Graduate Council Curriculum Report

The Graduate Council Curriculum Report (GCCR), which includes all graduate curricular proposals approved through the Graduate Council curricular review process, is published 12 times each calendar year.

Questions/comments regarding the GCCR or its contents may be directed to the Director of Graduate Council Administration.

October 10, 2018

Graduate Degree Programs

ADD

Corporate Finance – new graduate program offering the M.Fin. degree in residence (Smeal College of Business), page 18

Real Estate Analysis and Development – new graduate program offering the M.S. degree in residence (Smeal College of Business), page 55

CHANGE

Accounting – change degree requirements (Smeal College of Business), page 85

Applied Behavior Analysis – change degree requirements (Penn State Harrisburg), page 95

Applied Clinical Psychology – change degree requirements (Penn State Harrisburg), page 111

Astrobiology – change degree requirements for the dual-title and drop Biology as an adopter (College of Earth and Mineral Sciences), page 138

Biology – change degree requirements, unadopt Astrobiology dual-title, drop four options (Eberly College of Science), page 155

Health Education – change admission and degree requirements (Penn State Harrisburg), page 172

Human Development and Family Studies – adopt dual-title in Clinical and Translational Sciences for the Ph.D. degree (College of Health and Human Development), page 185

Nursing – change M.S.N. degree requirements and option requirements (College of Nursing), page 207

Public Health – add an IUG with the B.S. in Health Policy and Administration and the M.P.H. in Public Health (College of Medicine), page 228

Women’s Studies – change degree requirements and change program name to Women’s, Gender, and Sexuality studies (College of the Liberal Arts), page 275
Graduate Courses

**ADD**

**ABA 544**  
Behavioral Systems Support  
BEH SYST SUPPORT (3)  
ABA 544 Behavioral Systems Support concentrates on personnel supervision and management knowledge with additional components of skill training. The class will include the research/evidence-based practices for behavioral system-wide instructional techniques, personnel management, and supervisory methodologies. Within the course, students will be exposed to evidence-based behavioral staff training methodologies for a variety of environments (e.g., group home, business, health, educational, etc.), behavioral skills training for parents/caregivers, and training methodologies within organizations. Behavioral research-based personnel and behavior-analytic supervisory management related to staff management, behavioral treatment integrity, performance management (e.g., assessment, expectation, and feedback), ethics, and functionally-based assessment and performance feedback will be taught.  
PREREQUISITES: ABA 511; ABA 533  
PROPOSED START: FA2019

**ACCTG 573**  
Topics in Financial Reporting  
FINANCIAL REPORTING (3)  
This course examines the accounting for complex business transactions with an emphasis on understanding the “why”, rather than exclusively the “how”. There is a focus on the economic substance of transactions and developing a deep understanding of the Financial Accounting Standards Board Conceptual Framework. This enables one to analyze the consistency of current financial reporting standards within a conceptual framework while considering alternative accounting treatments that can better reflect the economic substance of transactions. An overview of the conceptual and practical issues surrounding the accounting for investments, fair values, business combinations, consolidation of financial statements, structured transactions, derivatives, and hedging activities and foreign operations will also be covered with the intent for developing an awareness of academic research related to the economics of and accounting for complex business transactions.  
PREREQUISITES: ACCTG 472  
PROPOSED START: SP2019

**BIOL 893**  
Experiential Teaching in Biology  
TEACHING BIOLOGY (2)  
The course provides a broad exploration of the science of learning as well as how to effectively develop curricula and pedagogy to support effective learning in undergraduate biology laboratory courses. Additionally, this course will prepare graduate students for future roles as educators. In particular, this course will focus on the cognitive principles of how people learn most effectively as well as provide students the skills involved in developing curricula and pedagogy to support active learning and a learner-centered environment in undergraduate biology laboratory courses. The major topics to be covered include the science of learning, the need for curricular reform in the
sciences, how to create a student-centered learning environment, and the ethical and professional foundations of teaching. After successfully completing this course, students will be able to use evidence to discuss the value of learner-centered classrooms in the sciences, identify elements of a learner-centered biology classroom, identify major classroom challenges and methods of approaching them, write effective assessment questions and provide effective feedback to students, lead productive and effective class discussions, and demonstrate understanding of how people learn and apply learner-centered teaching approaches to developing effective lesson plans.

PROPOSED START: SP2019

EDTHP 565
Causal Inference in Educational Policy Research
CAUSAL INFERENCE (3)
This course is designed to help students develop a broad familiarity with the kinds of research designs (e.g., cluster randomized trials) and statistical methods (e.g., propensity score matching, instrumental variables, regression discontinuity) that are helpful in drawing causal inferences in educational policy research.
PREREQUISITES: EDPSY 505; SOC 574
PROPOSED START: SP2019

EME 522
Computational Methods for Electric Power Systems Analysis
COMP METHODS ELEC POWER ANALYS (3)
This course covers the formulation of and solution methods for a full range of economic-engineering investment and operations problems for electric power systems. Application problems include economic dispatch, unit commitment, optimal power flow, generation capacity expansion, transmission expansion, and modeling of competitive electricity markets. Solution methods include linear programming, mixed integer programming, decomposition methods for stochastic programming (e.g., Lagrangian Relaxation, Benders Decomposition), and mixed complementarity problems, with an emphasis on numerical implementation.
RECOMMENDED PREPARATION: It is recommended that students be familiar with or have taken EME 501, IE 505, or an equivalent graduate-level course in math programming.
PROPOSED START: SP2019

EME 523
Stochastic Optimization Methods of Energy and Environmental Systems
STOCHASTIC OPTIMIZATION (3)
This course covers the theory and implementation of computational methods for stochastic simulation and stochastic optimization, with an emphasis on algorithms and implementation. The course emphasizes the quantitative analysis or numerical modeling of complex systems in fields such as civil, environmental, energy, mechanical, and industrial engineering or energy, environmental, and natural resource economics. Topics include Monte Carlo simulation, quasi-random and pseudo-random sampling methods, Markov Chains, Dynamic Programming, Approximate Dynamic Programming, and Stochastic Programming decomposition techniques.
RECOMMENDED PREPARATION: It is recommended that students be familiar with or have taken EME 501, IE 505, or an equivalent graduate-level course in math programming.
PROPOSED START: SP2019
EME 524
Machine Learning for Energy and Mineral Engineering Problems
MACHINE LEARNING (3)
This course provides an overview of the application of machine learning algorithms to problems in energy and mineral engineering. The course addresses the strengths and weaknesses of various machine learning approaches, as well as appropriate testing and validation techniques for these complex models. Topics include machine learning applications in regression, classification, design optimization, and risk analysis. An emphasis of this course is for students to apply these methods to specific research problems of interest. Students with some background in statistics, but no previous formal training in machine learning algorithms will find this course most useful.
RECOMMENDED PREPERATION: Students are recommended to have had some previous basic training in statistics and experience with at least one programming language.
PROPOSED START: SP2019

EME 527
Stochastic Modeling of Spatial Variability in Energy and Environmental Systems
STOCHASTIC MODEL SPATIAL VAR (3)
This course covers the theory, methods, and implementation of modeling spatial variability and uncertainty with special consideration of the structure of energy, natural resource, and environmental system models. The course draws heavily upon geostatistical methods, and covers random functions, Semivariograms, Kriging, spatial simulation, and data assimilation into spatial simulation models.
PROPOSED START: SP2019

EPID 595
Internship
INTERNSHIP (1-18/Repeatable Max: 18)
Supervised, research-oriented, off-campus, nongroup instruction, including field experiences, practicums, or internships. Written and oral critique of activity required
PROPOSED START: FA2019

EPID 601
Ph.D. Dissertation Full-Time
PH.D. DISSERTATION FULL-TIME (0)
PROPOSED START: SP2019

ESC 529
Neural Control Engineering
NEURAL CONTROL ENG (3)
The ability to use formal control theory to observe and control neuronal systems is rapidly becoming more feasible as our models of neural systems become more realistic and as our advances in nonlinear Kalman filtering become more sophisticated. This course will explore the cutting edge of nonlinear state estimation of neuronal systems and the construction of control algorithms based on that state estimation. We will give an overview of several canonical neuroscience models, which represent experimental systems that can be controlled: the Hodgkin-Huxley equations, their reduction with the Fitzhugh-Nagumo equations, the Wilson-Cowan model of cortex, and recent models of Parkinson’s disease. We will then apply nonlinear state estimation to measurements from such systems and construct control algorithms that interact with such models.
CROSS-LISTED COURSES: PHYS 529
RECOMMENDED PREPERATION: Students without a background including calculus, differential
equations, and linear algebra should consult with the instructor.

PROPOSED START: SP2019

HIST 583
Rebellion, Revolution and Nation in China
REBELLION REVOLUTION MOD CHINA (3)
A research seminar, this course focuses on rebellion and revolution in Chinese history from the mid-nineteenth century to the present. In particular, the course investigates not only the myriad forms of revolution experienced in China including the 1911 Revolution, the Warlord period, the Nanjing Decade, Second World War, the Civil War, and the Cultural Revolution, it seeks to see these through the lens of the political ideologies such as nationalism, anarchism, communism, and feminism. Students will examine the manner in which the tide of rising expectations predicated the social and economic motivations lingering in the more overt political demands. Understanding the dramatic shifts in Chinese culture as well as its relationship to global politics will shape much of the seminar’s focus.

PROPOSED START: SP2019

INTAD 577
Global Agricultural Systems
GLOBAL AGR SYSTEMS (3)
Global food demand is expected to double over the next few decades and agriculture is arguably the world’s major driver of global environmental change. Therefore the challenge is increasing agricultural production and yields without comprising biophysical processes and environmental sustainability. This course tackles this issue through a review and survey of world farming and agricultural production systems from a biophysical, technical and agro-ecological perspective. Students will learn about basic environmental factors, constraints, threats, and solutions to these systems. Emerging topics and key innovations such as sustainable intensification, GMOs, precision farming, global climate change, and biodiversity are discussed in the context of complex socio-technical and agro-ecological systems. The focus is on developing countries but includes different agro-ecological zones, from cold temperate regions to the sub-tropics, and from the arid tropics to the sub-humid and humid tropics.

PROPOSED START: FA2019

MGMT 811
Sustainability Strategy Development
SUSTAIN STRATEGY (3)
MGMT 811 Sustainability Strategy Development covers intermediate to advanced content for integrating sustainability into core business by identifying and managing the environmental and social impacts of a business in order to drive profitability, reduce risk, and for long-term value creation. This course provides students with knowledge, concepts, and practical tools for developing a strategic sustainability strategy and measuring financial, environmental, and social returns. Course content focuses on: (1) an exploration of “sustainability” and what it means to business regarding changes to the regulatory, consumer, competitive landscape; (2) analysis of international differences across Europe, Asia, Africa, the Americas and beyond; (3) strategy development including external and internal analysis, employee engagement, governance, and ensuring sustainability is “built in, not bolted on”; and (4) the latest business models and sustainable design solutions to drive business value and environmental/social performance.

PROPOSED START: SP2019
MNG 512
Valuation of Mineral Properties and Mining Projects
VALUATION MINERAL PROPERTIES (3)
This course will prepare the students with tools to evaluate mineral resources and mining projects from industrial perspectives. Students are expected to possess basic understanding of geostatistics, economic and accounting principles, and the mining industry in general. This course will provide additional insight in geostatistical methods and the economic and financial decision-making process. Case studies will examine recent major global exploration undertakings to reinforce key concepts.
RECOMMENDED PREPERATION: Students are expected to possess basic understanding of geostatistics, economic and accounting principles, and the mining industry in general, as covered in MNG 412, EME 460, or equivalent.
PROPOSED START: SP2019

MNGMT 841
Entrepreneurial Funding Strategies
ENTREPRENEUR FUND (3)
Entrepreneurial Funding Strategies is an in-depth analysis of concepts, strategies, and techniques to obtain funding for start-ups and entrepreneurs. This course covers an overview of entrepreneurship, techniques for analyzing cash needs, strategies for financing the new venture, building venture relationships, and exit strategies.
PREREQUISITES: ACCT 501
PROPOSED START: SP2019

MNPR 505
Particle Separation
PARTICLE SEPARATION (3)
This course will provide the students with the fundamentals and state-of-the-art techniques in particle separations and their applications in recovery of minerals and elements from primary and secondary sources. The topics covered in this course include: Data Evaluation and Mass Balancing, Gravity Concentration, Froth Flotation, Advanced Dry Separations, Advanced Dewatering Techniques, Classifications, Magnetics, Clarification, Processing of Primary Mineral Resources, and Recycling.
RECOMMENDED PREPERATION: Students should be familiar with the fundamentals of mineral process engineering and the content of MNPR 413, or equivalent.
PROPOSED START: SP2019

NURS 851
General Linear Modeling in Health Research
GEN LINEAR MODEL (4)
In this course students will learn the application of general and generalized linear models in health research. Students will learn the process of developing and testing hypotheses including hypotheses testing mediation and moderation. Students will also identify the quantitative and clinical assumptions of models, apply model building techniques, and calculate the appropriate effect sizes. Using common statistical analysis software packages, students will develop the skills needed for interdisciplinary collaborations on research projects using these models.
PREREQUISITES: STAT 500; PHS 520; HDFS 519; EDPSY 406
PROPOSED START: SP2019
PHS 532
Population Health Informatics and Analytics
HEALTH INFORMATICS (3)
This course explores the principles of population health informatics and analytics, where learners will have practical experiences using data such as clinical, genomic, financial, publicly available secondary data, and other health-related data for analysis aimed at improving patient care across populations by reducing outcome variations, increasing quality and patient satisfaction, and reducing cost of care.
PROPOSED START: SP2019

PNG 555
Unconventional Resources Analysis
UNCONV RES ANALYS (3)
This course provides an in-depth analysis of the technical aspects of unconventional oil and gas reservoirs, such as geochemistry, geomechanics, storage mechanisms, and transport processes. The course is designed to contribute to the student’s ability to advance the frontiers of knowledge about the characteristics and development of unconventional reservoirs. The course presents conceptual knowledge and mathematical models necessary for exploration, characterization, reserve estimation, and performance analysis of unconventional oil and gas reservoirs. This content is critical for the student given that conventional hydrocarbon resources are known not to be able to meet growing demand for energy to fuel worldwide economic growth, which has triggered the developments of unconventional resources such as Marcellus Shale.
PROPOSED START: SP2019

PNG 566
Reservoir Characterization
RES CHARACTERIZ (3)
This course focuses on the quantitative characterization of oil and gas reservoirs, principally through analysis of seismic survey data, well logs, and by employing geostatistics. Emphasis is placed on the use of seismic surveys in the oil and natural gas industries, including interpretation, inversion, rock physics, and ties to well logs. One major goal of this course is to expose the student to a variety of advanced analytical tools used to quantitatively interpret seismic data. The tools we will talk about are specifically geared towards characterizing petroleum and natural gas reservoirs, but may be adapted for other purposes.
PROPOSED START: SP2019

RPTM 537
Scholarly Development in Recreation, Park and Tourism Management
SCHOLARLY DEVELOPMENT (3)
This course, taught from a recreation, park and tourism management perspective, provides an overview of the varied expectations and responsibilities for doctoral graduates at universities/colleges, non-profit organizations, and governmental agencies. Topics include grant/contract proposals, scholarly and professional publications, and the development of professional vitae, narrative, and teaching portfolios.
PROPOSED START: SP2019

SBN 505
Seminar in Social and Behavioral Neuroscience
SEMINAR IN SBN (3/Repeatable Max: 12)
Each section of this course explores an important topical area within contemporary social and behavioral neuroscience, exploring pertinent concepts, theories, and empirical findings. Topics explored
may include the neuroscience underpinnings of social, personality, and emotional development; the neuroscience of aging and memory; and social and affective neuroscience. The intention of this course is to lay a foundation so that students may critically read and conduct research in the topical area, with an emphasis on how the topic can be examined at different levels of analysis, and how integrating information across levels of analysis furthers advancement in the field. Levels of analysis include neurochemical and cellular processes, neural networks and systems, behavioral manifestation, and dynamic feedback from the environmental context. The course will emphasize class participation and provide multiple opportunities to examine related topics in written and spoken form.

