BALL STATE UNIVERSITY

ACADEMIC POSTING 2016-2017

VOLUME XLVIII – 3

February 6, 2017

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins February 6, 2017. If no demurrer is received within ten school days, the changes will be certified for implementation. *The effective date for implementing the undergraduate and graduate materials posted after May 5, 2017 is Fall Semester 2018*.

CERTIFICATES

Dropped:

Certificate in Science and Entrepreneurship, 68-92 credits

INTERDEPARTMENTAL PROGRAMS

INTERDEPARTMENTAL (ID)

Revised:

495 Tier 3 Experience for Bachelor of General Studies Students (1) A Tier 3 experience for students who are completing the Bachelor's of General Studies degree. Students will work independently with a faculty member to design a course based in one or two of the student's minor areas of concentration. Each course will be individually designed to meet that student's needs, and will allow the student to demonstrate the movement in cognitive skills from experience or information to action. Each student will also demonstrate their ability to write at the college level, and will submit a reflective essay discussing his or her experiences.

Prerequisite: Permission of Dean of University College.

Open only to BGS students.

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

Department of Technology

Dropped:

Minor in Plastics Technology, 16 credits

COLLEGE OF ARCHITECTURE AND PLANNING

Department of Architecture

ARCHITECTURE (ARCH)

Revised:

428 History of Architecture in the Built Environment (3)

The roots and development phases of American architecture and design are explored, beginning with Native American and Colonial examples, through the exploration, development, urbanization, industrialization, modernist and post-industrial epochs. Both vernacular and high style design examples are covered, with emphasis on regional and cultural diversity. Design examples are drawn from the fields of architecture, landscape architecture and urban planning.

Prerequisite: permission of the program director.

440 Introduction to Preservation (3) This course presents the history, philosophy and current practice of heritage preservation. Students examine the roles of significant public, private and non-profit preservation agencies and organizations. The legal basis of preservation is studied, as well as the process for documenting, designating and protection heritage places. Preservation treatment and re-use options are examined in light of conservation, sustainability and cultural continuity concerns.

Prerequisite: permission of the program director.

441 Preservation Policy (3) This course examines the structure and function of international, federal, state and local laws and programs governing heritage preservation activities. Planning and economic development aspects of preservation practice are studied in the context of conservation and protection of heritage places.

Prerequisite: permission of the program director.

442 Preservation Research Methods (3) A comprehensive examination of the methods of researching, surveying, recording, and registering historic properties and heritage sites. Legal concepts of "significance" and "context" are applied to evaluating the historic built environment. The course emphasizes applied research and analysis skills and the preparation of a research study report.

Prerequisite: permission of the program director.

447 Preservation Technology (3) An in-depth examination of architectural conservation. This course includes an analysis of the materials and systems of construction used in historic buildings. Students employ contemporary technology to document, analyze and diagnose building conditions, then formulate interventions for the stewardship of historic structures.

Prerequisite: permission of the program director.

473 Current Issues in Preservation (3) This course provides an in-depth investigation of complex social, cultural and political case studies in contemporary heritage preservation. A foundation is laid for development of individual philosophies and ethics regarding preservation practice.

Prerequisite: permission of the program director.

506 Preservation Professional Project (3-6) Graduate preservation exercises involving project-based learning, with opportunity to apply technical skills and academic concepts to community and professional preservation problems.

Prerequisite: permission of the program director. *A total of* 6 credits may be earned.

528 History of Architecture in the Built Environment (3)

The roots and development phases of American architecture and design are explored, beginning with Native American and Colonial examples, through the exploration, development, urbanization, industrialization, modernist and post-industrial epochs. Both vernacular and high style design examples are covered, with emphasis on regional and cultural diversity. Design examples are drawn from the fields of architecture, landscape architecture and urban planning.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 428.

540 Introduction to Preservation (3) This course presents the history, philosophy and current practice of heritage preservation. Students examine the roles of significant public, private and non-profit preservation agencies and organizations. The legal basis of preservation is studied, as well as the process for documenting, designating and protecting heritage places. Preservation treatment and re-use options are examined in light of conservation, sustainability and cultural continuity concerns.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 440.

541 Preservation Policy (3) This course examines the structure and function of international, federal, state and local laws and programs governing heritage preservation activities. Planning and economic development aspects of preservation

practice are studied in the context of conservation and protection of heritage places.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 441.

