Clinical Bio	3
	655	Adv Biomechn	3
BIO	548	Biometry	3
CS	699	Read Honor	3
All approved electives			3
Research requirement			
THES	698	Thesis (1-6)	6
			33 hrs

Exercise Physiology

Core requirements

EXSCI	603	Adv Physl H P	4
	611	Res Design	3
	630	Meta Adap St	3
	637	Human Dynam	5

6–10 hours from			
EXSCI	633	Seminar (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
3–6 hours from electives			
EXSCI	634	Mechan Anls (3)	
EDPSY	641	Statist Meth (3)	
	or		
	642	Interim Stats (3)	
BIO	557	Molecular (4)	
PHYSL	514	Cardiovsculr (3)	3–6
			33–34 hrs

MASTER OF ARTS (M.A.) OR MASTER OF SCIENCE (M.S.) IN PHYSICAL EDUCATION

Admission

Applicants must meet the admission requirements of the Graduate School. Applicants must also 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 a statement of purpose, three letters of recommendation, résumé, 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 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.

Students must complete a minimum of 33 hours of graduate courses including 6 hours of graduate courses and 6 hours of a thesis project (THES 698) for the master of science or 3 hours of 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.

Prerequisite: students whose undergraduate degrees are not in the area of sport, physical education, or other closely related areas, must take PEP 620 (Seminar in Sport and Physical Education).

Adapted Physical Education

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
EDPSY	641	Statis Meth	3
PEP	594	Tech P E Disab	3
	601	Found P E Res	3
	620	PE Workshop (1–8)	3
SPCED	600	Except Child	3
	637	Or Adm Sp Ed	3
RES	697	Research Ppr (3)	
	or		
THES	698	Thesis (1–6)	3–6
Directed electives			6–9
			30–33 hrs

Administration in Physical Education and Sports

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Choose one option:			
Public school option, 33 hours			
Core requirements			
PEP	601	Found P E Res	3
	602	Comp Appl P E	3
	613	Phys Fit Sem	3
	676	Admin Ath	3
	692	Admin Superv	3
Professional requirements			
3 hours from Category I			
PEP	594	Tech P E Disab (3)	
	616	Motor Behavr (3)	
	695	Tch Methodol (3)	3
3 hours from			
EDTEC	550	Curric Tech (3)	
EDSEC	534	Class Mgt (3)	
	or		
any other Category II courses			3
3 hours from			
EDPSY	600	Adv Ed Psy (3)	
	603	Human Devel (3)	
EDMUL	660	Mlti Clt Eth (3)	
	or		
any other Category III or I courses			3
Research requirement			
RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6
Directed electives			
PEP	609	Sp & Ex Psy (3)	
	628	Compar Intsp (3)	
	690	Sp Sociology (3)	
	696	Ath Training (3)	
EXSCI	634	Mechan Anls (3)	
EDAD	620	Secon School (3)	
	684	Ed Fin Ethcs (3)	
	686	School Law (3)	
	688	Sch Bldg Grs (3)	
EDFON	631	Philosphy Ed (3)	
EDPSY	641	Statist Meth (3)	

PR	660	Pr Theories (3)	
	664	Pr Eval Tech (3)	3–6
			33 hrs

Higher education option, 33 hours

Core requirements

PEP	600	Internship (1–3)	3
	601	Found P E Res	3
	602	Comp Appl P E	3
	676	Admin Ath	3
	690	Sp Sociology	3
	692	Admin Superv	3

Research requirement

RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6

Directed electives

PEP	609	Sp & Ex Psy (3)	
	613	Phys Fit Sem (3)	
	628	Compar Intsp (3)	
EXSCI	634	Mechan Anls (3)	
SPTAD	603	Ethics Phil (3)	
	669	Paid Intrn (6)	
	698	Intern Sptad (6)	
EDFON	631	Philosphy Ed (3)	
EDMUL	660	Mlti Clt Eth (3)	
EDHI	602	Amer Col Stu (3)	
	610	Isu High Ed (3)	
	613	Adm Fin H Ed (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)	
PR	660	Pr Theories (3)	
	664	Pr Eval Tech (3)	9–12
			33 hrs

Coaching, 33 hours

PEP	601	Found P E Res	3
SPTAD	604	Phy Prep Con	3
	612	Grw Dev	3
	618	Skill Tact	3
	625	Eval Coach	3
	632	Phil Ethic	3
	670	Sp Saf Inj	3
	675	Teach Motiv	3
	692	Org Admin	3
PEP	600	Internship (1–3)	3
RES	697	Research Ppr (1–3)	3
			33 hrs

Sport Management, 33 hours

Core requirements

PEP	600	Internship (1–3)	3
	601	Found P E Res	3
	602	Comp Appl P E	3
SPTAD	603	Ethics Phil	3

12 or more hours from (not open to undergraduate majors in business)

ACC	501	Fin Acct (3)	
BEOA	608	Comm Bus Org (3)	
ECON	509	Survey Econ (3)	
FIN	500	Corporation (3)	
MGT	500	Mng Org Beh (3)	
MKG	505	Survey Mrktg (3)	12