PREREQUISITES: NEURO 520; NEURO 521
PROPOSED START: SP2019

SBN 511
Translational Applications of Social and Behavioral Neuroscience
TRANSLATIONAL APPLICATIONS (3/Repeatable Max: 12)
This course explores translational applications of Social and Behavioral Neuroscience to a particular population or populations at risk, how neuroscience contributes to a broader multi-level understanding of the phenomenon and more comprehensive theory and evidence-based intervention approaches, and how understandings derived from neuroscience can inform policy and best practice. Content may also address how neuroscience can contribute to the evaluation of behavioral interventions to inform factors such as (a) etiological heterogeneity that may moderate treatment efficacy, (b) neurological processes that mediate the behavioral effects of intervention, and (c) the implications of neuroscience evidence for assessing individual-level responsivity to intervention. These topics naturally integrate advances in the idea of “personalized medicine” to include behaviorally targeted prevention and intervention programs.
Topics explored may include the neuroscientific substrates of: substance use, misuse, and addiction, learning disabilities, developmental disability, and behavioral problems. SBN 511 will incorporate transdisciplinary, transactional developmental models that take into account individual characteristics across multiple levels of analysis (i.e. genetic, neurobiological, psychological, behavioral) throughout childhood, adolescence, and adulthood, in interaction with contextual and experiential conditions (family, peers, adversity) that bear directly on individual risk and resilience and, more broadly, policy and best practice. This course aims to lay a foundation so that students may critically read and conduct research in the topical area and understand how the topic can be examined at different levels of analysis. The course will emphasize class participation and provide multiple opportunities to examine related topics in written and spoken form.
PREREQUISITES: NEURO 520; NEURO 521
PROPOSED START: SP2019

SCM 813
Sustainable Supply Chain Management
SUSTAINABLE SCM (3)
Traditional supply chain fundamentals are necessary but not sufficient in understanding and strategically managing emergent environmental and social costs, risks, and opportunities. Driving this change is a combination of pressures from customers, suppliers, competitors, employees, regulations, and resource constraints. This course is designed to equip supply chain students with the latest tools, concepts, and business practices for managing an environmentally and economically sustainable supply chain.
PROPOSED START: SP2019
**SYSEN 534**  
Simulation in Systems Engineering: Continuous-Time Systems  
SIM CONTIN-TIME (3)  
This course addresses system dynamics modeling and simulation for the analysis of complex systems. It provides the theoretical and technical knowledge necessary to conceptualize dynamics of complex systems, formulate appropriate simulation models, and use models to understand the system behavior and develop effective policy interventions. Students are exposed to the techniques used to form models of supply-demand, mechanical, electrical, biological, and hybrid systems. The course starts with an overview of system dynamics (SD) as a “set of conceptual tools that enable us to understand the structure and dynamics of complex systems”. Then, students learn about tools and techniques that enable us to use SD as a rigorous modeling method to build formal computer simulations of complex systems. Also, the use of computer-based simulation software packages will be addressed. After understanding how to test the validity of the simulation model, and analyze the sensitivity of the model to uncertainty in parameters and/or structural changes, students will learn how to use SD to model and analyze basic electromechanical and hybrid systems. Advanced topics, including simulation-based optimization and application of SD in modeling interdependent infrastructure, socio-economic, and hybrid renewable energy systems, are covered to provide students with an insight to the applications of SD in studying contemporary issues.  
PROPOSED START: SP2019

**WFED 501**  
Scholarly Writing for Workforce Education and Development  
SCHLY WRT WFED (3)  
This course is grounded in the current research literature, theoretical frameworks, analysis, and methodologies within the discipline of Workforce Education and Development. Within this course students will engage in synthesis of knowledge and analytical work. The objective of this course is to contribute to the student’s ability to expand the frontiers of knowledge, and produce creative scholarly writing products with a particular focus on scholarship within the field of Workforce Education and Development. The course content includes: (1) Research literature and theoretical frameworks in Workforce Education and Development; (2) The annotated bibliography foundation; (3) Analysis and methodologies within Workforce Education and Development; (4) The literature review process; (5) Developing positive writing habits; (6) Writing for publication in Workforce Education and Development; (7) Research presentation formats; and (8) Enhancement of Scholarship for the future.  
PROPOSED START: SP2019

**WFED 865**  
Implementing Training as an Organization Development Intervention  
IMPLEMENTING TRAINING AS OD (3)  
In this course, students will be asked to do more than accept the conventional wisdom of organization development and change. Students will look at the standard approaches and then beyond them to examine critically the processes associated with planning, developing, and implementing training and development programs in the context of the whole organization. Students will focus on how to create changes that take into account the individuals who comprise the organization at the same time that the changes improve the organization’s overall effectiveness. A key point of emphasis will be the connection between the models, theories, and strategies and the students’ workplaces and their professional practices. Students will be encouraged to share stories about their experiences—both past and current—that illustrate or raise questions about concepts discussed in the course.  
PROPOSED START: SP2019
**WFED 876**
Facilitating Organization Development and Change Through Technology
FACILITATING OD WITH TECH (3)
This course aims to equip OD/HRD professionals with the technological acumen necessary for their consulting practice and work efficiency. Emerging topics such as security and big data have become integral to technology usage in the workplace. In this course, students will learn about such trends and develop an understanding of how to intervene in organization processes to improve performance by utilizing technological tactics and software programs to gather, visualize, and present data to client organizations. Other tools and technologies that enhance knowledge management, team-building, and project management will also be explored.
PROPOSED START: SP2019

**WFED 885**
Appreciative Inquiry Coaching
APPRECIATIVE INQUIRY COACHING (3)
Appreciative inquiry has been called the next generation of organization development. Appreciative inquiry is a strength-based approach to change methodology, as well as a paradigm of thought, a worldview, and a way of being in the world. For these reasons, appreciative inquiry coaching is a timely and important topic. The knowledge and skills related to appreciative inquiry coaching gained during this course will prepare students to become well-rounded OD/HRD professionals.
PROPOSED START: SP2019

**WMNST 509**
Feminist Pedagogies
FEMINIST PEDAGOGY (3)
This interdisciplinary graduate seminar gives students an overview of the theoretical, epistemological, and methodological foundations of feminist pedagogy. We will examine theoretical frameworks of teaching and learning that promote justice and social change (i.e. praxis), as well as feminist pedagogical strategies that can be utilized within and beyond the classroom (i.e. practice). Students can expect to engage with various critical and liberatory pedagogies, pedagogies of identity and difference, and signature pedagogies. They will learn how feminist epistemologies shape (and are shaped by) ethical classroom practice, focusing on specific ways in which to cultivate and nurture feminist teaching and learning. In addition, students will also learn how to develop a syllabus and teaching philosophy.
PROPOSED START: SP2019

**CHANGE**

**OLD**

**ABIOL 590**
Astrobiology Seminar
ABIOL SEMINAR (2)
Student-led presentations and discussions of current and classic literatures relevant to the themes of Astrobiology. ABIOL 590

Astrobiology Seminar (2)
Astrobiology is a new, multidisciplinary field of science encompassing astronomy, biology, biochemistry, genomics, chemistry, atmospheric chemistry, geochemistry, paleontology, geology, and many other fields of science and technology. Astrobiology includes the study of the origin of life, the connections between the evolution of life and of environments, the potential for life and life's actual distribution in our solar system and beyond, and
future of life on Earth and in space. This course is conducted as a seminar series led by the 16 principal investigators of the Penn State Astrobiology Research Center (PSARC) and their students. Classic literature relevant to the themes of Astrobiology will be introduced, but the main focus of discussions will be on new and important research developments made by the PSARC members and other astrobiologists. The seminars will be given once a week, typically on Friday afternoons, during the Fall semester each year. At each seminar, a

NEW

ABIOL 590
Astrobiology Seminar
ASTROBIOLOGY SEMINAR (3/Repeatable Max: 6)
Astrobiology is a multidisciplinary field of science encompassing astronomy, biology, biochemistry, genomics, chemistry, atmospheric chemistry, geochemistry, paleontology, geology, and many other fields of science and technology. Astrobiology includes the study of the origin of life, the connections between the evolution of life and of environments, the potential for life and life's actual distribution in our solar system and beyond, and future of life on Earth and in space. The main focus of lectures, discussions, and projects will be on new and important research developments within the interdisciplinary field of Astrobiology. Additionally, classic literature relevant to each topic will be covered to provide students with important context and principles.

OLD

AGRO 555
Effective Scientific Communications
EFFECTIVE SCI COMM (2)
Instruction and practice in verbal communication of scientific information to technical and non-technical audiences through realistic exercises with invited audiences. AGRO 555 Effective Scientific Communications (2) The overall course objective is discovery of methods to effectively communicate scientific information to both fellow scientists and the lay community. A majority of the course will be devoted to preparing students to deliver oral and poster presentations technically appropriate for their target audience. Specifically, students will learn to present information in oral and poster formats used for scientific meetings, seminars, and proposal hearings. Additional emphasis will be placed on techniques for handling questions from the audience. Students will also determine appropriate scientific paper formats, and realize how outlines facilitate organized technical writing. Students will improve their critical listening, thinking, and interpersonal skills by participating in weekly topical discussions as well as peer reviews. This course is unlike others in the Crop and Soil Sciences curriculum in that it teaches students how to communicate what they have learned during their research and academic endeavors. Enrollees will make two formal presentations based on their research, present their research as a scientific poster and conduct an exercise in writing a scientific journal article. Students will be evaluated on five criteria: participation, scientific poster presentation, technical oral presentation, non-technical oral presentation, and a scientific journal writing exercise.

NEW

AGRO 555
Effective Scientific Communications
EFFECTIVE SCI COMM (3)
Students will learn to effectively present their research to scientific and non-scientific audiences. The overall goal of the course is to develop student skills in spoken and written communication of scientific concepts, methods, and data, and to provide effective evidence-based recommendations for practical
application of such knowledge. In addition, students will develop skills in writing testable hypotheses, evaluating experimental approaches, considering alternative approaches, and envisioning expected outcomes of a research plan.

OLD
APDEM 803
Applications in Applied Demography
APPS IN APPL DEMOG (3)
This course provides an overview of applications in applied demography in business, government and public policy, health, and non-profit organizations.
PREREQUISITES: APDEM 801, APDEM 802
CONCURRENTS: SOC 573

NEW
APDEM 803
Applied Demography in Practice
APPL DEMOG IN PRACTICE (3)
This course provides an overview of applications in applied demography in business, non-profit organizations, public policy, and health; including a focus on international applications. Students will learn to apply critical and analytic skills to case studies, identify the most appropriate data sources and methods to help solve practical problems (e.g., business siting; school redistricting; emergency evacuation; labor market projections; relief efforts). Emphasis throughout will be on recognizing and reinforcing best practices in the use, linkage, and interpretation of data in real world situations.

OLD
BUSAD 501
Statistical Analysis for Managerial Decision Making
STAT ANALYSIS MGMT (3/Repeatable Max: 3)
Use of statistical methods for managerial decision making, with emphasis on problem formulation, data analysis and interpretation, and business applications.

NEW
BUSAD 801
Statistical Analysis for Managerial Decision Making
STAT ANALYSIS MGMT (3)
This course is designed to provide the M.B.A. students with an exposure to the most commonly used statistical concepts, methods, techniques, and their applications to business problems. This course covers the basic concepts of business statistics and data analysis integrated in a contemporary spreadsheet environment. The course emphasizes practical applications and business decision making.

OLD
EME 580
Interdisciplinary Team Project in EME Systems
INTERDISC PROJECT (3)
Problem-based, integrative, and collaborative learning to solve interdisciplinary problems on energy and mineral systems based on engineering and business principles. EME 580 Integrative Design of EME Systems (3) The role of energy and minerals in society is increasingly important with increasing environmental constraints, transitioning energy policies, supply disruption, and international pressure
on climate change compliance and competition for energy. Both conventional (fossil fuels) and renewable energy sources are being explored. This course will enable energy and mineral engineering students to collaboratively integrate their knowledge and experiences in addressing common problems. The typical problems will address issues with the production, processing and utilization of fossil and renewable energy and the associated environmental, health and safety, and business management issues. Students will utilize their engineering and business principles to optimally recover, process and utilize conventional and unconventional energy in an environmentally friendly, safe and economical manner. Complete problem solutions must include a synthesis of methods to identify, recover, transport, and utilize the energy source. A quantitative approach, including mechanistic, thermodynamic, fluid flow, and kinetic analysis of proposed options must be considered, together with a preliminary economic analysis.

PREREQUISITES: EME 500

NEW
EME 580
Methodology of Research in EME
RESEARCH METHOD (3)
Analysis of the methodology of the research process through a discussion of the methodology of reading and writing peer-reviewed publications. The students will learn how to more efficiently understand and explain the results available in the published literature, so that they can apply this methodology to organize, present, and discuss their own results by applying the essential principles of research ethics and integrity.

OLD
HIST 581
Late Imperial and Modern China
IMP AND MOD CHINA (3)
This course provides students with an overview of the literature and themes in late imperial and modern Chinese history. HIST 581 Late Imperial and Modern China (3) This course surveys the historical scholarship on late imperial and modern China, providing students with an overview of the themes, theories, and debates within the field of late imperial and modern Chinese history. Students will become aware of key historical events of the past 250 years, such as the Opium Wars, the Taiping Rebellion, the fall of the Qing, the rise of the Chinese Communist Party, and the establishment of a socialist state. They will also think critically about the social and cultural shifts that accompanied or caused these well known events, from the changing role of women in Chinese society to the changing relationship of humans to environment, as well as exploring the multiple approaches Chinese historians have taken to reading and presenting historical work, including economic, political, social, and cultural history. The course will emphasize a set of themes that will be revisited throughout the semester. Students will, for instance, investigate the role that Manchu identity played in the shape and governance of the Qing dynasty and contrast this later in the course to the role of ethnic identities in the People’s Republic of China. Governance is another theme of the course, and students will begin by considering the structure of Qing bureaucracy and its relationship to local society; in the middle of the course, students will read about the changes to government administration under the Republic of China that brought local society and central government into increasing conflict, before turning to thinking about the compelling vision of state-society relations that swept the Chinese Communists into power. Other recurring themes include interactions between China and the West, changing gender and family relationships, and rebellion and revolution. Discussion and analysis of the assigned readings are at the core of this seminar’s work. In addition to reading important works in the field of late imperial and modern Chinese history, students will be asked both in class discussions and in written work to analyze and synthesize the
contributions these works make to the study of Chinese history; regular additional readings such as book 
reviews, review essays, and short scholarly articles will help students to place the works in broader 
context.

NEW
HIST 581
Modern China
MODERN CHINA (3)
Primarily a reading seminar, this course focuses on Chinese history from the mid-nineteenth century to 
the present, emphasizing the profound ways that the Qing empire, Republican China, and then the 
People’s Republic changed through numerous social, cultural, economic, and political revolutions. In 
particular, the course investigates transitions from the late imperial period through the Revolution, the 
Warlord period, the Nanjing Decade, Second World War, the Civil War, and the establishment of the 
socialist China.

Students will examine the changing role of women in Chinese society to the changing relationship of 
humans to environment, as well as exploring the multiple approaches Chinese historians have taken to 
reading and presenting historical work, including economic, political, social, and cultural history; social, 
cultural, economic, and political revolutions; the consolidation of communism; and the impact of 
successive political movements on China and the Chinese peoples.

OLD
PHS 896A
Integrative Doctoral Research I
INTEG DOCT RES I (3/Repeatable Max: 6)
This course provides DrPH degree students with opportunities to demonstrate knowledge and skills 
gained through doctoral research via manuscript development. Integrative Doctoral Research I is the 
first of two courses required for the integrative culminating experience for doctor of Public Health 
students delivered on an individualized basis. DrPH students will be required to develop two major 
components for their DrPH integrative experience that are linked conceptually - two publishable quality 
manuscripts. With individualized guidance from their doctoral adviser and doctoral committee, students 
will develop two manuscripts that comprehensively address, generate, and/or interpret and evaluate 
knowledge applicable to public health practice. Manuscripts are encouraged to be of an applied nature 
and must demonstrate students' abilities to conduct independent research on a contemporary public 
health issue. Students will demonstrate the application of advanced public health practice skills and 
knowledge in the design and execution of a scholarly project, the analysis and interpretation of the 
findings, and the application of the new knowledge to advance public health practice. This work should 
contribute to the evidence base of public health practice, be of publishable quality, be linked to the 
doctoral portfolio contents and demonstrate critical thinking and rigorous analytic strategies. 
Manuscripts will build upon work completed in PHS 892 Directed Studies in Public Health and the 
portfolio. Although not required, a strong student portfolio will link doctoral research to the previously 
required Advanced Field Experience.
PREREQUISITES: PHS 892

NEW
PHS 896A
Integrative Doctoral Research I
INTEG DOCT RES I (1-9/Repeatable Max: 9)
This course provides Dr.P.H. degree students with opportunities to demonstrate knowledge and skills 
gained through doctoral research via manuscript development. Integrative Doctoral Research I is the
first of two courses required for the integrative culminating experience for doctor of Public Health students delivered on an individualized basis. Dr.P.H. students will be required to develop two major components for their Dr.P.H. integrative experience that are linked conceptually: two publishable-quality manuscripts. With individualized guidance from their doctoral adviser and doctoral committee, students will develop two manuscripts that comprehensively address, generate, and/or interpret and evaluate knowledge applicable to public health practice. Manuscripts are encouraged to be of an applied nature and must demonstrate students' abilities to conduct independent research on a contemporary public health issue. Students will demonstrate the application of advanced public health practice skills and knowledge in the design and execution of a scholarly project, the analysis and interpretation of the findings, and the application of the new knowledge to advance public health practice. This work should contribute to the evidence base of public health practice, be of publishable quality, be linked to the doctoral portfolio contents and demonstrate critical thinking and rigorous analytic strategies.

PREREQUISITES: PHS 892

OLD
PHS 896B
Integrative Doctoral Research II
INTEG DOCT RES II (3)
Integrative Doctoral Research II is the second of two courses required for the integrative culminating experience for Doctor of Public Health students and is delivered on an individualized basis. Dr.P.H. students will be required to develop a major component for their Dr.P.H. integrative experience that is linked conceptually to two publishable-quality manuscripts - a doctoral portfolio. With individualized guidance from their doctoral adviser and doctoral committee, students will develop a doctoral portfolio that comprehensively addresses, generates, and/or interprets and evaluates knowledge applicable to public health practice. The portfolio will build upon work completed in PHS 892 Directed Studies in Public Health, prior coursework, the advanced field experience, and other related integrated doctoral research. Students will develop a doctoral portfolio throughout their program that will document how their advanced field experience and doctoral research has informed their leadership in advancing and integrating research into public health practice. The contents of the doctoral portfolio will be used to inform the development of the student's doctoral research and ultimately two publishable manuscripts that stem from this research. Components of the portfolio may include, but are not limited to, research (e.g., publications, conference presentations), teaching (academic and non-academic, community-based teaching), and field and other service learning experiences. Portfolios will require reflection on in-class and out-of-class experiences and demonstrate students' broad public health knowledge, specialized knowledge, translation of this knowledge into evidence-based public health practice, and leadership style.
PREQUISITES: PHS 892, PHS 896A

NEW
PHS 896B
Integrative Doctoral Research II
INTEG DOCT RES II (1-9/Repeatable Max: 9)
Integrative Doctoral Research II is the second of two courses required for the integrative culminating experience for Doctor of Public Health students and is delivered on an individualized basis. Dr.P.H. students will be required to develop a major component for their Dr.P.H. integrative experience that is linked conceptually to two publishable-quality manuscripts - a doctoral portfolio. With individualized guidance from their doctoral adviser and doctoral committee, students will develop a doctoral portfolio that comprehensively addresses, generates, and/or interprets and evaluates knowledge applicable to public health practice. The portfolio will build upon work completed in prior
coursework, the advanced field experience, and other related integrated doctoral research. Students will develop a doctoral portfolio throughout their program that will document how their advanced field experience and doctoral research has informed their leadership in advancing and integrating research into public health practice. The contents of the doctoral portfolio will be used to inform the development of the student's doctoral research and ultimately two publishable manuscripts that stem from this research. Components of the portfolio may include, but are not limited to, research (e.g., publications, conference presentations), teaching (academic and non-academic, community-based teaching), and field and other service learning experiences. Portfolios will require reflection on in-class and out-of-class experiences and demonstrate students' broad public health knowledge, specialized knowledge, translation of this knowledge into evidence-based public health practice, and leadership style.

PREQUISITES: PHS 892, PHS 896A

OLD
PSYC 520
Research Methods
RESEARCH METH (4)
The course will review experimental, quasi-experimental designs, program evaluation, between subject designs, and within subject or intra-subject designs.
PREREQUISITES: Admission to program

NEW
PSYC 520
Research Methods
RESEARCH METHODS (3)
This course is intended to provide students in the Applied Psychology Clinical program with a basis for understanding psychological research methodologies. The course will serve as a starting point for developing their master's project (PSYC 530), which is the culminating research experience for the Applied Clinical Psychology program. The course will begin with development of research questions and explore how to appropriately search research databases for previous literature on topics of interest. The course will also focus on developing ethical foundations for research through review of case studies and discussion of ethical principles and codes for psychologists. Students will also focus on understanding how different methodologies function in relation to psychological research including, but not limited to: experimental designs, quasi-experimental designs, program evaluation, within or between subject designs, and systematic literature reviews. In addition to developing an understanding of research methodologies, students will also explore how to interpret and write-up statistical results for academic manuscripts.