542 Preservation Research Methods (3) A comprehensive examination of the methods of researching, surveying, recording, and registering historic properties and heritage sites. Legal concepts of "significance" and "context" are applied to evaluating the historic built environment. The course emphasizes applied research and analysis skills and the preparation of a research study report.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 442.

547 Preservation Technology (3) An in-depth examination of architectural conservation. This course includes an analysis of the materials and systems of construction used in historic buildings. Students employ contemporary technology to document, analyze and diagnose building conditions, then formulate interventions for the stewardship of historic structures.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 447.

573 Current Issues in Preservation (3) This course provides an in-depth investigation of complex, social, cultural and political case studies in contemporary heritage preservation. A foundation is laid for development of individual philosophies and ethics regarding preservation practice.

Prerequisite: permission of the program director. *Not open to* students who have credit in ARCH 473.

Dropped:

444 Historic Preservation Economics (3)

445 Historic Preservation Design and Graphic Documentation (3)

449 Historic Preservation Technology 2 (3)

544 Historic Preservation Economics (3)

545 Historic Preservation Design and Graphic Documentation (3)

549 Historic Preservation Technology 2 (3)

630 Fundamentals of Historic Preservation (3)

674 Historic Preservation Proposal (1)

MILLER COLLEGE OF BUSINESS

Department of Marketing

MARKETING (MKG)

Revised:

450 Advanced Market Research and Analytics (3) In-depth look into the details of conducting market research including marketing decision making, database marketing, marketing analytics and related issues.

Prerequisite: MKG 350 or BA 305 and BA 345 or permission of department chairperson.

COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

Department of Communication Studies

Revised:

Minor in Management and Organizational Communication, 21 credits

Open only to majors in communication studies (concentration 1), or majors in human resource management, entrepreneurial management, or business administration (concentration 2), or other majors with permission from chair of the Department of Communication Studies (concentration 3). Only 3 credits from a student's major may count in any concentration of the minor.

Concentration 1: For majors in communication studies, 21 credits

PREFIX	NO	SHORT TITLE	CREDITS
ECON	116	Survey of Economic Ideas (3)	
EGOM	or	F1 (2)	2
ECON	201	Elementary Microeconomics (3)	3
MGT	241	The Entrepreneurial Experience	3
	300	Managing Behavior in Org	3
	361	FDN of HR Employee Relations	3
	363	Talent Management	3
	467	Leadership and Change MGT	3
3 credits	from		
COMM	251	Bus and Prof Comm (3)	
	325	Interviewing (3)	
	330	Small Group Decision Making (3)	
	340	Leadership Communication (3)	
	351	Organizational Communication (3)	3
			21 ama
			21 crs

Concentration 2: For majors in human resource management, entrepreneurial management, or business administration, 21 credits

COMM	251	Bus and Prof Comm	3
	325	Interviewing	3
	330	Small Group Decision Making	3
	340	Leadership Communication	3

ECON	351 116	Organizational Communication Survey of Economic Ideas (3)	3
	or		
ECON	201	Elementary Microeconomics (3)	3
3 credits	from		
MGT	241	The Entrepreneurial Experience (3)	
	300	Managing Behavior in Org (3)	
	361	FDN of HR Employee Relations (3)	
	363	Talent Management (3)	
	467	Leadership and Change MGT (3)	3
			21 crs

Concentration 3: For other majors (requires permission of Comm Studies chair), 21 credits

ECON	116	Survey of Economic Ideas (3)	
ECON	or 201	Elementary Microeconomics (3)	3
9 credits	from		
COMM	251	Bus and Prof Comm (3)	
	325	Interviewing (3)	
	330	Small Group Decision Making (3)	
	340	Leadership Communication (3)	
	351	Organizational Communication (3)	9
9 credits	from		
MGT	241	The Entrepreneurial Experience (3)	
	300	Managing Behavior in Org (3)	
	361	FDN of HR Employee Relations (3)	
	363	Talent Management (3)	
	467	Leadership and Change MGT (3)	9
			21 crs

COLLEGE OF FINE ARTS

Department of Art

Revised:

Master of Fine Arts, Visual Arts (Animation, Glass, Ceramics, Metals, Sculpture), 60 credits

The MFA visual arts program allows students to earn a terminal degree in the visual arts (animation, Glass, Ceramics, Metals, Sculpture/Intermedia) through studio and seminar courses. A total of 60 credits must be earned in a minimum six semesters.