Research requirement

RES	697	Research Ppr (1–3)	
	or		
THES	698	Thesis (1–6)	3–6

Directed electives

PEP	609	Sp & Ex Psy (3)	
	628	Compar Intsp (3)	
	676	Admin Ath (3)	
	690	Sp Sociology (3)	
SPTAD	669	Paid Intern (6)	
BL	560	Survey B L (3)	
PR	660	Pr Theories (3)	
	664	Pr Eval Tech (3)	3–6
			33 hrs

Requirements for graduation (sport and exercise psychology)

- Students must have a minimum of six hours of prerequisites in physical education and psychology.
- Students must have basic computer skills; if a student lacks these skills, then the student must take PEP 602: Computer Applications in PE.
- 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 and Exercise Psychology, 33 hours

Core requirements

PEP	577	Psy Inj Rhb	3
	601	Found PE Res	3
	609	Sp & Ex Psy	3
	644	Psy Soc Sp PA	3
	660	Psy Ex Hlth	3
	690	Sp Sociology	3
EDPSY	641	Statist Meth	3

Research requirement			
RES	697	Research Ppr (1–3)	
		or	
THES	698	Thesis (1–6)	3–6
Directed electives			6–9
			33 hrs

Teacher Education, 33–34 hours

Core requirements			
PEP	601	Found P E Res	3
	612	Motor Dvlpt	3
	613	Phys Fit Sem	3
	630	Eval P E	3
	685	P E Curr	3
Professional requirements			
3 hours from			
PEP	594	Tech P E Disab (3)	
	616	Motor Behavr (3)	
	695	Tch Methodol (3)	3
3 hours from Category 2 courses (General Methods)			3
3 hours from Category 3 courses (General, Professional, or Special Methods)			3
Research requirement			
RES	697	Research Ppr (1–3)	
		or	
THES	698	Thesis (1–6)	3–6
3–7 hours from directed electives			
EXSCI	603	Ad Physl H P (4)	
	634	Mechan Anls (3)	
PEP	602	Comp Appl P E (3)	
	608	Motor Learn (3)	
	609	Sp & Ex Psy (3)	
	628	Compar Intsp (3)	
	635	Super St P E (3)	
	690	Sp Sociology (3)	
	696	Ath Training (3)	
EDPSY	641	Statist Meth (3)	3–7
			33–34 hrs

DOCTOR OF PHILOSOPHY IN HUMAN BIOENERGETICS

The doctor of philosophy 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; 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 Ph.D. committees when the dissertation is completed.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core requirements			
EXSCI	603	Ad Physl H P	3
	630	Meta Adap St	3
	637	Human Dynam	3
Cognate(s)			24–30
Dissertation			10
Electives			10–15
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.

577 Psychology of Injury Rehabilitation. (3) Designed to introduce the psychological impact of injury and related factors involved in the

rehabilitation process. Includes the sociocultural, mental, emotional, and physical behaviors of athletes and others involved in injury rehabilitation.

Prerequisite: successful completion of PEP 609 or 373.

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: PEP 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 Foundations for Physical Education Research. (3) Degree advising, selection, and presentation of a research problem. Required for all graduate physical education majors, this should be the first course in which graduate majors are enrolled. To be taken no later than the second semester in which students are enrolled, although it may be taken concurrently with other physical education classes.

602 Computer Applications in Physical Education and Sports. (3) An introductory course in computer data processing with special emphasis on physical education problem solving.

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.

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.

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.

635 Supervision of Student Teaching in Physical Education. (3) A study of various models of supervision utilizing several systematic observation data collection systems to develop skills for supervision in physical education.

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, 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.

676 Administration of Athletics. (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.

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 Administration and Supervision of Physical Education Programs. (3) Development of a unified administrative program with regard to activities, policies, procedures, and standards, showing the interrelationships within physical education and between physical education and other disciplines.

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.

EXERCISE SCIENCE (EXSCI)

603 Advanced Physiology of Human Performance. (4) Advanced study of physiological principles relative to muscular activity. The Human Performance Laboratory will be used in the study of physiological responses during controlled exercise.

Prerequisite: permission of the program director.

Open only to exercise science majors.

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 Metabolic Adaptations to Physical Stress. (3) Selected physiological adaptations to chronic exposure to exercise and environmental stresses. Provides a physiological basis for optimal training programs.

Prerequisite: permission of the program director.

Open only to exercise science majors.

633 Seminar in Exercise and Environmental Physiology. (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 a 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 Human Physical Dynamics. (5) A concise summary of physiology as applied to human bioenergetics using an organ-system approach. Laboratory sessions in the Human Performance Laboratory will demonstrate general principles of physiology, instrumentation techniques, and interpretation of experimental data.

Prerequisite: permission of the program director.

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 Rehabilitation. (2) Study of the characteristics of a three-phase cardiac rehabilitation program. Includes the various diagnostic tests and the exercise prescription, administration, financial management, and multidisciplinary components of a cardiac rehabilitation program. Review of current cardiac rehabilitation literature and programs.

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

Open only to exercise science majors.