OLD
REST 570
Institutional Real Estate Investment
INSTI R EST INV (2)
A survey of the latest developments of real estate as an institutional investment.
PREREQUISITES: BA 531

NEW
REST 570
Institutional Real Estate Investment
INSTITUTIONAL REST INVESTMENT (2)
This course covers the convergence of real estate and the capital markets. It is designed to expose students to the structure, analysis, and valuation of a variety of real estate securities including: residential mortgage backed securities (MBS), collateralized mortgage obligations (CMOs), commercial mortgage backed securities (CMBS), and real estate investment trusts (REITs). The course also focuses on the role of real estate as a specific asset class in modern portfolio theory. After successfully completing this course, students will have a practical foundation for applying rigorous empirical methods in research to topics related to project level valuation and investment, the role of debt (capital structure), analysis of mortgages, private and public equity investment in real estate, and the role of real estate in portfolio allocation models.

PREREQUISITES: REST 830; BA 831
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: Smeal College of Business
Department or Instructional Area: Finance

Penn State Graduate School

New Graduate Program, Option, or Minor: Add

Designation of new graduate program: Master of Corporate Finance

Classification of Instructional Programs (CIP) Code: FEB 21 2018

Designation of new graduate option:

Designation of new graduate minor:

Indicate effective semester: First semester following approval
Second semester following approval

Office of the Vice Provost and Dean of the Graduate School

Existing Graduate Program Option, or Minor: Change Drop

Current designation of graduate program:

Current designation of graduate option:

Current designation of graduate minor:

New designation of existing graduate program (if changing):

New designation of existing graduate option (if changing):

New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above):

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head

William Kracaw
Printed name
Signature
Date: 2/15/18

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Arvind Rangaswamy
Printed name
Signature
Date: 2/20/18

Approved by College/School Dean/Chancellor (or Designee):

Russell Barton
Printed name
Signature
Date: 2/15/18
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Recommended by Chair, Graduate Council Subcommittee on New and</td>
<td>David Babb</td>
<td></td>
<td>10/9/2018</td>
</tr>
<tr>
<td>Revised Programs and Courses:</td>
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<tr>
<td>On Behalf of David Babb</td>
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<tr>
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<td>Date: 10/9/2018</td>
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<tr>
<td>Recommended by Chair, Graduate Council Committee on Programs and</td>
<td>C. Andrew Cole</td>
<td></td>
<td>10/9/2018</td>
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<td>Courses:</td>
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<tr>
<td>On Behalf of C. Andrew Cole</td>
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<tr>
<td>Date: 10/9/2018</td>
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<tr>
<td>Noted by Dean of the Graduate School:</td>
<td>Regina Vasilatos-Younken</td>
<td></td>
<td>10/9/2018</td>
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<tr>
<td>On Behalf of Regina Vasilatos-Younken</td>
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<tr>
<td>Date: 10/9/2018</td>
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</table>
PROPOSAL — MASTER OF FINANCE IN CORPORATE FINANCE

THE PENNSYLVANIA STATE UNIVERSITY — SMEAL COLLEGE OF BUSINESS
DR. WILLIAM KRACAW, DEPARTMENT CHAIR, DAVID AND SHIRLEY SYKES PROFESSOR OF FINANCE
Introduction

The Smeal College of Business is proposing a Master of Finance in Corporate Finance (CFIN). The Corporate Finance degree is designed as a one-year program. This degree targets individuals wishing to pursue careers in corporate management and strategic planning. The target population includes baccalaureate graduates from the Smeal College and peer universities with non-finance degrees and graduates from non-business disciplines that have a strong interest in corporate finance, management, and strategic planning.

This 31-credit master program provides students with a solid understanding of the theory and practice of corporate finance, emphasizing the following analytical techniques: discounted cash flow, valuation, risk and return, the Capital Asset Pricing Model (CAPM), corporate capital structure, capital budgeting, mergers and acquisitions, investment and financing decision-making, and quantitative analysis.

This proposal defines the motivation, target audience, approach, and viability of developing a new Master of Finance in Corporate Finance (CFIN) in the Smeal College of Business at University Park.

A. Program Justification

The Penn State Smeal College of Business faculty contains a group of pre-eminent scholars in the academic field of Finance. The finance faculty consistently rank in the top-tier in terms of world-wide research productivity and visibility. Finance faculty provide research and teaching expertise in a variety of areas emphasizing corporate finance, international finance, investment management, and financial services. Ranked in the top 15 for research performance according to the Academy of Management Journal, Smeal Finance faculty members publish research in leading journals and earn international recognition from academic and professional organizations.

The CFIN program will leverage the academic reputation of the faculty and extensive Smeal alumni network to create a master degree program that develops economic and financial analytical skills based on the rigorous application of, and insights from the leading research tools and techniques developed by the faculty.

According to the U.S. Bureau of Labor Statistics’ 2018-19 Occupational Outlook Handbook, several core functions of financial managers, including risk management and cash management, are expected to be in high demand over the next decade. “Employment of financial managers is projected to grow 19 percent from 2016 to 2026, much faster than the average for all occupations”. https://www.bls.gov/ooh/management/financial-managers.htm. Because of this trend, the CFIN_MCF program will meet the growing demands of students hoping to secure careers in the growth sectors of the economy. These same students will need academic
training beyond their traditional non-finance baccalaureate degrees to compete. The salary and job growth attraction for careers in corporate management attainable with a specialized graduate degree in corporate finance can be found in the following table:

<table>
<thead>
<tr>
<th>Career</th>
<th>Total Employment</th>
<th>Annual Mean Wage</th>
<th>Projected Job Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Analysts</td>
<td>281,610</td>
<td>$97,640</td>
<td>10.8%</td>
</tr>
<tr>
<td>Financial Managers</td>
<td>543,300</td>
<td>$139,720</td>
<td>18.7%</td>
</tr>
<tr>
<td>Loan Officers</td>
<td>305,700</td>
<td>$76,260</td>
<td>11.5%</td>
</tr>
<tr>
<td>Personal Financial Advisors</td>
<td>201,850</td>
<td>$123,100</td>
<td>14.4%</td>
</tr>
</tbody>
</table>


Faculty Members
**CVs are available for all faculty**

Program Head
William Kracaw, Ph.D. Department Head of Finance; David and Shirley Sykes Professor of Finance

Finance Graduate Faculty
Canayaz, Mehmet, Assistant Professor of Finance
Cao, Charles, Smeal Chair Professor of Finance
Cornaggia, Jess, Associate Professor of Finance
Cornaggia, Kimberly, Associate Professor of Finance
Davis, Brian, Clinical Associate Professor of Finance
Gattis, Louis, Faculty Director for MBA and EMBA Programs, Clinical Professor of Finance
Ghadar, Fariborz, Director of Center for Global Business Studies, Professor of Finance
Gustafson, Matthew, Assistant Professor of Finance
Haushalter, George David, Academic Director Smeal Trading Room, Calderwood Faculty Fellow, Associate Professor of Finance
Huang, Jingzhi (Jay), David H. McKinley Professor of Business and Professor of Finance
Iliev, Peter, Associate Professor of Finance
Kotter, Jason, Assistant Professor of Finance
Le, Anh, Assistant Professor of Finance
Lenkey, Stephen, Assistant Professor of Finance
Lunn, Jason, Clinical Assistant Professor of Finance
B. Program Objectives

The Master of Finance in Corporate Finance (CFIN) program focuses on developing accomplished and innovative corporate managers. Globalization, technical innovation and fierce competition compel companies to hire and develop managers with unique and superior analytical skills. Successful corporate managers must develop and execute strategies that drive their organizations’ successful evolution in this challenging business environment. In addition, today’s fast paced and challenging international business environment requires corporations to hire employees that have cutting-edge critical thinking skills to understand and anticipate the forces of change affecting their markets.

In order to develop outstanding corporate leaders, the CFIN program will provide a curriculum of courses that builds student knowledge of finance, accounting and management techniques. In addition, the program’s course sequence will force students to apply the use of theories, quantitative techniques and academic research by thinking critically to solve “real” business problems. Group and individual assignments will challenge students to analyze case studies, build models and communicate their research in both written and verbal form.

World-class professors who are specialists in finance, economics and corporate strategic management will teach in the program. This solid foundation in corporate finance as well as decision analysis, corporate strategy, accounting, valuation, market analysis, econometrics, and investment analysis will develop graduates who are more attractive to hiring managers, and enable graduates to advance more rapidly into management and leadership positions.

Key features of the CFIN program include:

- **Learn the “Language of Academic Finance”**: Gain a solid corporate finance background to open up advancement opportunities. The CFIN program opens career opportunities for students that are unavailable without a graduate specialization in the finance discipline.
• **Experiential Learning:** The program delivers this core finance knowledge through high-impact experiential learning, small-group interaction in class, and team-based projects focused on real-world application.

• **Learning Environment:** Engage in challenging, fast-paced coursework that develops “critical thinking skills” imperative for confronting the business problems facing a wide range of organizations in today’s fast-paced, challenging business environments.

• **Team-Based Learning.** Careers in corporate finance and strategic planning often require high-functioning teams to solve today’s complex problems. To prepare for this environment, students will participate in small teams during the program to master decision-making skills, grow intellectually, and learn from each other’s talents.

• **Selective Peer Group:** The CFIN program is highly selective, and each student will engage with professors and classmates in a dynamic, rigorous learning environment.

• **Experience the Rigors of Corporate Finance Research and Communication:** Students will actively engage in research projects that will cultivate critical thinking skills that apply modern financial and economic analysis to real business problems, and learn to effectively communicate findings to a broader audience.

• **World-Class Faculty:** Students in the program will take classes from Smeal’s world-class faculty. Our professors are respected experts, renowned for their cutting-edge research and passion for teaching.

### Learning Goals and Objectives

The Master of Finance in Corporate Finance Program Learning Goals and Objectives include:

1. **Broad Core of Finance Knowledge**
   
   CFIN graduates will master a broad core of financial and economic knowledge and be able to integrate and apply this knowledge to business situations as corporate managers and strategic partners in industries requiring interdisciplinary skills and global perspectives.

   **Learning Objectives:**
   
   - CFIN graduates will demonstrate advanced competency in the underlying concepts, theory, and tools taught in core finance and economics programs.
   - CFIN graduates will be prepared to apply their knowledge of finance, economics and markets to identify, analyze, and recommend solutions to complex corporate strategic problems and projects requiring interdisciplinary and global perspectives.

   **Assessment Method:** Course-embedded measure (FIN 577, FIN 831, FIN 855)

2. **Analytical and Critical Thinking Skills**
   
   CFIN graduates will develop analytical and critical thinking skills needed to excel in today’s business environment.

   **Learning Objectives:**
CFIN graduates will acquire the analytical and critical thinking skills needed to identify, analyze, and evaluate alternative solutions to problems and projects facing today’s corporate managers and strategic planners.

CFIN graduates will develop the skills needed to craft and implement unique and “cutting edge” strategic and tactical plans.

CFIN graduates will be able to articulate and defend their analysis and recommended solutions to multiple audiences from business, government, and the community.

CFIN graduates will be able to integrate findings and analysis from cutting edge academic and practitioner research to problems and projects confronting corporate America.

Assessment Method: Course-embedded measure (FIN 577, FIN 880, MGMT 861)

3. **Interpersonal Skills**

CFIN graduates will possess the interpersonal skills needed to impress hiring managers and become effective corporate managers and leaders.

Learning Objectives:

- CFIN graduates will be skilled at leadership, team building, interpersonal influence, and the management of change.

- CFIN graduates will be able to communicate and work effectively with others in work settings involving cultural and demographic diversity.

- CFIN graduates will become natural team leaders with the unique ability to identify and limit the phenomenon of “group think” that often plagues underperforming corporations. Graduates will draw out the high potential from their team members, leveraging the team’s ability to analyze problems from many points of reference.

Assessment Method: Course-embedded measure (BA 817, MGMT 861)

4. **Value System**

CFIN graduates will be able to evaluate the ethical and societal implications of the corporate strategic decision-making for which they are involved and responsible.

Learning Objectives:

- CFIN graduates will be skilled at evaluating the impact of various courses of action on multiple stakeholders, including investors, lenders, customers, and the broader community.

Assessment Method: Course-embedded measure (FIN 883)
These learning outcomes will be achieved by a combination of lectures by faculty and invited guest lecturers, reading of key literature, individual and team projects, and practical involvement in a corporate finance capstone experience.

Target Market

The Smeal College CFIN program will be promoted to undergraduates at University Park as a graduate degree to be pursued directly after completion of their undergraduate studies. The program will target students from diverse disciplines that typically have strong quantitative skills and other qualities typically found in STEM-related disciplines. These students are seeking degrees that will enhance their competitive position in hiring for a career in corporate and strategic management that would otherwise be limited with their undergraduate degrees.


Projected Size of the Program

Initially, the size of the first class will be limited to approximately 30 students to assure that teaching, advising, and supervising are appropriately matched with faculty resources. In subsequent years, a class size of 40 is expected. Classes taught in the CFIN program can be considered part of the faculty member’s teaching load or as an overload with extra compensation (on a voluntarily basis) and will not impact the college’s ability to staff other curricular programs in the college. The program may be expanded depending on market needs and availability of faculty resources.

Impact on Existing Programs

The program will have no impact on other PSU programs or campuses. Penn State Great Valley currently offers a resident Master of Finance degree that targets the local audience in the Philadelphia area. The CFIN program will target primarily the undergraduate audience at University Park as a masters to be pursued directly after completion of the undergraduate degree.

No other unit at University Park offers a master-level program that focuses specifically on providing the program’s target population with a specialized Corporate Finance curriculum.

The Smeal College of Business offers a one-year Master of Accounting program (ACCTG_MACC)
to recent baccalaureate graduates with an accounting background. While the age of the students in the Master of Accounting is similar to the anticipated students enrolling in the CFIN program, the background of these student groups is very different.

The Smeal resident M.B.A. program (BA_MBA) offers several core courses that are similar to proposed courses for the FN_MFIN program; however, the BA_MBA program targets an older student with substantial work experience and it requires a second full year of study. The ACCTG_MACC and BA_MBA programs are in their own markets which are different from the CFIN program. In addition, The Smeal College one-year resident M.P.S. program in Organization Leadership (MOL_MPS) targets recent graduates from STEM fields that wish to acquire general business and management knowledge. In contrast, the CFIN program will attract a broad range of students which will include STEM students. Those interested in CFIN will have a specific interest in corporate finance.

Ability to Offer a Quality Program

The Smeal College of Business currently offers a highly ranked resident M.B.A. program and Executive M.B.A. program as well as a world-class M.P.S. in Supply Chain Management and a Master of Accounting program. The College has 68 tenured, 29 tenure-track and 68 fixed-term faculty with Ph.D. degrees. The Smeal faculty are respected experts in their fields, renowned for their cutting-edge research and passion for teaching.

The College has thoroughly considered workload issues within the context of existing programs and is confident that there will be no impact on existing programs. The alignment of resources achieved in this program eliminates the need to hire additional faculty and will create synergies between the programs. The program will require a minimal number of new courses as many of the needed core graduate business courses already exist.

C. New Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 880: Corporate Financial Analytical Research Projects</td>
<td>2</td>
<td>Required course offered as two 1-credit units that develop primary resource analytical skills. Students complete a final Strategic White Paper project and executive presentation that analyzes a “real world” business problem and integrates all knowledge mastered from the program’s course sequence.</td>
</tr>
</tbody>
</table>
The course descriptions of these new courses are provided below:

**FIN 880 Corporate Financial Analytical Research Projects:**
This course, designed as the capstone course, combines multidisciplinary critical analysis and problem solving of corporate strategy in the context of a challenging business environment. The capstone course integrates all of the essential concepts involved in corporate financial decision-making, cultivated throughout the program. Topics will integrate managerial aspects of finance, accounting and statistical analysis including, risk analysis, capital budgeting, NPV project decision-making, and multinational expansion strategy. Students will be expected to approach the analysis as if they were a Chief Financial Officer (CFO) in charge of setting strategic positioning for a simulated corporation, preparing them with the critical analysis and communication skills crucial for a successful corporate finance career.

**REST 575: Quantitative Analysis for Real Estate**
The course introduces quantitative methods and tools widely used in business and real estate analyses and decisions. Course objectives include: Introduce quantitative methods, develop working knowledge of statistical programming languages, and gain experience of using suitable quantitative methods and statistical programming languages to solve business problems.

**D. Program Statement**

Program Statement (to be included in the graduate student handbook)

**D.1 Program Description**
The Master of Finance in Corporate Finance program (CFIN) requires a minimum of 31 credits at the 400, 500, or 800 level. At least 18 credits must be courses at the 500 or 800 level (with at least 6 credits at the 500-level). Courses will be delivered in a resident format with the core courses in Financial Accounting and Applied Statistics offered on-line during the summer session prior to the fall semester.
a. Required Courses (31 cr.)

There are 31 specified credits comprised of the following courses:

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<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>MBADM 811</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>2</td>
</tr>
<tr>
<td>BA 821</td>
<td>Foundations in Managerial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BA 831</td>
<td>Foundations in Finance</td>
<td>2</td>
</tr>
<tr>
<td>FIN 577</td>
<td>Financial Engineering and Corporate Strategy</td>
<td>2</td>
</tr>
<tr>
<td>FIN 855</td>
<td>Global Finance</td>
<td>2</td>
</tr>
<tr>
<td>FIN 871</td>
<td>Strategic Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>FIN 880</td>
<td>Corporate Financial Analytical Research Projects</td>
<td>2</td>
</tr>
<tr>
<td>FIN 881</td>
<td>Fundamentals of Financial Markets</td>
<td>2</td>
</tr>
<tr>
<td>FIN 883</td>
<td>Modern Portfolio Management Theory and Practice</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 861</td>
<td>Global Strategy and Organization</td>
<td>2</td>
</tr>
<tr>
<td>REST 575</td>
<td>Quantitative Analysis for Real Estate</td>
<td>3</td>
</tr>
</tbody>
</table>

D.2 Pattern of Course Scheduling for the Master of Finance in Corporate Finance program

The following is an exemplar schedule of classes and other events required for completion of the degree. The degree requires two semesters of full-time study with on-line core courses starting in the summer semester.