PREFIX	NO	SHORT TITLE	CREDITS
Core requ	uireme	nts, 33 credits	
AED	604	Teaching Studio Art	3
AHS	698	Art History Seminar	3
ART	600	Writing Practicum	3
	601	Critique Seminar (3)	15
	602	Professional Practice	3

CRPR	698	Creative Project (3 or 6)	6
		tudio concentration	
Animatic			0
ART	511		9
	611	Animation Studio (3-6)	9
	or		
Glass, 18	8 credi	ts	
ACR	531	Advanced Glass (3)	9
	631	Glass Studio (3-6)	9
	or		
Ceramic	s, 18 ci	redits	
ACR	511	Advanced Ceramics (3-6)	9
	611	Ceramics Studio (3-6)	9
	or	, ,	
Metals, I	18 cred	lits	
ACR	521	Advanced Metals (3-6)	9
11010	621	Metals Studio (3-6)	9
	or	Metals Stadio (5 0)	
Coulntur		media, 18 credits	
AFA	521		9
АГА		1 ,	
	621	Sculpture/Intermedia Studio (3-6)	9
			10
			18 crs
G. 1: /			0
Studio/ad	cademi	c electives	9
			27
			27 crs
			60 crs

School of Music

Revised:

Major in Music Media Production, 73 credits

PREFIX	NO	SHORT TITLE	CREDITS
MMP	100	Survey of the Music Industry	3
	125	Acoustics	3
	220	Electronics and Studio Mainten	2
	235	Recording Technology 1	3
	236	Recording Technology 2	3
	301	Songwriting	2
	330	Live Sound and Recording	3
	335	Mixing	3
	430	Production Workshop	3
	495	MMP Project and Recital	3
MUHI	200	Survey of Music Literature	2
	330	Music History	3
	331	Music History	3
MUSC	499	Recital	1
MUST	101	Sight Singing and Ear Training	1
	102	Sight Singing and Ear Training	1
	111	Music Theory	2
	112	Music Theory	2
	121	Introduction to Computer Music	3

	201 202 211 212 311 411	Sight Singing and Ear Training Sight Singing and Ear Training Music Theory Music Theory Mus Thry: Form and Analy Instrumentation and Orchestrtn	1 1 2 2 2 2 2
2 credits	from		
MUSP	325	Secondary Study (Piano) (1)	
	or		
	326	Group Piano (1)	2
8 credits	from		
MUSP 2		401	8
7 credits			_
MUSC e	nsemb	les	7
			73 crs

COLLEGE OF HEALTH

School of Kinesiology

Dropped:

Minor in General Foundations of Business, 15 credits

Department of Nutrition and Health Science

NUTRITION (NUTR)

New:

695 Independent Study in Nutrition and Dietetics (1-6)

Investigation and exploration of a topic in nutrition and dietetics not offered as a class. Requires extensive reading and development of research skills. The student must work with faculty who has expertise in the area of study.

Prerequisite: EDPS 641 or EDPS 642 or HSC 683 or HSC 687 or permission of the department chairperson.

A total of 6 credits may be earned.

Open only to NUTD majors.

Revised:

350 (FCFN **350**) Technology of Food Science (3) Scientific evaluation of the behavior of food and its qualitative and quantitative properties. Overview of the food industry, food technology, biotechnology, and federal regulation related to food supply. Review of research and marketing practices of bioengineered food and dietary supplements.

Prerequisite: FCFN 220.

Open only to students admitted into the dietetics program.

375 (FCFN 375) Nutrition Assessment, Counseling, and

Education (3) An introduction to nutrition assessment techniques, principles of nutrition counseling, and appropriate nutrition interventions utilized in the Nutrition Care Process. Motivational interviewing, behavior change theories, and effective nutrition counseling strategies are emphasized.

Prerequisite: NUTR 340.

Open only to students admitted into the dietetics major.

446 (FCFN 446) Medical Nutrition Therapy 1 (3) An

introduction to the principles of medical nutrition therapy. Provides a comprehensive review of disease pathophysiology and treatment with a focus on evidence-based nutritional care using the Nutrition Care Process. Prepares students for success in clinical practice settings, including supervised practice programs.

Prerequisite: NUTR 360 or permission of the department chairperson.

Open only to students admitted into the dietetics program.

447 (FCFN **447**) **Medical Nutrition Therapy 2** (3) Explores the application of evidence-based medical nutrition therapy for the prevention and management of multiple medical conditions and disease states. An emphasis is placed on nutrition assessment, diagnosis, intervention, monitoring and evaluation of chronic diseases and critically ill patients.