640 Exercise in Prevention and Rehabilitation of Chronic Diseases. (2) Covers the role of regular aerobic exercise 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 Topics in Biomechanics. (1) Theoretical and practical applications of data recording methods commonly used in biomechanical analysis.

Prerequisite: permission of the program director.

A total of 3 hours of credit may be earned but no more than 1 in any one semester or term.

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.

SPORT ADMINISTRATION (SPTAD)

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.

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 (PEP 610) Psychology of Coaching. (3) Study of the social psychological forces that have profound effects on the interactions of coach and athlete.

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.

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.

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 in sport, ethical conduct, and how to facilitate social and emotional growth of athletes.

669 Paid Internship in Sport Administration. (6) A paid work and learning field assignment with an appropriate sport organization or agency. Requires the advance approval of the sport studies program director.

Prerequisite: permission of the coordinator of graduate studies in sport and physical education.

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.

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.

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.

698 Internship in Sport Administration. (6) A field assignment with an appropriate sport administration organization or agency. Requires the advance approval of the sport studies program director.

Prerequisite: permission of the coordinator of graduate studies in sport and physical education.

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: David Gobble
Program Director for Wellness Management: David Gobble
Program Director for Gerontology: Kathleen Segrist
Graduate Faculty: Gobble, Haber, Kaluzynski, Schoonaert, 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 masters' 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 (M.A.) and master of science (M.S.) 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 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 (G.R.E.), 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 30 hours, including a core of gerontology courses, a research experience, and electives in related areas.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
15 hours from			
CPSY	676	Cn Oldr Adlt	3
EDAC	540	Ed Gerontoly	3
GERON	699	Intern Geron (1–6)	3
HSC	569	Health Aging	3
SOC	531	Gerontology	3
3–6 hours from			
CPSY	653	Res Cpy Guid (3)	
WELNS	670	Well Res Dgn (3)	
RES	697	Research Ppr (3)	
THES	698	Thesis (6)	3–6
9–12 hours from			
Electives from related areas			9–12
			30 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 M.A. 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 provides consultation, training, and other resources for agencies serving an older clientele and for community groups of older adults.

In addition to the M.A. 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 SCIENCE (M.S.) AND MASTER OF ARTS (M.A) 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 (M.A.) IN WELLNESS MANAGEMENT

The minimum requirement for the degree is 36–37 semester hours for students who have undergraduate majors or minors in business and majors or minors in an allied health discipline. The maximum requirement is 63 semester hours of graduate course work for students with no supporting undergraduate major or minor in business or allied health. All students complete the wellness core.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core courses			
WELNS	650	Foundations	3
	655	Applications	3
	660	Issues	3
	665	Technology	3
	670	Well Res Dgn	3
	698	Intern Well	6
RES	697	Research Ppr (3)	
	or		
HSC	687	Qtn Meth H S C (3)	
	or		
EDPSY	641	Statist Meth (3)	3
Directed elective courses			
FCSFN	540	Human Nut (3)	
	or		
	644	Nut Exer Spt (3)	
GERON	605	Aging Well (3)	
HSC	683	Epidemiology (3)	
	or		
	687	Qtn Meth H S C (3)	
	686	Prg Pln Eval (4)	
PEP	613	Phys Fit Sem (3)	
CPSY	634	Behv Medicin (3)	
WELNS	675	Alt Comp The (3)	12–13
			36–37 hrs

MASTER OF SCIENCE (M.S.) IN WELLNESS MANAGEMENT

The minimum requirement for the degree is 39–40 semester hours for students who have undergraduate majors or minors in business and majors or minors in an allied health discipline. The maximum requirement is 63 semester hours of graduate course work for students with no supporting undergraduate major or minor in business and allied health. All students complete the wellness core.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Core courses			
WELNS	650	Foundations	3
	655	Applications	3
	660	Issues	3
	665	Technology	3
	670	Well Res Dgn	3
	698	Intern Well	6
THES	698	Thesis (1–6)	6
Directed elective courses			
FCSFN	540	Human Nut (3)	
	or		
	644	Nut Exer Spt (3)	
GERON	605	Aging Well (3)	
HSC	683	Epidemiology (3)	
	or		
	687	Qtn Meth H S C (3)	
	686	Prg Pln Eval (4)	

PEP	613	Phys Fit Sem (3)	
CPSY	634	Behv Medicin (3)	
WELNS	675	Alt Comp The (3)	12–13
			39–40 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 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 College of Business.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
ACC	501	Fin Acct	3
ECON	509	Survey Econ	3
MBA	601	Leadership	3
MGT	500	Mng Org Beh	3
MKG	505	Survey Mrktg	3
			15 hrs

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

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

All substitutions will be approved by the College of Business.

GERONTOLOGY (GERON)

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 8 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.

Prerequisite: permission of the program director.

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)

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.

Prerequisite: permission of the director.

Open only to wellness management majors.

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

Prerequisite: WELNS 650; permission of the director.

Open only to wellness management majors.

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.

Prerequisite: WELNS 650, 655; permission of the director.

Open only to wellness management majors.

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.

Prerequisite: permission of the director.

Open only to wellness management majors.

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.

Prerequisite: admission to the program or permission of the director.

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.

Prerequisite: permission of the program director.

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.