<table>
<thead>
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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>Summer</td>
<td>MBADM 811</td>
<td>Financial Accounting</td>
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</tr>
<tr>
<td></td>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Fall – Module I</td>
<td>BA 831</td>
<td>Foundations in Finance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BA 821</td>
<td>Foundation in Managerial Accounting</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>Fall – Module II</td>
<td>FIN 855</td>
<td>Global Finance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>FIN 881</td>
<td>Fundamentals of Financial Markets</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>FIN 575</td>
<td>Financial Engineering and Corporate Strategy</td>
<td>2</td>
</tr>
<tr>
<td>Spring – Modules III &amp; IV</td>
<td>REST 575</td>
<td>Quantitative Analysis for Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>Spring – Module III</td>
<td>FIN 880</td>
<td>Corporate Financial Analytical Research Projects</td>
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<td>FIN 871</td>
<td>Strategic Financial Management</td>
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<td></td>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>1</td>
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<tr>
<td>Spring – Module IV</td>
<td>FIN 880</td>
<td>Corporate Financial Analytical Research Projects</td>
<td>1</td>
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<tr>
<td></td>
<td>FIN 883</td>
<td>Modern Portfolio Management Theory</td>
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<td></td>
<td>MGMT 861</td>
<td>Global Strategy and Organization</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>1</td>
</tr>
</tbody>
</table>
E. Graduate Bulletin Copy

**CORPORATE FINANCE**

William Kracaw, Ph.D. Chair, Department of Finance; David and Shirley Sykes Professor of Finance
The Smeal College of Business
352 Business Building
814-863-0486

Degree Conferred:
M.Fin.

Finance Graduate Faculty
- Canayaz, Mehmet, Assistant Professor of Finance
- Cao, Charles, Smeal Chair Professor of Finance
- Cornaggia, Jess, Associate Professor of Finance
- Cornaggia, Kimberly, Associate Professor of Finance
- Davis, Brian, Clinical Associate Professor of Finance
- Gattis, Louis, Faculty Director for MBA and EMBA Programs, Clinical Professor of Finance
- Ghadar, Fariborz, Director of Center for Global Business Studies, Professor of Finance
- Gustafson, Matthew, Assistant Professor of Finance
- Haushalter, George David, Academic Director Smeal Trading Room, Calderwood Faculty Fellow, Associate Professor of Finance
- Huang, Jingzhi (Jay), David H. McKinley Professor of Business and Professor of Finance
- Iliev, Peter, Associate Professor of Finance
- Kotter, Jason, Assistant Professor of Finance
- Le, Anh, Assistant Professor of Finance
- Lenkey, Stephen, Assistant Professor of Finance
- Lunn, Jason, Clinical Assistant Professor of Finance
- Nguyen, Giang, Assistant Professor of Finance
- Simin, Timothy, Smeal Research Fellow in Finance, Associate Professor of Finance
- Song, Fenghua, Mary Kathryn Walker Fellowship, Associate Professor of Finance
- Vanden, Joel, Associate Professor of Finance
- Wang, Zhe, Assistant Professor of Finance
- Woolridge, J. Randall, The Goldman Sachs & Co. and Frank P. Smeal Endowed University Fellow, President, Nittany Lion Fund, LLC., and Professor of Finance
The Program

The Master of Finance in Corporate Finance program prepares graduates to stand out in a competitive job market by studying at a highly reputed business school with some of the world’s leading academic thinkers in finance and industry experts. This program provides students with the analytical skills grounded in finance and economics needed to successfully engage as corporate strategic managers. Students will gain the skills needed to succeed in today’s dynamic work environments, gain a firm understanding of issues and problems facing corporate management, develop an understanding and appreciation for leading edge research in corporate finance, and be prepared to become a successful corporate leader. World-class professors who are specialists in finance and economics will teach in the program. A solid foundation in finance, decision analysis, project management, accounting, valuation, market analysis, econometrics, and investment analysis will make the target audience more attractive to hiring managers and enable graduates to advance more rapidly into management and leadership positions.

Admission Requirements

Educational Background

Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Applicants must:

- Hold either a baccalaureate degree from a regionally accredited U.S. institution or a tertiary (postsecondary) degree that is deemed comparable to a four-year bachelor's degree from a regionally accredited U.S. institution
- Submit GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.
- Submit a completed online Graduate School Application for Admission, including a Statement of Purpose, resume, and two letters of recommendation.
- Submit official transcripts from all post-secondary institutions attended.

Applicants who are still completing their baccalaureate requirements at the time of application may be provisionally admitted to the Graduate School, pending the award of the baccalaureate degree; refer to Application and Admission Procedures.

Language of Instruction

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency section of the Graduate Bulletin Application and Admission Procedures page for more information.
Core Application Packet

- Completed official online Graduate School application and payment of nonrefundable application fee.
- Statement of Purpose: a 600 word essay articulating career and educational goals that demonstrate strong written communication skills.
- Résumé.
- Two letters of recommendation that attest to readiness for graduate study.
- Official transcripts from all post-secondary institutions attended.
- GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.
- Visa Application (International Candidates).
- Official English Language Proficiency Exam Scores (International Candidates).
Degree Requirements
Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Total credits required for the CFIN program is 31 credits at the 400, 500, or 800 level, with at least 18 credits at the 500 or 800 level, and at least 6 credits at the 500 level.

REQUIRED COURSES: (31 credits)
There are 31 specified credits comprised of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBADM 811</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>2</td>
</tr>
<tr>
<td>BA 821</td>
<td>Foundations in Managerial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BA 831</td>
<td>Foundations in Finance</td>
<td>2</td>
</tr>
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<td>FIN 577</td>
<td>Financial Engineering and Corporate Strategy</td>
<td>2</td>
</tr>
<tr>
<td>FIN 855</td>
<td>Global Finance</td>
<td>2</td>
</tr>
<tr>
<td>FIN 871</td>
<td>Strategic Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>FIN 880</td>
<td>Corporate Financial Analytical Research Projects</td>
<td>2</td>
</tr>
<tr>
<td>FIN 881</td>
<td>Fundamentals of Financial Markets</td>
<td>2</td>
</tr>
<tr>
<td>FIN 883</td>
<td>Modern Portfolio Management Theory and Practice</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 861</td>
<td>Global Strategy and Organization</td>
<td>2</td>
</tr>
<tr>
<td>REST 575</td>
<td>Quantitative Analysis for Real Estate</td>
<td>3</td>
</tr>
</tbody>
</table>

CAPSTONE:
The CFIN program culminates with the capstone course, FIN 880: Corporate Financial Analytical Research Projects. FIN 880 combines multidisciplinary critical analysis and problem solving of corporate strategy in the context of a challenging business environment. The capstone course integrates all of the essential concepts involved in corporate financial decision making cultivated throughout the program.

The aim of the capstone is to assess students' ability to synthesize and integrate the skills they have developed throughout their course work. This course is structured to support student success in fulfilling program goals and requirements. The projects students tackle will mirror what they'll encounter on the job as a significant member of the corporate planning strategic management team. The course integrates topics and methodologies analyzed throughout the program, leading students to understand that corporate strategic analysis, and ultimately, the firm's ability to enhance shareholder value, is a holistic and multifaceted analytical process.
Student Aid

Refer to the Student Aid section of the Graduate Bulletin. Students in this program are not eligible for graduate assistantships.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

F. Admission Requirements

Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin.

The student cohort reflects today’s international business environment, with selective admittance. With this in mind, the following are the admission requirements:

- Hold either a baccalaureate degree from a regionally accredited U.S. institution or a tertiary (postsecondary) degree that is deemed comparable to a four-year bachelor's degree from a regionally accredited U.S. institution
- Submission of a completed online Graduate School Application for Admission, including a Statement of Purpose, résumé, and two letters of recommendation.
- Official transcripts from all post-secondary institutions attended.
- GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.

Language of Instruction

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency section of the Graduate Bulletin Application and Admission Procedures page for more information.

Acceptable Test Scores

TOEFL
Internet-based test (iBT) - a total score of 80 with a 19 on the speaking section for the internet-based test (iBT). Applicants with iBT speaking scores between 15 and 18 may be considered for provisional admission, with Graduate School approval, which requires completion of specified remedial English courses ESL 114G (American Oral English for Academic Purposes) and/or ESL 116G (ESL/Composition for Academic Disciplines) and attainment of a grade of B or higher within the first semester of enrollment.

Paper-based test (taken prior to July 2017) – the minimum acceptable score is 550.

Paper-based test (taken July 2017 or later) – a combined total of the 3 sections evaluated must be 60 or greater.

IELTS – The minimum acceptable composite score for the IELTS Academic Test is 6.5.

Core Application Packet

- Completed official online [Graduate School application](#) and payment of nonrefundable application fee.
- Statement of Purpose: a 600 word essay articulating career and educational goals that demonstrate strong written communication skills.
- Résumé.
- Two letters of recommendation that attest to readiness for graduate study.
- [Official transcripts from all post-secondary institutions attended](#).
- GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.
- Visa Application (International Candidates).
- [Official English Language Proficiency Exam Scores (International Candidates)](#).

G. Degree Title Justification

The rationale for our proposed title of the program as Master of Finance in Corporate Finance is three-fold:

1) Clearly and specifically describe the proposed program to potential applicants.

2) Eliminate any issue of “cannibalization” or proliferation of similar programs within the Penn State system.

3) Meet the growing demand for a market of potential students interested in a curriculum that delineates a program of study unique and different from a
traditional M.B.A. or general Master of Finance program, currently offered in the graduate school marketplace.

1) Given the proliferation within the academic market of programs offering extremely general M.B.A. programs and general Finance Master’s Degrees, and given the specific target audience for the Master of Finance in Corporate Finance, potential students can be confused as to which program is the “right one” for them.

By titling the program specifically as a Master of Finance in Corporate Finance, Smeal is clear and concise as to why this program may be the correct program for a potential student. To generalize the program in any way as a Master of Finance program would not accurately describe the mission or strengths of the program proposed.

A Master of Finance Program label carries a connotation of skill development for students with career goals across all areas of traditional Finance such as Wall Street, Consulting, and Corporate Finance positions.

Master of Finance in Corporate Finance, as proposed only hopes to enhance students’ prospects in the area of Corporate Finance, i.e., Strategic Planning, Treasury, Controller, Product Management, Supply Chain Management, and eventually career goals in the role of Chief Financial Officer (CFO).

Students enrolling in the Master of Finance in Corporate Finance program should not expect to enhance career opportunities for employment in professions as investment bankers, commercial banking or equity analysts for example.

Generalizing the title of the program as a Master of Finance may promise more to the target audience than Smeal is proposing to or able to offer.

2) The proposed Master of Finance in Corporate Finance program focuses strictly on a Finance course sequence specializing in the skills necessary for students with a Bachelor’s Degree seeking to enhance employment opportunities or salary goals specifically in the areas of Strategic Planning, Corporate Controller, Treasurer and ultimately CFO.

Students of interest include: undergraduate students at University Park graduating in the majors of Marketing, Management, MIS, Economics, Liberal Arts, and the many STEM programs generally in the fields of Engineering. As the Master of Finance in Corporate Finance grows, students from other universities will be targeted within these disciplines, essentially as a 5th year of course of study bolstering employment and salary opportunities. This model has been extremely successful for the MAcc program offered by the Accounting Department at Smeal.

With respect to the important issue of cannibalization and/or proliferation of similar programs offered by Penn State as a whole, the Master of Finance in Corporate Finance program seeks to minimize this issue and clearly distinguish itself
from other successful Penn State programs, specifically the Great Valley Master of Finance.

After extensive communication with the Great Valley program, consensus has easily been reached that the program proposed has not and will not infringe upon Great Valley’s targeted potential student market.

In terms of proliferation of programs, the only program identified is Great Valley who is in agreement with the need and potential success of the Master of Finance in Corporate Finance as currently proposed.

3) The proposed Master of Finance in Corporate Finance program will serve a niche market of potential students interested in a curriculum of study unique and different from a traditional M.B.A. or general Masters of Finance program

There is an important debate within Academic Strategy concerning how to provide the need for general vs. specific business administrative skills. Below, are two articles from the Princeton Review and the Economist that highlight this debate: (https://www.princetonreview.com/business-school-advice/specialized-mba-or-general-mba)

https://www.economist.com/whichmba/specialised-mbas-broader-better)

However, there is a clear market demand for some form of specificity within advanced business degrees—if it is done correctly and for the right type of student. It is exactly this niche that the CFIN Program hopes to fulfill within the competitive marketplace.

A recent Wall Street Journal article lays out many of the advantages of considering a specific Finance degree in conjunction with a BA in Economics degree, the same type of student audience targeted by the Master of Finance in Corporate Finance. https://www.wallstreetmojo.com/finance-vs-economics-difference/

The CFIN is not promising that an Economics or Marketing BA, BS, Major will secure employment on Wall Street. This is the distinguishing aspect of the CFIN Program. The following link shows pay scales of business majors and the opportunity offered by some form of specialization within Finance at the graduate level (https://www.payscale.com/mba-paths)

There are a few related Master of Finance in Corporate Finance programs in the graduate education market but more are expected in the future. This small number is to Smeal’s advantage in terms of target audience and even more importantly, ethically, what we promise as a program. We believe that there is a great opportunity to become one of the leading programs in this emerging market.

Smeal has identified several highly regarded and prestigious programs that specifically offer a similar academic experience:

Master in Corporate Finance & Banking (LUISS)
Smeal plans to meet an underserved segment of the population not only within the Penn State community, but also for the external market of students interested in a corporate finance focused Master’s degree. A program defined clearly as a Master of Finance in Corporate Finance allows the University to directly target this underserved student population.

The degree conferred by the CFIN program will be a Master of Finance in Corporate Finance. This type of professional degree was chosen for the following reasons:

- The CFIN program trains students to apply existing knowledge to practical problems and critically evaluate research beyond the training received with their current baccalaureate degree.

- The CFIN program contains no extensive research or thesis requirement; instead, there is a culminating design project taken during the third and fourth modules (spring semester).

- The CFIN program has a strong focus on financial analysis and economics as applied to corporate management, strategy and planning.

- The CFIN program focuses on professional development for advancement in the student’s specific corporate career.

Institutions where similar programs are in place:

- Massachusetts Institute of Technology
- Princeton University
- The Ohio State University
- University of California, San Diego
- University of Notre Dame
- University of Pittsburgh
- Washington University, St. Louis
- University of Southern California
- The University of Texas at Austin
- Johns Hopkins University
- Villanova University
- University of Illinois at Urbana-Champaign
• Boston College
• University of Miami
• University of Minnesota
• The George Washington University

H. Accreditation

The CFIN program will be incorporated into the Smeal College’s accreditation by the Association to Advance Collegiate Schools of Business (AACSB). Upon approval of the program, AACSB will be notified and the program will be added to Smeal’s accreditation portfolio. There is no known other professional accreditation or licensing process for programs like CFIN. It is possible this will be a future development and will be closely monitored.

I. Consultation Responses

From Smeal Graduate Policy Committee:

From: Lisa Bolton
Sent: Thursday, February 1, 2018 8:23 PM
To: Mike Gilpatrick <mjg11@psu.edu>
Cc: Brent Ambrose <bwa10@psu.edu>
Subject: RE: Graduate Policy Committee (proposal/course reviews)

Mike,

The Graduate Policy Committee voted to approve the following proposals:
* Master of Science in Real Estate
* Master of Corporate Finance
* Sustainability courses

Best,
Lisa

From Penn State Harrisburg:

From: Steve Schappe <sxs28@psu.edu>
Sent: Tuesday, January 30, 2018 9:02 PM
To: Brian Cameron
Subject: New Master of Corporate Finance Consultation

Hi Brian,

I have no objection to your changing the title of the proposed program to Master of Corporate Finance.

Regards,
Steve

Stephen P. Schappe, Ph.D.
Director, School of Business Administration
777 W. Harrisburg Pike
Middletown, PA 17057
717-948-6141
http://hbg.psu.edu/sba

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "Steve Schappe" <sxs28@psu.edu>
Sent: Monday, January 29, 2018 1:39:48 PM
Subject: RE: New MS in Corporate Finance Consultation

Hi Steve

After consultations with the grad school and our faculty, we are changing the title of this program to a Master of Corporate Finance. Nothing in the body of the proposal has changed. This change will allow us greater flexibility in the use of 800 level courses and types of faculty that may teach on the program.

Please confirm your positive consultation with this changed program title.

Thanks

Brian

Brian H. Cameron | Associate Dean for Professional Graduate Programs | Smeal College of Business | The Pennsylvania State University | University Park, PA 16802 | Phone: 814-863-1460 | Email: bcameron@smeal.psu.edu

From: Steve Schappe [mailto:sxs28@psu.edu]
Hi Brian,

Thank you for the opportunity to review Smeal's proposal for a new resident MS in Corporate Finance. We don't have any objections and support the proposal.

Regards,
Steve

---

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "Steve Schappe" <sxs28@psu.edu>
Sent: Wednesday, January 10, 2018 3:09:56 PM
Subject: New MS in Corporate Finance Consultation

Hello Steve

Attached is a draft program proposal (and associated new courses) for a new resident MS in Corporate Finance. Would you be able to review the proposal and send me any questions or comments by January 30? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great week!

Brian

---

Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
University Park, PA 16802-3603
814.863.1460 office
From Black School of Business, Penn State Erie

From: Greg Filbeck <mgf11@psu.edu>
Sent: Monday, January 29, 2018 2:02 PM
To: Brian Cameron
Subject: New Master of Corporate Finance Consultation

Absolutely. Continue to support!

Dr. Greg Filbeck, CFA, FRM, CAIA, CIPM, PRM
Samuel P. Black III Professor of Finance and Risk Management
Director, Black School of Business
Penn State Erie, the Behrend College
281 Burke
Erie, PA 16563

On Jan 29, 2018, at 1:39 PM, Brian Cameron <bcameron@smeal.psu.edu> wrote:
Hi Greg

After consultations with the grad school and our faculty, we are changing the title of this program to a Master of Corporate Finance. Nothing in the body of the proposal has changed. This change will allow us greater flexibility in the use of 800 level courses and types of faculty that may teach on the program.

Please confirm your positive consultation with this changed program title.

Thanks

Brian

From: Greg Filbeck [mailto:mgf11@psu.edu]
Sent: Wednesday, January 10, 2018 3:32 PM
To: Brian Cameron
Subject: Re: New MS in Corporate Finance Consultation

Yes, absolutely I concur! Great program!

Dr. Greg Filbeck, CFA, FRM, CAIA, CIPM, PRM
Samuel P. Black III Professor of Finance and Risk Management
Director, Black School of Business
Penn State Erie, the Behrend College
281 Burke
Erie, PA 16563

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "MICHAEL FILBECK" <mgf11@psu.edu>
Sent: Wednesday, January 10, 2018 3:16:23 PM
Subject: RE: New MS in Corporate Finance Consultation

Thanks for the very fast turnaround Greg!