Prerequisite: NUTR 446 or permission of the department chairperson.

Open only to students admitted into the dietetics program.

455 (FCFN **455**) Lifecycle Nutrition (3) Involves the study of special nutritional needs, physiology, and health concerns of pregnant and lactating women, infants, children, adolescents, women of child bearing age, and older adults.

Prerequisite: NUTR 340.

Open only to students admitted into the dietetics major or by permission of the department chair.

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

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

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

Prerequisite: permission of the Dietetic Internship Director.

Open only to Dietetic Internship students.

643 (FCFN 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.

Open only to NUTD majors.

644 (FCFN 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: NUTR 340 or equivalent.

647 (FCFN 647) Carbohydrates, Proteins, and Lipids (3)

Advanced study of carbohydrates, proteins, and lipids in humans. Includes macronutrient metabolism and the relationship of these dietary components to health and disease.

Open only to NUTD majors.

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

Open only to NUTD majors.

650 (FCFN 650) Maternal and Infant Nutrition (3)

Nutrition during pregnancy, lactation, and infancy. Includes nutrient needs, growth and development, and common complications. Emphasizes reading in current professional publications.

Open only to NUTD majors.

651 (FCFN **651**) **Pediatric Nutrition** (3) Principles of pediatric nutrition (2 years of age through adolescence). Nutritional needs of children in normal and therapeutic nutrition will be investigated. Current research in pediatric nutrition will be discussed.

Open only to NUTD majors.

652 (FCFN 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.

Open only to NUTD majors.

660 (FCFN 660) Advanced Healthcare Administration (3)

Identification and application of advanced healthcare, food service, dietary management and marketing concepts: development of leadership skills required of dieticians and upper level managers.

Open only to NUTD majors.

680 (FCFN 680) Supervised Practices 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 (360 clock hours).

Prerequisite: permission of the Dietetic Internship Director.

Open only to Dietetic Internship students.

681 (FCFN 681) Supervised Practice in Nutrition Therapy

(3) Application of the healthcare team approach of dietary management to human pathophysiologic status through assessing, planning, documenting, and counseling individuals and educating groups in an acute care environment (520 clock hours).

Prerequisite: permission of the Dietetic Internship Director.

Open only to Dietetic Internship students.

682 (FCFN 682) 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 (320 clock hours).

Prerequisite: permission of the Dietetic Internship Director.

Open only to Dietetic Internship students.

683 (FCFN 683) Advanced Practice in Dietetics (3)

Advanced directed study in an approved area of boardcertified or specialty certification as recognized by the American Dietetic Association. Areas of specialized practice could include sports nutrition, pediatrics, nutrition support, weight management, oncology, geriatrics, or diabetes.

Prerequisite: current registered dietitian status. Open only to NUTD majors.

696 (FCFN 696) Seminar in Foods 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 policy issues. Basic knowledge of food and nutrition required.

Prerequisite: permission of the department chairperson. A total of 9 credits may be earned, but no more than 6 in any one semester or term.

Open only to NUTD majors.

COLLEGE OF SCIENCES AND HUMANITIES

Department of Anthropology

ANTHROPOLOGY (ANTH)

Revised:

342 Anthropology of the United States (3) Examines how the values, beliefs, and norms of different groups of people in the United States are integrated into power structures. Explores how people in the United States experience and resolve cultural tensions between individuals and community, equality, and hierarchy, competition and cooperation.

Prerequisite: ANTH 101 or 111 or permission of the instructor.

407 (**307**) **Applied Anthropology** (**3**) Investigates the problems and work that engage the attention of anthropologists outside the university setting. Examination of new skills needed to supplement those traditionally taught in anthropology.

Prerequisite: ANTH 101 or permission of the instructor.

429 (329) Laboratory Methods in Material Culture (3)

Addresses artifacts as reflections of culture. Focuses on ethnoarchaeology and experimental archaeology, as well as the integration of research design, recovery, identification, and laboratory analysis of artifacts from archaeological sites.

Prerequisite: ANTH 103 or 204 or permission of the instructor.

529 Laboratory Methods in Material Culture (3) Addresses artifacts as reflections of culture. Focuses on ethnoarchaeology and experimental archaeology, as well as the integration of research design, recovery, identification, and

laboratory analysis of artifacts from archaeological sites. *Prerequisite*: ANTH 103 or 204 of permission of the instructor.