Yes, you are correct on the real estate question.

Do you concur with the advancement of the proposal?

Thanks again and great seeing you as well!

Brian

Brian H. Cameron | Associate Dean for Professional Graduate Programs | Smeal College of Business | The Pennsylvania State University | University Park, PA 16802 | Phone: 814-863-1460 | Email: bcameron@smeal.psu.edu

From: Greg Filbeck [mailto:mgf11@psu.edu]
Sent: Wednesday, January 10, 2018 3:14 PM
To: Brian Cameron
Subject: Re: New MS in Corporate Finance Consultation

Brian,

The program looks very solid and impressive! I also scanned the individual courses. I assume the real estate course ties into the road of a corporate finance officer's understanding of real estate acquisition, valuation (that was the only class I was unsure of content, the others all very much are in line with corporate finance.

Good to see you on Monday!

Greg
From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "MICHAEL FILBECK" <mgf11@psu.edu>
Sent: Wednesday, January 10, 2018 3:08:20 PM
Subject: New MS in Corporate Finance Consultation

Hello Greg

Attached is a draft program proposal (and associated new courses) for a new resident MS in Corporate Finance. Would you be able to review the proposal and send me any questions or comments by January 30? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great week!

Brian

________________________________________________________________________________

Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
University Park, PA 16802-3603
814.863.1460 office
bcameron@smeal.psu.edu
www.smeal.psu.edu
http://www.linkedin.com/pub/brian-cameron/0/814/51

From Penn State Great Valley:

From: Kathryn Jablokow <kwl3@psu.edu>
Sent: Monday, January 29, 2018 3:57 PM
To: Brian Cameron
Cc: JAMES A NEMES
Subject: New Master of Corporate Finance Consultation
Hi Kathryn,

We're fine with this change in the program title.

Thanks,
Kathryn

Kathryn W. Jablokow, Ph.D., FASME
Associate Chief Academic Officer
Professor of Engineering Design and Mechanical Engineering
School of Graduate Professional Studies
The Pennsylvania State University
30 E. Swedesford Road, Malvern, PA 19355
Phone: 610-648-3372
Fax: 610-648-3377

Hi Brian,

After consultations with the grad school and our faculty, we are changing the title of this program to a Master of Corporate Finance. Nothing in the body of the proposal has changed. This change will allow us greater flexibility in the use of 800 level courses and types of faculty that may teach on the program.

Please confirm your positive consultation with this changed program title.

Thanks

Brian

Brian H. Cameron | Associate Dean for Professional Graduate Programs | Smeal College of Business | The Pennsylvania State University | University Park, PA 16802 | Phone: 814-863-1460 | Email: bcameron@smeal.psu.edu
From: Kathryn Jablokow [mailto:kwl3@psu.edu]
Sent: Monday, January 22, 2018 8:00 PM
To: Brian Cameron
Cc: JAMES A NEMES
Subject: Re: New MS in Corporate Finance Consultation

Hi Brian,
I think we're good for now. Thanks for your additional assurances.

Best regards,
Kathryn

Kathryn W. Jablokow, Ph.D., FASME
Associate Chief Academic Officer
Professor of Engineering Design and Mechanical Engineering
School of Graduate Professional Studies
The Pennsylvania State University
30 E. Swedesford Road, Malvern, PA 19355
Phone: 610-648-3372
Fax: 610-648-3377

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "KATHRYN WEED JABLOKOW" <kwl3@psu.edu>
Cc: "JAMES A NEMES" <jan16@psu.edu>
Sent: Wednesday, January 17, 2018 10:45:56 AM
Subject: Re: New MS in Corporate Finance Consultation

Hi Kathryn

Thanks for the quick response. Our primary target market for the resident MS in Finance is our UP undergraduate population who would stay and do the program as a fifth year program.

Our faculty feel that we will fill the program with Smeal students that could not get into our undergrad finance major.

My understanding is that a majority of the students in your master of finance program come from China. We do not plan to actively recruit internationally for our program and will focus most of our recruiting efforts on our UP population.

If you have any other ideas that would help address any concerns, please let me know and I'd be happy to set up a time to discuss further.

Best regards,
Brian

From: Kathryn Jablokow <kwl3@psu.edu>
Sent: Wednesday, January 17, 2018 8:11 AM
To: Brian Cameron
Cc: JAMES A NEMES; KATHRYN WEED JABLOKOW
Subject: Re: New MS in Corporate Finance Consultation

Brian,
We have reviewed the program and course proposals. While we do support them, we also want to register our concern about the potential for this program to cut into our (Great Valley's) international applications for our own Finance program. If that concern can be addressed further, it would be appreciated.

Thank you,
Kathryn

Kathryn W. Jablokow, Ph.D., FASME
Associate Chief Academic Officer
Professor of Engineering Design and Mechanical Engineering
School of Graduate Professional Studies
The Pennsylvania State University
30 E. Swedesford Road, Malvern, PA 19355
Phone: 610-648-3372
Fax: 610-648-3377

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "KATHRYN WEED JABLOKOW" <kwil3@psu.edu>
Cc: "JAMES A NEMES" <jan16@psu.edu>
Sent: Wednesday, January 10, 2018 3:07:20 PM
Subject: New MS in Corporate Finance Consultation

Hello Kathryn

Attached is a draft program proposal (and associated new courses) for a new resident MS in Corporate Finance. Would you be able to review the proposal and send me any questions or comments by January 30? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great week!

Brian
From Penn State Statistics Department for use of STAT 500 course:

From: David Hunter <dhunter@stat.psu.edu>
Sent: Tuesday, January 23, 2018 3:17 PM
To: Brian Cameron
Subject: Re: Discussion Follow Up

Importance: High

Hi, Brian. My apologies for the delay! And thanks for following up.

I’m happy to concur that the inclusion of STAT 500 among the requirements for these two programs will not create any insurmountable problems for us, and I support these programs as you’ve described them to me.

Best wishes,
Dave

------
David Hunter
Professor and Head
Department of Statistics
Penn State University
Phone: (814) 865-1348
Fax: (814) 863-7114
www.stat.psu.edu/~dhunter

On Jan 23, 2018, at 2:38 PM, Brian Cameron <bcameron@smeal.psu.edu> wrote:

Hi David

Just following up on the note below – would it be possible to get an email of concurrence this week if possible?
Please let me know if we need to have another discussion.

Thanks,

Brian

Brian H. Cameron | Associate Dean for Professional Graduate Programs | Smeal College of Business | The Pennsylvania State University | University Park, PA 16802 | Phone: 814-863-1460
| Email: bcameron@smeal.psu.edu

From: Brian Cameron
Sent: Thursday, January 11, 2018 8:44 AM
To: 'David Hunter'
Subject: Discussion Follow Up
Importance: High

Hello David

We had a discussion on December 6 regarding the use of STAT 500 in two of our proposed masters programs. We want to require that the students in these programs take STAT 500 over the summer at the start of both of these programs.

You felt that allowing approximately 20 students from each program into STAT 500 over the summer would not be a problem.

I am in process of developing the program proposals for both of these programs and need a note from you for each program stating that you concur with the use of STAT 500 in each program. An email from you for each program would be fine.

The first program is a Master of Corporate Finance and the second program is an MS in Real Estate Analysis and Development.

Would you be able to send me an email of concurrence/support for each of these programs?

Thanks for your help!

Brian
From Chair of the Online MBA Executive Committee on the use of MBADM 811:

From: Lorraine Reitz on behalf of Charles H. Whiteman  
Sent: Thursday, February 15, 2018 4:22 PM  
To: RALPH FORD; MUKUND SHIVRAM KULKARNI; JAMES A NEMES; rse1@psu.edu; MICHAEL VERDERAME  
Cc: RHONDA J STEG; SHARON ANN BLOUCH; SUZAN LYNN KERSHNER; Brian Cameron; Judy Wills; CATHLEEN J MURGAS; Stacey Dorang Peeler; Melissa Forsha; Charles H. Whiteman  
Subject: Confirmation - approval of additional sections of OMBA core courses

Dear Members of the Online MBA Executive Committee,

This is to certify that the request below has been approved by the OMBA Executive Committee.

Thanks to all of you for your timely responses.

Regards,

Chuck

___________________________
Charles H. Whiteman  
John and Becky Surma Dean  
Smeal College of Business  
The Pennsylvania State University  
210 Business Building  
University Park, PA 16802-3603  
814-863-0448  
814-865-7064 (fax)  
cwhiteman@smeal.psu.edu
From: "Charles H. Whiteman" <cwhiteman@psu.edu>
To: "RALPH FORD" <rmf7@psu.edu>, "MUKUND SHIVRAM KULKARNI" <msk5@psu.edu>, "JAMES A NEMES" <jan16@psu.edu>, "rse1" <rse1@psu.edu>, "Michael Verderame" <mxv8@psu.edu>
Cc: "RHONDA J STEG" <rjv3@psu.edu>, "SHARON ANN BLOUCH" <svb5@psu.edu>, "SUZAN LYNN KERSHNER" <slk28@psu.edu>, "Brian Cameron" <bcameron@smeal.psu.edu>, "Judy Wills" <jcw25@psu.edu>, "CATHLEEN J MURGAS" <cjm28@psu.edu>, "Stacey Dorang Peeler" <sld138@psu.edu>, "Melissa Forsha" <mzc4@psu.edu>, "Charles H. Whiteman" <cwhiteman@psu.edu>
Sent: Tuesday, February 13, 2018 3:32:49 PM
Subject: Request for approval of additional sections of OMBA core courses

Dear Members of the Online MBA Executive Committee,

Last year, Smeal made the request below to create sections of select core online MBA courses for use in other Smeal masters programs.

The process for allowing any of the partners in the online MBA program to create a section of any of the core online MBA courses for use in other programs is attached.

We are now planning new resident masters programs in Smeal and are asking permission of the Executive Committee to use an existing Smeal section of the following course:

MBADM 811 Financial Accounting – a Smeal section of this course already exists and we would like to use that Smeal section and possibly one or more future Smeal sections of this course in a new resident MS in Real Estate Development and Analysis as well as in a new resident Master of Finance. We will likely offer MBADM 811 as a web resident summer section to these programs.

Please let me know if you concur with our request by February 19, 2018.

Best regards,
Chuck
J. SARI Requirements

All graduate students must participate in Scholarship and Research Integrity (SARI) training. The Penn State Smeal Master of Finance in Corporate Finance program will complete this requirement through three primary avenues: FIN 881 Fundamentals of Financial Markets, FIN 880 Corporate Financial Analytical Research Projects, and REST 575 Quantitative Analysis for Real Estate. Based on the course sequence in the program, students will complete 2.5-hours of discussion-based RCR during the fall semester (in FIN 881) and 2.5-hours in the spring semester (in FIN 880 and REST 575).
K. Consultation with ORP-SARI Documentation

February 6, 2018

Dear Dr. Cameron,

I am pleased to inform you that the SARI@PSU Program Plan for Smeal College of Business, Master of Corporate Finance has been received and approved for implementation beginning in the fall semester of 2019. Thank you very much for your time and attention to detail.

We have set up a folder in Box at Penn State to facilitate SARI@PSU program tracking and communication. Here, we will keep a copy of your plan, your syllabi for the courses that will provide RCR instruction to your graduate students, and a tracking form you will need to upload once a year (in June or July) letting the ORP know the progress of your students. Once your program is under way, please contact us with information regarding your program administrator so we will know who to contact. The first time you will need to upload the spreadsheet will be the summer of 2020. Our goal is to make this system as simple and transparent as possible, so please let us know if you have any comments or suggestions.

If, in the future, you find that changing needs require you to modify your SARI@PSU plan, please let us know and submit a revised SARI@PSU program plan form to the Office for Research Protections at least 30 days prior to the change. You may do this by email. Documents to support the SARI@PSU program can be found on the SARI@PSU website (www.research.psu.edu/training/sari), which includes additional resources for SARI@PSU education. As always, your questions, comments, and suggestions concerning any aspect of the SARI@PSU program are welcome.

Thank you again for your participation in this important initiative, and for supporting Penn State’s commitment to modeling and teaching the responsible conduct of research and scholarship in our community.

Sincerely,

Deb

Debrah Poveromo
Education Coordinator
Dap192@psu.edu
814-863-1441
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal documents with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of Graduate Studies in the Graduate School.

College/School: Smeal College of Business
Department or Instructional Area: Risk Management

New Graduate Program, Option, or Minor: Add
Designation of new graduate program: Master of Science in Real Estate Analysis and Development
Classification of Instructional Programs (CIP) Code:
Designation of new graduate option: 
Designation of new graduate minor: 

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change Drop
Current designation of graduate program: 
Current designation of graduate option: 
Current designation of graduate minor: 

New designation of existing graduate program (if changing):
New designation of existing graduate option (if changing):
New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above):

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head
Brent Ambrose
Printed name
Signature
Date: 3/15/18

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:
Arvind Rangaaswamy
Printed name
Signature
Date: 2/19/18

Approved by College/School Dean/Chancellor (or Designee):
Russell Barton
Printed name
Signature
Date: 3/15/18
Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:

On Behalf of David Babb
Printed name
Signature
Date: 10/19/2018

Recommended by Chair, Graduate Council Committee on Programs and Courses:

On Behalf of C. Andrew Cole
Printed name
Signature
Date: 10/19/2018

Noted by Dean of the Graduate School:

On Behalf of Regina Vasilatos-Younken
Printed name
Signature
Date: 10/19/2018
PROPOSAL —
MASTER OF SCIENCE IN REAL ESTATE ANALYSIS AND DEVELOPMENT

THE PENNSYLVANIA STATE UNIVERSITY — SMEAL COLLEGE OF BUSINESS
DR. BRENT AMBROSE, SMEAL PROFESSOR OF REAL ESTATE, DIRECTOR, INSTITUTE FOR REAL ESTATE STUDIES, PH.D. PROGRAM FACULTY DIRECTOR
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Introduction

The Smeal College of Business is proposing a Master of Science (M.S.) in Real Estate Analysis and Development (REA_MS). The REA_MS is designed as a one-year program. This degree is targeted at individuals wishing to have a career in the real estate industry or a related field. The target population includes graduates from engineering and architecture, economics, finance, business, hospitality management, landscape architecture, and other related disciplines that have a strong interest in the real estate industry. This 32 credit master’s program will provide students a solid foundation in the concepts associated with real estate finance, investment, and development analysis as well as quantitative research methods that are needed to solve problems in the real estate industry. The program will provide students with the required analytical tools necessary to analyze the real estate markets and conduct basic research on problems or issues they may encounter in their careers. As real estate is an interdisciplinary field that spans micro-economics, macro-economics, urban economics, finance, geography, architecture, and engineering, the program will be a natural springboard for students wishing to pursue doctoral level training in any of these fields.

This proposal defines the motivation, target audience, approach and viability of developing a new Master of Science in Real Estate Analysis and Development.

MS Degree Requirements Summary

The following guidelines for the M.A. and M.S. degrees are meant to ensure these programs meet essential standards of quality. All new program and program change proposals submitted must include a description of how the program will meet these requirements. All proposals for M.A. and M.S. degree programs must include evidence of:

1. the active participation of tenure-line and/or research-active faculty in overseeing and teaching in the program;

All tenure-line faculty in the real estate area of the Department of Risk Management will participate in this program. Tenure-line faculty are serving as the program head and codirectors. All real estate tenure-line faculty are teaching in the program in addition to tenure line faculty in business economics and finance. The program contains 19-credits at the 500-level. The real estate faculty consistently ranks in the top-5 in the world in terms of research productivity and visibility. As a result of this performance, the real estate faculty members hold many leadership and editorial board positions within the real estate academic community. Furthermore, in testimony to the research visibility of the real estate group at Penn State, the faculty sponsor one of the premier Ph.D. programs in the field as evidenced by recent (past five-years) placements by graduates in academic positions at the University of Wisconsin-Madison,
the University of Georgia, the University of Notre Dame, Clemson University, and Georgia State University.

2. a low student/adviser ratio, with a high degree of one-on-one interaction;

With two co-directors and one program head, the program will provide a low student/advisor ratio. Assuming 20 students in the program, the program will have a student-advisor ratio of 6.7-to-1. In addition, the Real Estate Colloquium (REST 590) will provide significant opportunities for one-on-one interaction with the real estate tenure line faculty.

3. course work on research methodology and analysis;

The REA_MS program contains eight (10) credits of course work covering research methods and analysis (BA 512, REST 560, REST 575, REST 590, REST 840).

4. the same standards for the M.A. and M.S. degrees regardless of delivery method; and

The REA_MS program is only delivered at University Park to resident students.

5. a culminating experience for the M.A. and M.S. degrees that demonstrates students have the capacity to conduct research, scholarly analysis, or creative scholarly investigations, and effectively communicate their scholarship.

The culminating experience in the REA_MS program is the Institutional Real Estate Investment course (REST 570). This course requires students to apply and integrate the knowledge, skills, and research methods that were gained throughout the REA_MS program. The platform of institutional real estate investment provides numerous opportunities for research projects related to real estate securities and markets. The course will offer students the opportunity to expand on research topics, tools, and methods acquired in previous courses. Students will create a capstone research paper or project as one of the major deliverables in this course.

A. Program Justification

The Penn State Smeal College of Business faculty contains a group of pre-eminent scholars in the academic real estate field. The real estate faculty consistently ranks in the top-5 in the world in terms of research productivity and visibility. As a result of this performance, the real estate faculty members hold many leadership and editorial board positions within the real estate academic community. The active research agenda of the real estate faculty is also evidenced by their sponsorship of one of the premier Ph.D. programs in the field that has placed graduates in academic positions at the University of Wisconsin-Madison, the University of Georgia, the University of Notre Dame, Clemson University, and Georgia State University. In addition, the Penn State real estate program hosts an alumni advisory board comprising over 30
senior executives in the real estate industry that are committed to supporting the program and its initiatives. The REA_MS program will leverage the academic reputation of the faculty and the industry support from the advisory board to create a master’s degree program that develops economic and financial analytical skills based on the rigorous application of and insights from the leading research tools and techniques developed by the faculty. Feedback from the real estate advisory board indicates a growing demand for individuals with specialized skills in the analysis of real estate decisions, development, and investments. Furthermore, according to the 2017 Select Leaders Real Estate Hiring Trends Survey (https://www.selectleaders.com/employer/2017-Real-Estate-Hiring-Trends-Survey-Results) 71% of respondents reported revenue growth in their firms over 2016 but 50% of respondents reported no hiring in 2017 over 2016. Given the real estate industry revenue growth and lack of hiring, over 70% of respondents expected positive growth in compensation. Thus, these trends suggest upward pressure for new positions as the industry expands.

Unlike other professional masters (MPS) programs, the REA_MS program will provide students with a solid theoretical foundation in how real estate space, property, and mortgage markets function and how they may differ from markets of other products and assets. The REA_MS program will also provide students with the required special analytical tools necessary to analyze these markets and conduct basic research on problems or issues they may encounter in their careers in their careers. In addition, as an interdisciplinary field that spans micro-economics, macro-economics, urban economics, finance, geography, architecture, and engineering, the REA_MS program will be a natural springboard for students wishing to pursue doctoral level training in any of these fields.

Real estate as an asset class and as an academic field of study requires special analytical tools and techniques. From an asset standpoint, the industry is characterized by significant heterogeneity in demand and supply, illiquidity, indivisibility, and specific institutional and legal frameworks impacting its use and value. Thus, from an academic perspective, the study of real estate is an interdisciplinary field requiring special economic theories and unique econometric tools that only a MS degree focusing on real estate can possibly offer. From a professional development standpoint, many career opportunities in real estate asset and investment management require the unique research skills that are only acquired in master’s (MA/MS) or doctoral degree programs. By capitalizing on the strong research focus of the tenure-line real estate faculty at Penn State, the REA_MS will be one of the few programs that will provide students with the required research skills that can translate into research oriented positions in real estate analysis or into doctoral degree programs in real estate, economics, or finance. In contrast, real estate professional master’s programs (MPS) target students desiring non-research oriented careers in the real estate industry (such as appraisal, brokerage, or property management) and thus MPS programs emphasize the acquisition of institutional knowledge and applications. The MS_REA program will target students desiring careers in research or analysis.
Faculty Members

**CVs are available for all faculty**

Program Head

Brent W. Ambrose, Ph.D., Smeal Professor of Real Estate and Director, Institute for Real Estate Studies (IRES), and Director of Smeal College Ph.D. and M.S. Programs

Co-Directors (program oversight and student selection)

Liang Peng, Ph.D., Associate Professor of Real Estate, Smeal College of Business

Jiro Yoshida, Ph.D., Associate Professor of Business, Smeal College of Business

Real Estate Graduate Faculty

Brent W. Ambrose, Ph.D., Smeal Professor of Real Estate and Director of the Institute for Real Estate Studies (IRES), and Director of Smeal College Ph.D. and M.S. Programs

Liang Peng, Ph.D., Associate Professor of Real Estate and King Faculty Fellow

Jiro Yoshida, Ph.D., Associate Professor of Business

Sanket Korgaonkor, Ph.D., Assistant Professor of Real Estate

Mallory Meehan, J.D., Clinical Assistant Professor of Real Estate and Assistant Director of the Institute for Real Estate Studies (IRES)

B. Program Objectives

The Master of Science in Real Estate Analysis and Development (REA_MS) will prepare graduates to stand out in a competitive job market by studying at a highly reputed business school with some of the world’s leading real estate academic thinkers and industry experts. This program will provide students with the analytical skills grounded in economics and finance required to successfully engage in the real estate industry. Students will gain the skills needed to succeed in today’s dynamic work environments, gain a firm understanding of issues and problems facing the real estate industry, develop an understanding and appreciation for leading edge research used to solve problems in real estate markets, and be prepared to become a successful leader. World-class professors who are specialists in real estate finance and economics will teach in the program. A solid foundation in decision analysis, project management, accounting, valuation, market analysis, econometrics, investment analysis and
finance will make the target audience more attractive to hiring managers and enable graduates to advance more rapidly into management and leadership positions.

Key features of the REA_MS program include:

- **Learn the “Language of Real Estate”:** Gain a solid real estate background to open up advancement opportunities. The REA_MS will open career opportunities that would have been unavailable without a graduate business degree.
- **Experiential Learning:** The program delivers this core real estate knowledge through high-impact experiential learning, small-group interaction in class, and team-based projects focused on real-world application.
- **Learning Environment:** Engage in challenging, fast-paced coursework that prepares students to successfully deal with on-the-job demands in a wide range of organization structures found in the real estate industry.
- **Team-Based Learning:** The real estate industry comprises high-functioning teams to solve today’s complex real estate development and investment problems. To prepare for this environment, students will participate on small teams during the program to learn, grow, and excel together.
- **Selective Peer Group:** The Smeal REA_MS program is highly selective and each student engages with professors and classmates in a dynamic, rigorous learning environment.
- **Real Estate Research and Communication:** Leveraging the resources associated with the Institute for Real Estate Studies, students will actively engage in research projects that will cultivate critical thinking skills that apply modern economic and financial analysis to real estate problems and then learn to effectively communicate their findings to a broader audience.
- **World-Class Faculty:** Students in the program will take classes from Smeal’s world-class faculty. Our professors are respected experts, renowned for their cutting-edge research and passion for teaching.

**Learning Goals and Objectives**

The Master of Science in Real Estate Analysis and Development Learning Goals and Objectives include:

1. **Demonstrate Competency In and Across Real Estate Disciplines**
   REA_MS graduates will master a broad core of financial and economic knowledge and be able to integrate and apply this knowledge to business situations within the real estate industry requiring interdisciplinary and global perspectives.

   Learning Objectives:
REA_MS graduates will be able to demonstrate competency in the underlying concepts, theory, and tools taught in the REA_MS curriculum.

REA_MS graduates will be able to use their knowledge of economics, finance, and real estate institutions and markets to identify, analyze, and recommend solutions to complex real estate problems and projects requiring interdisciplinary and global perspectives.

REA_MS graduates will be capable of designing and implementing rigorous research methods to create new solutions to critical problems facing the real estate industry.

Assessment Method: Course-embedded measure (REST 570)

2. Analytical and Critical Thinking Skills
REA_MS graduates will develop analytical and critical thinking skills needed to excel in today’s business environment.

Learning Objectives:
- REA_MS graduates will acquire the analytical and critical thinking skills needed to identify, analyze, and evaluate alternative solutions to problems and projects facing the real estate industry.
- REA_MS graduates will develop the skills needed to craft and implement strategic and tactical plans.
- REA_MS graduates will be able to articulate and defend their analysis and recommended solutions to multiple audiences from business, government, and the community.
- REA_MS graduates will be able to integrate findings and analysis from cutting edge research to problems and projects in the real estate industry.

Assessment Method: Course-embedded measure (REST 570, REST 880, REST 590)

3. Interpersonal Skills
REA_MS graduates will possess the interpersonal skills needed to be effective managers and leaders.

Learning Objectives:
- REA_MS graduates will be skilled at leadership, team building, interpersonal influence, and the management of change.
- REA_MS graduates will be able to communicate and work effectively with others in work settings involving cultural and demographic diversity.
- REA_MS graduates will be competent at writing clear, concise, and analytical reports and documents.

Assessment Method: Course-embedded measure (REST 590, BA 817)

4. Value System
REA_MS graduates will be able to evaluate the ethical and societal implications of real
estate investment and development decisions.

Learning Objectives:
- REA_MS graduates will be skilled at evaluating the impact of various courses of action on multiple stakeholders, including investors, lenders, customers, and the broader community.

Assessment Method: Course-embedded measure (REST 880, REST 590)

Assessment Measures:

These learning outcomes will be achieved by a combination of lectures by faculty and invited guest lecturers, reading of key literature, individual and team projects, and practical involvement in a real estate development capstone experience and or a research project. Course embedded measures will include an exam administered every Spring in the capstone course (REST 570), writing assignments embedded in REST 590 and REST 570, and a speaking assignment embedded every Spring in BA 817.

Target Market

The Smeal College REA_MS will target students from diverse disciplines that typically have strong quantitative skills. Backgrounds include: Engineering, Physical Sciences, Geosciences, Math and Computer Sciences, Life Sciences, Science, Architecture, Computer and Information Sciences, Engineering Technologies, Interdisciplinary Studies, Mathematics and Statistics, Natural Resources and Conservation, Neurobiology, Economics, Finance, Accounting, Entrepreneurship, Security and Risk Analysis, Agricultural Sciences, Earth and Mineral Sciences, and many other disciplines.

Projected Size of the Program

Initially, the size of the first class will be limited to approximately 20 students to assure that teaching, advising, and supervising are appropriately matched with faculty resources. In subsequent years, a class size of 30 is expected. Classes taught in the REA_MS program can be considered part of the faculty member’s teaching load or as an overload with extra compensation (on a voluntarily basis) and will not impact the college’s ability to staff other curricular programs in the college. The program may be expanded depending on market needs and availability of faculty resources.

Impact on Existing Programs

Penn State does not offer any related program and thus the REA_MS will have no impact on existing programs. The Smeal College of Business offers a one-year Master of Accounting program that targets recent graduates with an accounting background. While the age of the target population for the Master of Accounting is similar to the REA_MS, the background of primary target audience is very different. The Smeal M.B.A. program offers core courses that are similar to the courses in the REA_MS but the M.B.A. program targets an older student with
substantial work experience and requires a second full year of study. Both programs are targeted at very different markets from the REA_MS. The Smeal Master of Professional Studies in Management and Organizational Leadership (MOL_MPS) program targets recent graduates from STEM fields that wish to acquire general business and management knowledge. In contrast, the REA_MS program targets students who have clearly identified a desire to have a career in the real estate industry.

Ability to Offer a Quality REA_MS Program

The Smeal College of Business currently offers highly ranked Resident and Executive M.B.A. programs as well a leading Master of Professional Studies in Supply Chain Management (SCM_MPS) and Master of Accounting (ACCTG_MACC) programs. The College has 68 tenured, 29 tenure-track and 68 fixed-term faculty with Ph.D. degrees. The Smeal faculty are respected experts in their fields, renowned for their cutting-edge research and passion for teaching.

The College has thoroughly considered workload issues within the context of existing programs and is confident that there will be no impact on existing programs. The alignment of resources achieved in this program eliminates the need to hire additional faculty and will create synergies between the programs. The program will require a minimal number of new courses as many of the needed core graduate business courses already exist.

C. New Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>REST 550: Contemporary Issues in Real Estate Markets</td>
<td>3</td>
<td>Course grounded in current real estate research and designed to expose students to the latest theoretical frameworks, empirical analysis, and real estate markets.</td>
</tr>
<tr>
<td>REST 575: Quantitative Analysis for Real Estate</td>
<td>3</td>
<td>Course introduces widely used quantitative methods in real estate analysis and research.</td>
</tr>
<tr>
<td>REST 590: Real Estate Colloquium</td>
<td>1-3</td>
<td>Repeatable course offered as variable credit covering topics related to faculty expertise.</td>
</tr>
<tr>
<td>REST 830: Real Estate Institutions and Market Analysis</td>
<td>1</td>
<td>Builds a foundation for successful completion of the REA_MS program by covering modern real estate analysis and risk management.</td>
</tr>
</tbody>
</table>
REST 840: Real Estate Analysis Software and Tools

Introduces students to the leading edge real estate industry analysis software programs preparing students for industry certification exams.

REST 880: Real Estate Development and Analysis

Focuses on complexities and problems associated with large commercial real estate development projects which can include site visits to projects associated with IRES Real Estate Advisory Board members.

Course descriptions of these new courses are given below:

REST 550: Contemporary Issues in Real Estate Markets

REST 550 surveys important issues in real estate markets, including special characteristics of real estate markets, valuation of real properties, mortgage mechanics and calculations, valuing investment opportunities, financing corporate real estate, financing project development, and the secondary mortgage market.

REST 575: Quantitative Analysis for Real Estate

The course introduces quantitative methods and tools widely used in business and real estate analyses and decisions. Course objectives include: Introduce quantitative methods, develop working knowledge of statistical programming languages, and gain experience of using suitable quantitative methods and statistical programming languages to solve business problems.

REST 590: Real Estate Colloquium

This is a variable credit course. Each course offering will focus on the research expertise of the faculty. The seminars will involve research presentations by leading academics from around the world. Examples of topics that may be covered include real estate finance, mortgage markets, real options and development, leasing, housing, urban development, tax policies, along with many others.

REST 830: Real Estate Institutions and Market Analysis:

This course is intended to build a foundation for successful completion of the MS in Real Estate Analysis and Development (REA_MS). The course has three objectives: a) provide an introduction to modern real estate analysis, b) introduce risk management, and c) develop a series of analytical techniques associated with real estate risk analysis.

REST 840: Real Estate Analysis Software and Tools

This course will provide a comprehensive overview of leading real estate industry software used for financial and investment analysis. Students successfully completing this course will be prepared to sit for industry certification exams.
REST 880: Real Estate Development and Analysis

This course focuses on academic theories and research in real estate investment analysis and development. The course content is grounded in current academic literature and students will demonstrate analytical thinking and application of this knowledge to practical problems in the real estate industry. A research paper or project will be one of the major deliverables in this course.

D. Program Statement

Program Statement (to be included in the graduate student handbook)

D.1 Program Description

The Master of Science in Real Estate Analysis and Development (REA_MS) program requires a minimum of 32 credits. At least 18 credits must be courses at the 500-level. Courses will be delivered in a resident format with the core courses in Financial Accounting and Applied Statistics offered on-line during the summer session prior to the fall semester.

Required Courses (32 cr.):

There are 32 specified credits comprised of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBADM 811</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>BA 817</td>
<td>Communication Skills for Management (repeatable)</td>
<td>–2 total</td>
</tr>
<tr>
<td>BA 821</td>
<td>Foundations in Managerial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BA 831</td>
<td>Foundations in Finance</td>
<td>2</td>
</tr>
<tr>
<td>FIN 577</td>
<td>Financial Engineering and Corporate Strategy</td>
<td>2</td>
</tr>
<tr>
<td>REST 550</td>
<td>Contemporary Issues in Real Estate Markets</td>
<td>3</td>
</tr>
<tr>
<td>REST 560</td>
<td>Real Estate Financial Analysis</td>
<td>2</td>
</tr>
<tr>
<td>REST 570</td>
<td>Institutional Real Estate Investment</td>
<td>2</td>
</tr>
<tr>
<td>REST 575</td>
<td>Quantitative Analysis for Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REST 590</td>
<td>Real Estate Colloquium (repeatable)</td>
<td>–2 total</td>
</tr>
<tr>
<td>REST 830</td>
<td>Real Estate Institutions and Market Analysis</td>
<td>1</td>
</tr>
<tr>
<td>REST 840</td>
<td>Real Estate Analysis Software Tools</td>
<td>1</td>
</tr>
<tr>
<td>REST 880</td>
<td>Real Estate Development and Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>
**D.2 Pattern of Course Scheduling for the REA_MS program**

The following is an exemplar schedule of classes required for completion of the degree. The degree requires two semesters of full-time study with on-line core courses starting in the summer semester.

<table>
<thead>
<tr>
<th>Semester/Module</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>MBADM 811</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Fall – Module I</td>
<td>BA 831</td>
<td>Foundations in Finance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BA 821</td>
<td>Foundation in Managerial Accounting</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>REST 830</td>
<td>Real Estate Institutions and Market Analysis</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>REST 590*</td>
<td>Real Estate Colloquium</td>
<td>0.5</td>
</tr>
<tr>
<td>Fall – Module II</td>
<td>REST 560</td>
<td>Real Estate Financial Analysis</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>REST 590*</td>
<td>Real Estate Colloquium</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>FIN 577</td>
<td>Financial Engineering and Corporate Strategy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>REST 840</td>
<td>Real Estate Analysis Software and Tools</td>
<td>1</td>
</tr>
<tr>
<td>Spring – Modules III &amp; IV</td>
<td>REST 570</td>
<td>Institutional Real Estate Investment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>REST 550</td>
<td>Contemporary Issues in Real Estate Markets</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>REST 575</td>
<td>Quantitative Analysis for Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>Spring – Module III</td>
<td>REST 590*</td>
<td>Real Estate Colloquium</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>1</td>
</tr>
<tr>
<td>Spring – Module IV</td>
<td>REST 590*</td>
<td>Real Estate Colloquium</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>REST 880</td>
<td>Real Estate Development and Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>

* The two Modules of REST 590 will total 1 credit for the corresponding semester.
E. Graduate Bulletin Copy

REAL ESTATE ANALYSIS AND DEVELOPMENT

Brent W. Ambrose, Ph.D., Smeal Professor of Real Estate, Director of the Institute for Real Estate Studies, and Director of Ph.D. and M.S. Programs
Smeal College of Business
355 Business Building
814-867-4172

Degree Conferred:
M.S.

Real Estate Graduate Faculty
Brent W. Ambrose, Ph.D., Smeal Professor of Real Estate and IRES Director
Liang Peng, Ph.D., Associate Professor of Real Estate and King Faculty Fellow
Jiro Yoshida, Ph.D., Associate Professor of Business
Sanket Korgaonkor, Ph.D., Assistant Professor of Real Estate
Mallory Meehan, J.D., Clinical Assistant Professor of Real Estate and IRES Assistant Director

The Program

The Master of Science in Real Estate Analysis and Development will prepare graduates to stand out in a competitive job market by studying at a highly reputed business school with some of the world’s leading real estate academic thinkers and industry experts. This program will provide students with the analytical skills grounded in economics and finance required to successfully engage in the real estate industry. Students will gain the skills needed to succeed in today’s dynamic work environments, gain a firm understanding of issues and problems facing the real estate industry, develop an understanding and appreciation for leading edge research used to solve problems in real estate markets, and be prepared to become a successful leader. World-class professors who are specialists in real estate finance and economics will teach in the program. A solid foundation in decision analysis, project management, accounting, valuation, market analysis, econometrics, investment analysis and finance will make the target audience more attractive to hiring managers and enable graduates to advance more rapidly into management and leadership positions.
Admission Requirements

Educational Background

Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Applicants must:

- Hold a Baccalaureate degree with a 3.00 minimum undergraduate GPA (or equivalent).
- Submit GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.
- Submit a completed online Graduate School Application for Admission, including a Statement of Purpose, resume, and three letters of recommendation.
- Submit official transcripts from all post-secondary institutions attended.

Applicants who are still completing their baccalaureate requirements at the time of application may be provisionally admitted to the Graduate School, pending the award of the baccalaureate degree; refer to Application and Admission Procedures.

Language of Instruction

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency section of the Graduate Bulletin Application and Admission Procedures page for more information.

Core Application Packet

- Completed official online Graduate School application and payment of nonrefundable application fee.
- Statement of purpose: a 2-3-page essay articulating career and educational goals that demonstrates the applicant’s written communication skills.
- Vita or Résumé.
- Three letters of recommendation that attest to the applicant’s readiness for graduate study and document the requisite minimum of one year of work experience. Letters must be submitted through the online application.
- GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.
- Official transcripts from all post-secondary institutions attended.
Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Total credits required for the REA_MS program is 32 credits at the 400, 500, or 800 level, with at least 18 credits at the 500 level. The culminating experience for the degree program is the capstone course REST 570. This course requires students to apply and integrate the knowledge, skills, and research methods that were gained throughout the REA_MS program. The platform of institutional real estate investment provides numerous opportunities for research projects related to real estate securities and markets. Thus, REST 570 offers students the opportunity to expand on research topics, tools, and methods acquired in previous courses. Students will create a capstone research paper or project as one of the major deliverables in this course.