Not open to students who have credit in ANTH 429.

541 Anthropology of Gender (3) Examines how gender, culture, and power intersect in different places around the globe. Course topics include the politics of reproduction, globalization and migration, violence, popular culture, and intersectionality.

Not open to students who have credit in ANTH 441.

Dropped:

307 Applied Anthropology (3)

329 Laboratory Methods in Material Culture (4)

542 American Culture (3)

Department of Biology

BIOLOGY (BIO)

Revised:

499 Biology Undergraduate Symposium (1) Prepares students for further studies or employment in the profession by developing a career plan, examining professional ethics, and establishing a professional identify. Evaluates student proficiency in the biological sciences.

Prerequisite: BIO 111 and 112 and 210 and 214 and 216 and 315 or 316.

Department of Criminal Justice and Criminology

CRIMINAL JUSTICE AND CRIMINOLOGY (CJC)

New:

396 Advanced Criminology (3) This course engages students in the process of understanding, evaluating, and empirically testing the major theories of crime causation. Further, students will be able to summarize the major schools of thought related to criminological theories, including, but not limited to, the historical context and primary assumptions of these theories as they relate to criminal behavior and social policy.

Prerequisite: CJC 101 and CJC 102.

Open only to CJC majors and minors.

Revised:

211 (311) Race, Gender, and Crime (3) The purpose of this course is to examine racial, ethnic, gender, and class issues regarding criminal offenders, victims, and employees of the criminal justice system. Focus is given to the development of cultural competency skills and practices.

Prerequisite: CJC 101 and 102. Open only to CJC majors.

229 (329) Decision-Making and Ethics in Criminal Justice

(3) This course provides an examination of decision making in the American criminal justice system. Ethical systems are applied to justice system decision making. An emphasis is placed on ethical principles and concerns impacting the justice system.

Prerequisite: CJC 101 and 102. Open only to CJC majors.

251 (**351**) **Criminal Law** (**3**) This course provides an examination of the functions of substantive criminal law; its historical foundations and limits. Emphasis is placed on Indiana criminal law.

Prerequisite: CJC 101 and 201. Open only to CJC majors.

301 (221) Evaluation Research in Criminal Justice (3) This course examines how evaluation research is used to study crime, criminality, policy, and the criminal justice system. The underlying assumptions of statistics are learned, research methods are evaluated, statistical tests are interpreted, and evaluation research skills are learned in order to teach students how to draw conclusions about the utility and application of criminal justice-related research findings.

Prerequisite: CJC 101 and 102 and 220. *Open only to* CJC majors.

340 Institutional Corrections (3) This course provides an indepth inquiry into the function, structure, and operation of American adult and juvenile correctional institutions.

Prerequisite: CJC 101 and 102 and 240. *Open only to* CJC majors and minors.

410 Current Topics in Criminal Justice and Criminology

(3) This course examines contemporary issues and topics in the criminal justice and criminology fields. The specific course topic is faculty-selected and delivered through various platforms, including individualized study, reporting, group discussion, or field study and observation.

Prerequisite: CJC 101 and 102.

Open only to CJC majors and minors.

Dropped:

221 Data Analysis in Criminal Justice (3)

311 Race, Ethnicity and Gender (3)

312 Victimology (3)

329 Decision Making and Ethics (3)

331 Organized Crime in America (3)

351 Criminal Law (3)

430 Current Topics in Policing (3)

440 Current Topics in Corrections (3)

450 Current Topics in Legal Aspects of Criminal Justice (3)

471 Practicum in Criminal Justice and Criminology (3)

Department of History

HISTORY (HIST)

New:

670 Introduction to Teaching History (3) This course explores the purposes of history teaching, learning, and assessment; foundational research in history education; and the recent research and teaching emphasis on disciplinary literacy.

Open only to graduate students.

671 Seminar in History Education (3) This course prepares students to analyze and critique research pertaining to the teaching and learning of history, consider how curriculum materials and designs impact both students and teachers, examine signature pedagogies in history, and engage in research.

Prerequisite: HIST 670.

Open only to graduate students.