**REQUIRED COURSES: (32 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBADM 811</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STAT 500</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BA 512</td>
<td>Quantitative Analysis for Managerial Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>BA 817</td>
<td>Communication Skills for Management (repeatable)</td>
<td>–2 total</td>
</tr>
<tr>
<td>BA 821</td>
<td>Foundations in Managerial Accounting</td>
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<td>Foundations in Finance</td>
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</tr>
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<td>Financial Engineering and Corporate Strategy</td>
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</tr>
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<td>REST 550</td>
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<td>REST 590</td>
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<td>REST 560</td>
<td>Real Estate Financial Analysis</td>
<td>2</td>
</tr>
<tr>
<td>REST 570</td>
<td>Institutional Real Estate Investment</td>
<td>2</td>
</tr>
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<td>REST 830</td>
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<td>REST 840</td>
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</tr>
<tr>
<td>REST 880</td>
<td>Real Estate Development and Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the Tuition & Funding section of The Graduate School’s website. Students on graduate assistantships must adhere to the course load limits set by The Graduate School.
Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

F. Admission Requirements

The student cohort should reflect today's international business environment, with selective admittance. With this in mind, the following admission requirements are proposed:

- Baccalaureate degree with a 3.00 minimum undergraduate grade point average (GPA) or equivalent.
- Submission of a completed online Graduate School Application for Admission, including a Statement of Purpose, resume, and three letters of recommendation.
- Submission of official transcripts from all post-secondary institutions attended.
- GMAT or GRE results. Candidates who have demonstrated a strong academic background may apply for a GMAT/GRE waiver.

G. Degree Title Justification

The degree conferred by the REA_MS program will be a Master of Science in Real Estate Analysis and Development. This type of degree was chosen for the following reasons:

- The REA_MS program trains students to critically evaluate research and apply appropriate research tools to industry problems in order to generate new insights.
- The REA_MS program contains a capstone research or project requirement.
- The REA_MS program has a strong focus on financial analysis and economics as applied to real estate and urban economics.
- The REA_MS program contains 19-credits at the 500-level.
- With tenure line faculty serving as directors and program head, the REA_MS program has a low student/advisor ratio.
The REA_MS program contains eight (10) credits of course work covering research methods and analysis (BA 512, REST 560, REST 575, REST 590, REST 840).

The culminating experience in the REA_MS program is the Institutional Real Estate Investment course (REST 570). This course requires students to apply and integrate the knowledge, skills, and research methods that were gained throughout the REA_MS program. The platform of institutional real estate investment provides numerous opportunities for research projects related to real estate securities and markets. The course will offer students the opportunity to expand on research topics, tools, and methods acquired in previous courses. Students will create a capstone research paper or project as one of the major deliverables in this course.

Institutions where similar programs are in place:

- American University
- Baurch College, City University of New York
- Columbia University
- DePaul University
- Georgia State University
- George Mason University
- Johns Hopkins University
- Massachusetts Institute of Technology
- New York University
- University of Florida
- University of North Carolina at Charlotte
- University of Wisconsin

H. Accreditation

The REA_MS program will be incorporated into the Smeal College’s accreditation by the Association to Advance Collegiate Schools of Business (AACSB). Upon approval of the program, AACSB will be notified and the program will be added to Smeal’s accreditation portfolio. There is no known other professional accreditation or licensing process for programs like REA_MS. It is possible this will be a future development and will be closely monitored.

I. Consultation Responses

From Smeal Graduate Policy Committee:
From: Lisa Bolton  
Sent: Thursday, February 1, 2018 8:23 PM  
To: Mike Gilpatrick <mjg11@psu.edu>  
Cc: Brent Ambrose <bwa10@psu.edu>  
Subject: RE: Graduate Policy Committee (proposal/course reviews)  

Mike,  

The Graduate Policy Committee voted to approve the following proposals:  
* Master of Science in Real Estate  
* Master of Corporate Finance  
* Sustainability courses  

Best,  
Lisa

From Penn State Harrisburg:  

From: Steve Schappe <sxs28@psu.edu>  
Sent: Thursday, January 18, 2018 11:19 AM  
To: Brian Cameron  
Subject: Re: Consultation for new proposed MS in Real Estate  

Hi Brian,  

Thank you for the opportunity to review Smeal's proposal for a new resident MS in Real estate. We have no objections to the proposal (or associated new courses) and support your efforts.  

Regards,  
Steve  

Stephen P. Schappe, Ph.D.  
Director, School of Business Administration  
777 W. Harrisburg Pike  
Middletown, PA 17057
From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "Steve Schappe" <sxs28@psu.edu>
Sent: Friday, January 5, 2018 9:09:39 AM
Subject: Consultation for new proposed MS in Real Estate

Hi Steve:

Happy New Year!

Attached is a draft program proposal (and associated new courses) for a new resident MS in Real Estate. Would you be able to review the proposal and send me any questions or comments by January 19? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great weekend!

Brian

_________________________________________________________
Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
University Park, PA 16802-3603
814.863.1460 office
bcameron@smeal.psu.edu
www.smeal.psu.edu
http://www.linkedin.com/pub/brian-cameron/0/814/51

From Black School of Business, Penn State Erie:

From: Greg Filbeck <mfg11@psu.edu>
Sent: Friday, January 5, 2018 9:18 AM
To: Brian Cameron
Subject: Re: Consultation for new proposed MS in Real Estate

Brian,

I scanned through the proposal and the four course proposals. The program looks great! What an awesome add to the portfolio of programs there!

Looking forward to seeing you Monday morning!

Greg

Dr. Greg Filbeck, CFA, FRM, CAIA, CIPM, PRM
Samuel P. Black III Professor of Finance and Risk Management
Director, Black School of Business
Penn State Erie, the Behrend College
281 Burke
Erie, PA 16563

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "MICHAEL FILBECK" <mgf11@psu.edu>
Sent: Friday, January 5, 2018 9:11:15 AM
Subject: Consultation for new proposed MS in Real Estate

Hi Greg:

Happy New Year!

Attached is a draft program proposal (and associated new courses) for a new resident MS in Real Estate. Would you be able to review the proposal and send me any questions or comments by January 19? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great weekend!

Brian

Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
From Penn State Great Valley:

From: Kathryn Jablokow <kwl3@psu.edu>
Sent: Wednesday, January 10, 2018 7:12 AM
To: Brian Cameron
Cc: JAMES A NEMES; KATHRYN WEED JABLOKOW
Subject: Re: Consultation for new proposed MS in Real Estate

Hello Brian,

I have read through your proposal (including the courses) and have no objections. I support the program proposal as presented.

Best regards,
Kathryn

Kathryn W. Jablokow, Ph.D., FASME
Associate Chief Academic Officer
Professor of Engineering Design and Mechanical Engineering
School of Graduate Professional Studies
The Pennsylvania State University
30 E. Swedesford Road, Malvern, PA 19355
Phone: 610-648-3372
Fax: 610-648-3377

From: "Brian Cameron" <bcameron@smeal.psu.edu>
To: "KATHRYN WEED JABLOKOW" <kwl3@psu.edu>
Cc: "JAMES A NEMES" <jan16@psu.edu>
Sent: Friday, January 5, 2018 9:05:49 AM
Subject: Consultation for new proposed MS in Real Estate

Hi Kathryn (and Jim):

Happy New Year!

I think things like this go to Kathryn now but copied Jim as well.
Attached is a draft program proposal (and associated new courses) for a new resident MS in Real Estate. Would you be able to review the proposal and send me any questions or comments by January 19? Ultimately, I will need an email of concurrence/support to include with the program proposal.

Thanks for your help and have a great weekend!

Brian

________________________________________________________________________

Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
University Park, PA 16802-3603
814.863.1460 office
bcameron@smeal.psu.edu
www.smeal.psu.edu
http://www.linkedin.com/pub/brian-cameron/0/814/51

From Penn State Statistics Department for use of STAT 500 course:

From: David Hunter <dhunter@stat.psu.edu>
Sent: Tuesday, January 23, 2018 3:17 PM
To: Brian Cameron
Subject: Re: Discussion Follow Up

Importance: High

Hi, Brian. My apologies for the delay! And thanks for following up.

I’m happy to concur that the inclusion of STAT 500 among the requirements for these two programs will not create any insurmountable problems for us, and I support these programs as you’ve described them to me.

Best wishes,
Dave

------
David Hunter
On Jan 23, 2018, at 2:38 PM, Brian Cameron <bcameron@smeal.psu.edu> wrote:

Hi David

Just following up on the note below – would it be possible to get an email of concurrence this week if possible?

Please let me know if we need to have another discussion.

Thanks,

Brian

Brian H. Cameron | Associate Dean for Professional Graduate Programs | Smeal College of Business | The Pennsylvania State University | University Park, PA 16802 | Phone: 814-863-1460 | Email: bcameron@smeal.psu.edu

From: Brian Cameron
Sent: Thursday, January 11, 2018 8:44 AM
To: 'David Hunter'
Subject: Discussion Follow Up
Importance: High

Hello David

We had a discussion on December 6 regarding the use of STAT 500 in two of our proposed masters programs. We want to require that the students in these programs take STAT 500 over the summer at the start of both of these programs.

You felt that allowing approximately 20 students from each program into STAT 500 over the summer would not be a problem.

I am in process of developing the program proposals for both of these programs and need a note from you for each program stating that you concur with the use of STAT
500 in each program. An email from you for each program would be fine.

The first program is a Master of Corporate Finance and the second program is an MS in Real Estate Analysis and Development.

Would you be able to send me an email of concurrence/support for each of these programs?

Thanks for your help!

Brian

Brian H. Cameron, Ph.D.
Associate Dean for Professional Graduate Programs
Smeal College of Business
The Pennsylvania State University
220S Business Building
University Park, PA 16802-3603
814.863.1460 office
bcameron@smeal.psu.edu
www.smeal.psu.edu
http://www.linkedin.com/pub/brian-cameron/0/814/51

From Chair of the Online MBA Executive Committee on the use of MBADM 811:

From: Lorraine Reitz on behalf of Charles H. Whiteman
Sent: Thursday, February 15, 2018 4:22 PM
To: RALPH FORD; MUKUND SHIVRAM KULKARNI; JAMES A NEMES; rse1@psu.edu; MICHAEL VERDERAME
Cc: RHONDA J STEG; SHARON ANN BLOUCH; SUZAN LYNN KERSHNER; Brian Cameron; Judy Wills; CATHLEEN J MURGAS; Stacey Dorang Peeler; Melissa Forsha; Charles H. Whiteman
Subject: Confirmation - approval of additional sections of OMBA core courses

Dear Members of the Online MBA Executive Committee,

This is to certify that the request below has been approved by the OMBA Executive Committee.
Thanks to all of you for your timely responses.

Regards,
Chuck

__________________________________________
Charles H. Whiteman
John and Becky Surma Dean
Smeal College of Business
The Pennsylvania State University
210 Business Building
University Park, PA 16802-3603
814-863-0448
814-865-7064 (fax)
cwhiteman@smeal.psu.edu

From: "Charles H. Whiteman" <cwhiteman@psu.edu>  
To: "RALPH FORD" <rmf7@psu.edu>, "MUKUND SHIVRAM KULKARNI" <msk5@psu.edu>, "JAMES A NEMES" <jan16@psu.edu>, "rse1" <rse1@psu.edu>, "Michael Verderame" <mxv8@psu.edu> 
Cc: "RHONDA J STEG" <rjv3@psu.edu>, "SHARON ANN BLOUCH" <svb5@psu.edu>, "SUZAN LYNN KERSHNER" <slk28@psu.edu>, "Brian Cameron" <bcameron@smeal.psu.edu>, "Judy Wills" <jcw25@psu.edu>, "CATHLEEN J MURGAS" <cjm28@psu.edu>, "Stacey Dorang Peeler" <sld138@psu.edu>, "Melissa Forsha" <mzc4@psu.edu>, "Charles H. Whiteman" <cwhiteman@psu.edu> 
Sent: Tuesday, February 13, 2018 3:32:49 PM
Subject: Request for approval of additional sections of OMBA core courses

Dear Members of the Online MBA Executive Committee,

Last year, Smeal made the request below to create sections of select core online MBA courses for use in other Smeal masters programs.

The process for allowing any of the partners in the online MBA program to create a section of any of the core online MBA courses for use in other programs is attached.

We are now planning new resident masters programs in Smeal and are asking permission of the Executive Committee to use an existing Smeal section of the following course:
MBADM 811 Financial Accounting – a Smeal section of this course already exists and we would like to use that Smeal section and possibly one or more future Smeal sections of this course in a new resident MS in Real Estate Development and Analysis as well as in a new resident Master of Finance. We will likely offer MBADM 811 as a web resident summer section to these programs.

Please let me know if you concur with our request by February 19, 2018.

Best regards,
Chuck

___________________________
Charles H. Whiteman
John and Becky Surma Dean
Smeal College of Business
The Pennsylvania State University
210 Business Building
University Park, PA 16802-3603
814-863-0448
814-865-7064 (fax)
cwhiteman@smeal.psu.edu

J. SARI Requirements

All graduate students must participate in Scholarship and Research Integrity (SARI) training. The Penn State Smeal Master of Corporate Finance program will complete this requirement through three primary avenues: REST 830 (Real Estate Market Analysis), REST 590 (Real Estate Research Seminar), and REST 575 (Quantitative Analysis for Real Estate). Based on the course sequence in the program, students will complete 4-hours of discussion-based RCR during the fall semester (in REST830 and REST 590) and 1-hour in the spring semester (in REST 575).
K. Consultation with ORP-SARI Documentation

January 9, 2018

Dear Dr. Cameron,

I am pleased to inform you that the SARI@PSU Program Plan for an MS in Real Estate Analysis and Development has been received and approved for implementation beginning in the fall semester of 2019. Thank you very much for your time and attention to detail.

We have set up a folder in Box at Penn State to facilitate SARI@PSU program tracking and communication. Here, we will keep a copy of your plan, your syllabi for the courses that will provide RCR instruction to your graduate students, and a tracking form you will need to upload once a year (in June or July) letting the ORP know the progress of your students. Once your program is under way, please contact us with information regarding your program administrator so we will know who to contact. The first time you will need to upload the spreadsheet will be the summer of 2020. Our goal is to make this system as simple and transparent as possible, so please let us know if you have any comments or suggestions.

If, in the future, you find that changing needs require you to modify your SARI@PSU plan, please let us know and submit a revised SARI@PSU program plan form to the Office for Research Protections at least 30 days prior to the change. You may do this by email. Documents to support the SARI@PSU program can be found on the SARI@PSU website (www.research.psu.edu/training/sari), which includes additional resources for SARI@PSU education. As always, your questions, comments, and suggestions concerning any aspect of the SARI@PSU program are welcome.

Thank you again for your participation in this important initiative, and for supporting Penn State’s commitment to modeling and teaching the responsible conduct of research and scholarship in our community.

Sincerely,

Deb

Deb
Debrah Poveromo
Education Coordinator
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

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<thead>
<tr>
<th>College/School:</th>
<th>Smeal College of Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department or Instructional Area:</td>
<td>Accounting</td>
</tr>
</tbody>
</table>

New Graduate Program, Option, or Minor: Add

Designation of new graduate program: ____________________________
Classification of Instructional Programs (CIP) Code: ________________
Designation of new graduate option: ____________________________
Designation of new graduate minor: ______________________________

Penn State Graduate School

Indicate effective semester:
First semester following approval
Second semester following approval

MAY 22 2018

Existing Graduate Program Option, or Minor: Change Drop

Office of the Vice Provost and Dean of the Graduate School

Current designation of graduate program: ACCT MAcc
Current designation of graduate option: ____________________________
Current designation of graduate minor: ____________________________

New designation of existing graduate program (if changing): ____________________________
New designation of existing graduate option (if changing): ____________________________
New designation of existing graduate minor (if changing): ____________________________

Brief description of the change (if not noted above): Degree requirement change

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head

Steve Huddart
Printed name
Signature
Date: May 8, 2018

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Arvind Rangaswamy
Printed name
Signature
Date: May 14, 2018

Approved by College/School Dean/Chancellor (or Designee):

Russell Barton
Printed name
Signature
Date: 5/14/18
<table>
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<th>Position</th>
<th>Name</th>
<th>Signature</th>
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<td>On Behalf of David Babb</td>
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<td></td>
<td>10/9/2018</td>
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<td>On Behalf of C. Andrew Cole</td>
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Smeal College of Business
Masters of Accounting in Accounting (ACCTG_MACC)
Program Change Proposal
(this draft April 17, 2018)

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I. Introduction
The Department of Accounting respectfully submits the following program change proposal to modify its current Masters of Accounting (ACCTG_MACC) Program. This proposal contains essentially one change from the very recent ACCTG_MACC proposal that was approved on March 26, 2018 and published in the April 4, 2018 Graduate Council Curricular Report, namely, the replacement of ACCTG 873 with ACCTG 573. ACCTG 573 would replace ACCTG 873 as the capstone experience.

II. Rationale/Justification for the Proposed Changes
This change provides MAcc students with a more rigorous and research-focused capstone experience. At the same time, it moves responsibility for delivering 500-level coursework to the faculty in the Accounting Department from faculty in other departments, who may instead deliver 800-level instruction in the MAcc program. The new course proposal and program change proposal are attached.

III. Overview of Proposed Changes
ACCTG 573 will be offered in place of ACCTG 873 as soon as possible.
IV. Program Goals
The program goals for the proposed Master of Accounting program are unchanged.

V. New Course
One new course is proposed:

ACCTG 573 Advanced Topics in Financial Reporting – ACCTG 573 provides detailed coverage of the financial reporting issues related to complex transactions involving for-profit enterprises. In particular, the course explores the financial accounting standards for equity method investments, mergers and acquisitions, goodwill impairment, variable interest entities, derivatives and hedge accounting, and foreign currency issues. It builds on knowledge of financial accounting topics gained in undergraduate courses. It requires students to apply that knowledge to the financial accounting for complex business transactions. Students will identify the economic substance of complex business transactions and translate that economic substance into financial reporting that conforms with Generally Accepted Accounting Principles. The course will also expose students to academic research related to the topics studied and develop students’ skills with respect to using data to understand the implications of complex business transactions on various economic stakeholders.