Department of Mathematical Sciences

Revised:

Major in Actuarial Science (BS), 59-60 credits

PREFIX	NO	SHORT TITLE	CREDITS
MATH	165	Calculus 1	4
	166	Calculus 2	4
	215	Discrete Systems	4
	217	Linear Algebra	4
	251	Intro to Mathematics of Financ	2
	259	Intro to Mathematical Software	3
	267	Calculus 3	4
	320	Probability	4
	321	Mathematical Statistics	4
	351	Mathematics of Finance	4
	452	Life Contingencies 1	4
	457	Actuarial Models 1	4
	458	Actuarial Models 2	3
	498	Senior Seminar	2
RMI	270	Principles of Risk Mgt and Ins	3

6-7 credits from

CS	120	Computer Science 1 (4)	
MATH	355	Topics in Actuarial Science (1-6)	
	428	Regression Time Series Models (3)	
	453	Life Contingencies 2 (4)	
	454	Mathematics of Investments (3)	
	459	Models in Financial Economics (3)	
RMI	330	Employee Benefits and Ret Plan (3)	
	or as	approved 6-7	6-7

59-60 crs

Students may earn up to 6 credits for MATH 355, but only 4 credits will apply toward the actuarial science major. The following additional courses are strongly recommended, as they satisfy the Validation by Educational Experience requirements of the actuarial societies: ACC 201, ECON 201, ECON 202, MATH 428 or ECON 424, FIN 300 and one from MATH 454 or FIN 310. Students are encouraged to take CS 120 and PHYC 120. PHYC 120 satisfies the TIER 1 natural science requirements in the University Core Curriculum. This program leads to a bachelor of science degree only. All students will be required to complete a survey designated by the department in the semester in which they graduate.

Master of Arts in Statistics, 32 credits

The master's program in statistics provides students with the background suitable for employment as a statistician in business, industry, or government. The degree also provides suitable preparation for pursuing a PhD degree in statistics. Students pursuing the masters of science degree will be required to complete a 6-credit thesis.

Admission requirements

Applicants must meet the regular admission requirements of the Graduate School. It is also expected that students will have had three semesters of calculus, a course in linear algebra, and at least one semester of probability and statistics.

PREFIX	NO	SHORT TITLE	CREDITS
MATH	528	Regression Time Series Models	3
	620	Probability and Random Vars	4
	621	Theory of Statistics	4
	624	Intro to Statistical Learning	3
	627	General Linear Model Applicat	3
	628	Comput Methods in Statistics	3
	689	Research Methods Math Stats	3
9 credits			
MATH	522	Theory Sampling and Surveys (3)	
	523	Environmental Statistics (3)	
	529	Analysis Variance Exp Design (3)	
	626	Stochastic Processes (3)	
	675	Measure Thry and Integration 1 (3)	9
			32 crs

Master of Science in Statistics, 32 credits

The master's program in statistics provides students with the background suitable for employment as a statistician in business, industry, or government. The degree also provides suitable preparation for pursuing a PhD degree in statistics. Students pursuing the masters of science degree will be required to complete a 6-credit thesis.

Admission requirements

Applicants must meet the regular admission requirements of the Graduate School. It is also expected that students will have had three semesters of calculus, a course in linear algebra, and at least one semester of probability and statistics.

PREFIX	NO	SHORT TITLE	CREDITS
MATH	528	Regression Time Series Models	3
	620	Probability and Random Vars	4
	621	Theory of Statistics	4
	624	Intro to Statistical Learning	3
	627	General Linear Model Applicat	3
	628	Comput Methods in Statistics	3
THES	698	Thesis (1-6)	6
6 credits	from		
MATH	522	Theory Sampling and Surveys (3)	
	523	Environmental Statistics (3)	
	529	Analysis Variance Exp Design (3)	
	626	Stochastic Processes (3)	
	675	Measure Thry and Integration 1 (3)	6
			32 crs

MATHEMATICAL SCIENCES (MATH)

Revised:

331 Technology for Teaching, Learning, and Assessment in Mathematics (3) The use of technology for teaching,

learning, and assessment in mathematics. Includes the pedagogical use of a wide range of devices and tools that can be used to help students make sense of mathematics, engage in mathematical reasoning, and communicate mathematically.

Prerequisite: For teaching major in mathematics concentration 1 or concentration 2, MATH 250 with a grade of C- or better and permission to enroll in 300/400-level professional education courses; for elementary education area of concentration, MATH 202 with a grade of C- or better and permission to enroll in 300/400-level professional education courses.

570 Intermediate Analysis (3) Introduction to basic concepts of analysis: the real numbers, sequences, continuous functions, the derivative, and the Riemann integral.

Prerequisite recommended: MATH 166 and 215. Not open to students who have credit in MATH 470.

623 Probability, Data Analysis and Statistical Reasoning

(3) Students will select and use appropriate statistical methods to analyze data, develop, and evaluate inferences and predictions that are based on data, and understand and apply the basic concepts of probability.

Prerequisite: at least one year of teaching experience or permission of the department chairperson.

Dropped:

330 Technology in Elementary and Middle School Mathematics (3)

Department of Modern Languages and Classics

GERMAN (GER)

New:

404 Seminar in German Literature and Culture (3)

This advanced course is intended to enhance students' knowledge of the literature of target culture(s). Emphasis will be placed on developing a critical understanding of literary texts, such as poems, dramas, short stories, novels, essays, films, etc., of the target culture(s).

Prerequisite: GER 301 and 302 or permission of the department chairperson.

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

405 Seminar in German Literature and Culture (3)

This advanced course is intended to enhance students' knowledge of the linguistics of the target language. Emphasis will be placed on developing a critical understanding of the linguistic topics, such as syntax, morphology, semantics, but also variations of German such as specific dialects or Pennsylvania German etc.

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

Prerequisite: GER 301 and 302 or permission of the department chairperson.

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

Revised:

361 Survey of German Prose (3) Selections from Germanlanguage prose, short stories, and novellas designed to develop an appreciation of the literary heritage of German-speaking countries.

Prerequisite or parallel: GER 301.

362 Survey of German Drama (3) Selections from Germanlanguage dramatic texts designed to develop an appreciation of the literary heritage of German-speaking countries.

Prerequisite or parallel: GER 301.

363 Survey of German Lyric (3)

Selections from German-language poetry, folksongs, and ballads designed to develop an appreciation of the literary heritage of German speaking countries.

Prerequisite or parallel: GER 301.

401 History of German Literature (3)

This course will give an overview of German-language literature, culture, and politics. It will highlight works from various periods, engage in discussions about literature, and encourage students to think and re-think the significance of literary production beyond the confines of the written word. Readings, discussions, and essays in German.

Prerequisite: GER 301 and 302.

Department of Political Science

POLITICAL SCIENCE (POLS)

Revised:

241 Family Law (3) The focus of this course is on legal issues that arise in domestic relationships. Topics covered include marriage, divorce, child custody, support, and adoption. Students will complete a number of service-learning hours volunteering with a community partner organization that deals with issues of family law.

Prerequisite: permission of the department chairperson or legal studies coordinator.

642 Problems in Public Policy (3-6) Selected problems in public policy. Utilizes different approaches to the study of public policy to identify problems inherent in carrying out the basic stages of the policy process including issue definition, choices among alternatives, agenda setting, decision-making, implementation, and evaluation.

648 Policy Design and Advocacy (3) This course is designed to provide students with an understanding of the basic theories and methods of public policy analysis. Focus will be on

problem definition, alternative and criteria formulation, and decision-making phases of prospective policy analysis. Students will learn to conduct analyses for policy decisions in the public and non-profit sector.

650 Introduction to Public and Nonprofit Administration

(3) Basic management principles associated with the public and nonprofit sectors. Topics include theories of public and nonprofit organizations, discretion and accountability, strategic planning, human resource management, revenue generation, and budgeting.

651 Managing Organizations for Public Service (3) This course is designed to provide students with an understanding of the basic theories and concepts for managing and leading public and nonprofit organizations. Topics include decision-making, goal setting, strategic planning, and performance measurement.

652 Managing Human Resources for Public Services (3)

This course examines the lawful and effective exercise of personnel functions in public and nonprofit organizations. Students will learn principles of recruitment and selection, training and development, and employee performance evaluation and improvement.

653 Public and Nonprofit Financial Management (3) This course examines the process of public and nonprofit sector budgeting from the perspective of managerial planning and control. This includes an overview of issues and concepts important for administration and management of organizational financial affairs. Budget formats are reviewed, as are techniques and political aspects of financial decisionmaking.

Department of Psychological Science

PSYCHOLOGICAL SCIENCE (PSYS)

632 Science of Psychopathology (3) Advanced introduction to psychopathology from a clinical perspective. Course includes focus on descriptive psychopathology, theoretical and etiological models of psychopathological syndromes, and methodological issues.

Prerequisite: PSYS 432 or equivalent and PSYS 284 or equivalent or permission of the department chairperson.

Laura Helms

Executive Director of Academic Services Associate Dean, University College