VI. Effective Date and Transition Considerations
This program change is effective for the One-Year MAcc Class of 2020 and upon Graduate School approval for the Integrated ACCTG_MACC program students. Integrated MAcc students admitted before approval may elect to complete ACCTG 873 instead of ACCTG 573.
VII. Proposed Graduate Bulletin with Track Changes

Accounting (ACCTG)

Program Home Page

STEVEN HUDDART HENOCK LOUIS, Chair
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Degrees Conferred:

Master of Accounting (M.Acc.) in Accounting
Integrated B.S. in Accounting and Master of Accounting (M.Acc.) in Accounting Program

The Graduate Faculty

The Master of Accounting allows students to complete the educational requirements to become a certified public accountant in Pennsylvania, as well as most other states. Certified Public Accountants (CPAs) conduct independent audits and provide accounting, tax, and management advisory services. The program prepares students to enter into careers in public accounting, corporate accounting, management accounting, governmental accounting, financial analysis, and law enforcement.

Admission Requirements

Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Admission to the program is competitive. Criteria for evaluating applicants can include: professional and academic accomplishments, GMAT scores, personal data from application forms and, possibly, interviews or examinations.

Students who apply to the program should have an undergraduate educational background equivalent to a Bachelor of Science degree from the Penn State University Smeal College of Business. Students who apply to the program should have completed the equivalent of the following Penn State University courses: ACCTG 211, ACCTG 403W, ACCTG 404, ACCTG 405, ACCTG 471, ACCTG 472, and MIS 301. Applicants to the program from outside Penn State may be required to take an entry exam to demonstrate mastery of the material covered in these courses prior to beginning coursework in the master's program.
Although the program has no fixed minimum grade-point requirement, an applicant is generally expected to have maintained a junior-senior grade-point average of at least 3.00 on Penn State's grading scale of A (4.00) to D (1.00). In addition, an applicant is expected to have maintained a grade-point average of 3.00 for the required accounting courses.

Applicants to the program are required to take the Graduate Management Admission Test (GMAT). The GMAT requirement is waived for applicants with an undergraduate GPA of 3.50 or higher, or whose undergraduate degree is awarded by Penn State.

In addition to the Graduate School application for admission, the program requires a completed Smeal College of Business application for graduate study, and official transcripts from all post-secondary institutions attended.

Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Students must complete a minimum of 33 credits. The 33 credits must be earned in 400-, 500-, or 800-level courses. At least 18 credits must be earned in 500- and 800-level courses, and at least 6 credits must be earned in 500-level courses.

Students must complete the following 24 required credits:

ACCOUNTING (ACCTG)

- 432. Accounting Information Systems (3)
- 495. Internship (3)
- 873573. Advanced Topics in Financial Reporting (3)

BUSINESS ADMINISTRATION (BA)

- 817. Communication Skills for Management (3)
- 840. Business Data Management (3)
- 841. Business Intelligence (3)

BUSINESS LAW (BLAW)

- 444. Advanced UCC and Commercial Transactions (3)

FINANCE (FIN)

- 531. Financial Management (3)
Students must also complete an additional 9 credits of elective courses selected in consultation with their adviser. A list of approved elective courses is maintained by the graduate program office.

The culminating experience for the degree is the capstone course ACCTG 873573.

**Integrated B.S. in Accounting and Master of Accounting (M.Acc.) in Accounting Program**

The Department of Accounting offers an integrated program allowing students to receive a B.S. in Accounting and Master of Accounting (M.Acc.) degrees within a five-year period. Students typically are admitted into the integrated program in the spring of the second year of the undergraduate program and the program is completed in the subsequent three years.

**Admission Requirements**

Students must apply to the program via the Graduate School application for admission, and must meet all the admission requirements of the Graduate School and the Accounting graduate program for the Master of Accounting degree, listed above. Students shall be admitted to an IUG program no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of expected conferral of the undergraduate degree, as specified in the proposed IUG plan of study.

To apply for the program, students must be enrolled in the Smeal College of Business or the Division of Undergraduate Studies, and intend to complete the entrance-to-major requirements prior to completing 59 cumulative credits at Penn State.

Although the program has no fixed minimum grade-point requirement, an applicant is generally expected to have grade-point average of at least 3.20 on Penn State’s grading scale of A (4.00) to D (1.00).

In addition, the Department may request an interview with an applicant or require a GMAT exam or other exam. Admissions decisions will be based upon the student’s application, undergraduate record, SAT scores, and, if applicable, interviews and examination results.

Admitted students must have completed ACCTG 211 with superior performance by the end of the spring semester in which they apply for admission to the program.

In consultation with an adviser, students must prepare a plan of study appropriate to this integrated program, and must present their plan of study in person to the head of the graduate program or the appropriate committee overseeing the integrated program prior to being admitted to the program. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser as the student advances through the program.
Degree Requirements

Students must fulfill all degree requirements for each degree in order to be awarded that degree, subject to the alterations and double-counting of credits as outlined below. Degree requirements for the Bachelor of Science in Accounting are listed in the Undergraduate Bulletin. Degree requirements for the Master of Accounting degree are listed above. Students must sequence their courses so all undergraduate degree requirements are fulfilled before taking courses to count towards the graduate degree. If students accepted into the IUG program are unable to complete the M.Acc. degree, they are still eligible to receive their undergraduate degree if all the undergraduate degree requirements have been satisfied.

Students must complete the requirements for a B.S. in Accounting with the following alterations:

- Some of prescribed courses for the B.S. must be taken in sections that are available only to students enrolled in the program. These prescribed courses, which all count toward the undergraduate degree in accounting, are: ACCTG 403W, ACCTG 404, ACCTG 405, ACCTG 471, and ACCTG 472.
- The student need not satisfy the requirement that 6 credit hours be completed from the following list of courses: ACCTG 406, ACCTG 432, ACCTG 473, and ACCTG 481.
- The following courses cannot be used to satisfy the degree requirements of the integrated B.S./M.Acc. program: ACCTG 406, ACCTG 410, ACCTG 411, ACCTG 417, ACCTG 422, ACCTG 450, ACCTG 473, and ACCTG 481.

Up to 12 credits may be double-counted towards the degree requirements for both the graduate and undergraduate degrees; a minimum of 50% of the double-counted courses must be at the 500 or 800 level. Credits associated with the culminating experience for the graduate degree cannot be double-counted.

The following courses will count towards both the B.S. and Master of Accounting degrees: ACCTG 432 (3), BA 840 (3), BLAW 444 (3), and FIN 531 (3).

Student Aid

Refer to the Student Aid section of the Graduate Bulletin. Students in this program are not eligible for graduate assistantships.

Courses

Graduate courses carry numbers from 500 to 699 or 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.
VIII. Consultation

Specific stages of consultation are:

- Review by the Smeal Accounting Department faculty with a vote to move forward. (scheduled for April 23)
- Review by the Smeal College Graduate Policy Committee with a vote to move forward. (TBD)
- Review by the Smeal College Dean’s Advisory Committee with a vote to move forward. (TBD)
- University consultation with comments below. (TBD)
- Preliminary review by the Graduate School, specifically, Vicki Hewitt. (TBD)

University Consultation List

THOMAS AMLE (tta2) – School of Business, Capital College
HANS BAUMGARTER (jxb14) – Marketing, Smeal College of Business
THOMAS BUTTROSS (TEB11) - School of Business, Capital College
KEITH CROCKER (ist) – Risk Management, Smeal College of Business
ASHUTOSH DESHMUKH (avd1) – Black School of Business, Behrend College
LYDIA N DIDIA (Ind6) – School of Business, Capital College
WILLIAM G ENGELBRET (w7e) – Accounting, Penn State Altoona
GREG FILBACK (mgf11) – Black School of Business, Behrend College
JOHN KETZ (k55) – Accounting, Smeal College of Business
SHAHID ALI KHAN (sak62) – Penn State Berks
BILL KRACAW (wak4) – Finance Chair, Smeal College of Business
VILMOS MISANGYI (vfm10) – Management and Organization, Smeal College of Business
JAMES NEMES (JAN16) - Great Valley School of Professional Studies
NICK PETRUIZZI (nep12) – Supply Chain and Information Systems, Smeal College of Business
STEPHEN SCHAPPE (sxs28) – School of Business, Capital College
JEFFREY M. SHARP (JMS16) – Business Law, Smeal College of Business
JANET LYNN SOUZA (jls899) – Penn State Abington

University Consultation Responses
Colleagues:

The Smeal College Accounting faculty are proposing a change to Master of Accounting (ACCTG_MACC) program and seek your views on it.

This proposal contains essentially one change from the very recent ACCTG_MACC proposal that was approved on March 26, 2018 and published in the April 4, 2018 Graduate Council Curricular Report, namely, the replacement of ACCTG 873 with ACCTG 573. ACCTG 573 would replace ACCTG 873 as the capstone experience.

This change provides MAcc students with a more rigorous and research-focused capstone experience. At the same time, it moves responsibility for delivering 500-level coursework to the faculty in the Accounting Department from faculty in other departments, who may instead deliver 800-level instruction in the MAcc program. The new course proposal and program change proposal are attached.
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: BSED
Department or Instructional Area: Applied Behavior Analysis

New Graduate Program, Option, or Minor: Add

Designation of new graduate program: ___________
Classification of Instructional Programs (CIP) Code: __________
Designation of new graduate option: ___________
Designation of new graduate minor: ___________

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change Drop

Current designation of graduate program: M.A.
Current designation of graduate option: ___________
Current designation of graduate minor: ___________

New designation of existing graduate program (if changing): ___________
New designation of existing graduate option (if changing): ___________
New designation of existing graduate minor (if changing): ___________

Brief description of the change (if not noted above): increase in hours + course changes to reflect National Certification Board Changes

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head

Holly Angelique
Printed name
Holly Angelique
Signature
Date: 3/2/18

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Elizabeth J. Tsicelli
Printed name
Elvira J. Tsicelli
Signature
Date: 3/2/18

Approved by College/School Dean/Chancellor (or Designee):

Peter D. Ouw
Printed name
Signature
Date: March 27, 2018
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<th>Name</th>
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<td>Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:</td>
<td>On Behalf of David Babb</td>
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<td>Recommended by Chair, Graduate Council Committee on Programs and Courses:</td>
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Master of Applied Behavior Analysis
Program Change Proposal

School of Behavioral Sciences and Education
Penn State Harrisburg

Date 1/31/2018
CHANGES IN PROGRAMS, OPTIONS*, AND MINORS** (including program name changes)

A. A revised version of the affected area showing both the old program requirements and the new program requirements (so that the reviewers can determine what specifically is being changed). The proposal should include a side-by-side comparison of entry requirements, number of credits required, specific courses to be taken, etc. A copy of the revision to the Graduate Bulletin copy must be included, and the proposer is requested to use underlining, bolding, or Italics to indicate changes.

See attached

B. A justification for changes made, such as updating instruction, together with an indication of expected enrollments and any effects on existing programs.

In response to changes required to remain a Verified Course Sequence and Experience program from our national certification board (Behavior Analysis Certification Board: BACB), recommended changes from the BACB, and as a result of program development efforts, we made the following program changes: 1) addition of ABA 544 Behavioral Systems Support to the core of the ABA program; 2) addition of an elective ABA 512 Behavioral Programming & Skill Building as recommended for discretionary education; 3) change of objectives and names of courses to match requirements for the BACB 5th edition task list (courses changed: ABA 500 Experimental Analysis of Behavior; ABA 533 Applied Analysis of Behavior; ABA 577 Assessment and Treatment of Behavior; ABA 511 Behavior Modification; ABA 588 Ethics and Legal Issues; ABA 522 Single Subject Research Design)

The graduate faculty listing has been changed, to note changes in personnel.

C. Include written response from departments affected by the changes.
**Applied Behavior Analysis Certification Requirements/Current ABA Masters Program/Proposed New ABA Requirements:**

**changes in bold**

<table>
<thead>
<tr>
<th>Old BACB Certification Requirements</th>
<th>New BACB Certification Requirements</th>
<th>Old Program Courses</th>
<th>New Proposed Courses</th>
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<tr>
<td>Ethical and Professional Conduct (45 hours)</td>
<td>BACB Compliance Code and Disciplinary Systems; Professionalism (45 hours)</td>
<td>ABA 588 Ethics &amp; Legal Issues</td>
<td>ABA 588 Ethics in Research and Professional Practice (course name change)</td>
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<tr>
<td>Concepts and Principles of Behavior Analysis</td>
<td>Philosophical Underpinnings: Concepts &amp; Principles</td>
<td>ABA 500 Experimental Analysis of Behavior (45 hours)</td>
<td>ABA 500 Science &amp; Foundations of Behavior (course name change)</td>
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<tr>
<td>Measurement (including data analysis (25 hours)</td>
<td>Measurement, Data Display and Interpretation: Experimental Design</td>
<td>ABA 522 Single Subject Research Design</td>
<td>ABA 522 Behavioral Research Methods (course name change)</td>
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<td>Identification of the Problem and Assessment (30 hours)</td>
<td>Behavior Assessment (45 hours)</td>
<td>ABA 577 Assessment &amp; Treatment of Behavior</td>
<td>ABA 577 Case Conceptualization and Development (30 hours; course name change)</td>
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<td>Fundamental Elements of Behavior Change and Specific Behavior Change Procedures (45 hours)</td>
<td>N/A</td>
<td>ABA 533 Applied Analysis of Behavior</td>
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<td>Intervention and Behavior Change Considerations (10 hours)</td>
<td>Behavior Change Procedures; Selecting and Implementing Interventions (60 hours)</td>
<td>ABA 511 Behavior Modification</td>
<td>ABA 511 Behavioral Assessment and Treatment (30 hours; course name change)</td>
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<td>Behavior Change Systems (10 hours)</td>
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<td>Implementation, Management, and Supervision (10 hours)</td>
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<td>ABA 544 Behavioral Systems Support (15 hours; new course)</td>
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<td>ABA 555 Behavioral Interventions in Autism &amp; Developmental Disabilities (15 hours; course name change)</td>
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<td>ABA 566 Behavioral Pediatrics (15 hours)</td>
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<td>Psychology 443 Treatment and Education in Developmental Disabilities (15 hours)</td>
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<td>Discretionary (30 hours)</td>
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<td>Personnel Supervision and Management</td>
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<td>ABA 544 Behavioral Systems Support (new course)</td>
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Applied Behavior Analysis (ABA)

KIMBERLY A. SCHRECK, Coordinator – Professor in Charge
Penn State Harrisburg
777 West Harrisburg Pike
Middletown, PA 17057
717-948-6048
kas24@psu.edu
www.hbg.psu.edu

Degree Conferred:
M.A.

The Graduate Faculty

Jonathan Ivy PHD, BCBA-D Ohio State University Assistant Professor of Psychology
Kimberly Schreck PHD, BCBA-D Ohio State University Professor of Psychology
Kathryn Glodowski PHD, BCBA-D Western New England University Assistant Professor of Psychology

The Program

Human behavior contributes to many problems humans face. Adults disposing of trash along the road, children with autism or intellectual disabilities engaging in behaviors impeding learning, and people with diabetes not taking insulin or following diet plans – all human behaviors. The Penn State Harrisburg Applied Behavior Analysis program is designed to prepare students to apply the core areas of behavior analysis following the science-practitioner model to a variety of individual and social problems in a variety of settings. The ABA program represents a discipline that can be applied in a number of fields (e.g., education, health, psychology, medicine, business).

The verified course sequence was designed to provide an in-depth understanding of behavioral research and intervention, the foundations of the science of behavior, ethical research and practice, and behavioral skill application across behaviors and environments, while meeting the course and experience requirements according to the national certification board and promoting research in the field. Students who successfully complete the program will be expected to possess the skills and abilities of an emerging expert in ABA. Graduates of the Penn State Harrisburg ABA program provide this expertise to a
wide range of individuals across a multitude of settings within the region and across the globe.

The program helps prepare graduates to work in hospitals, medical schools, mental health centers, health maintenance organizations, a wide variety of educational settings, forensic settings, research facilities, and in center- and home-based programs for individuals with autism and developmental disabilities.

The program is intended for both part- and full-time students. Courses will be scheduled for fall, and spring, and summer semesters. Admission is in the fall and spring semesters only. However, the program encourages fall admission and typically reserves spring admission for exceptional circumstances on a case-by-case basis.

Admission Requirements

Requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Students will be admitted on a competitive basis and must submit the on-line application including the following:

- A completed Graduate School online application and payment of the nonrefundable application fee.
- Two official transcripts from all post-secondary institutions attended.
- Three letters of recommendation. At least one of these recommendations should be from a professor or person who can comment on the student’s academic qualifications. Recommendations addressing the applicant’s experience with ABA is recommended, but not required.
- A brief (two-page) interest statement that describes the applicant’s interest in and/or qualifications for studying Applied Behavior Analysis at Penn State.

The applicant must have either (1) a baccalaureate degree from a regionally accredited U.S. institution or (2) a tertiary (postsecondary) degree that is deemed comparable to a four-year bachelor’s degree from a regionally accredited U.S. institution. This degree must be from an officially recognized degree-granting institution in the country in which it operates. The program prefers that applicants have at least 18 credit hours in education, psychology, ABA, or related discipline with Applicants must have at least 18 credits in education,
psychology, or related disciplines with an cumulative grade-point average of 3.0 or above, in the
last 60 credits. Scores from the Graduate Record Examination General Test are required for all
applicants. Scores from the Graduate Record Examinations are required of all applicants in the
verbal, quantitative, and analytic portions. A personal interview may be required. A
complete application and meeting of minimal requirements does not ensure admission into
this competitive program. Applications will be reviewed only after a complete application
has been received.

The language of instruction at Penn State is English. English proficiency test scores
(TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency 2
section of the Graduate Bulletin Application and Admission Procedures page for more
information.

The language of instruction at Penn State is English. All international applicants must take and
submit scores for the TOEFL (Test of English as a Foreign Language) or the IELTS
(International English Language Testing System), with the exceptions noted below. The
minimum acceptable score for the TOEFL is 550 for the paper-based test, or a total score of 80
with a 19 on the speaking section for the Internet-based test (iBT). Applicants with iBT speaking
scores between 15 and 18 may be considered for the provisional admission, which requires
completion of specified remedial English courses ESL 114G (American Oral English for
Academic Purposes) and/or ESL 116G (ESL/Composition for Academic Disciplines) and
attainment of a grade of B or higher. The minimum acceptable composite score for the IELTS is
6.5.

International applicants are exempt from the TOEFL/IELTS requirement who have received a
baccalaureate or graduate degree from a college/university/institution in any of the following:
Australia, Belize, British Caribbean and British West Indies, Canada (except Quebec), England,
Guyana, Republic of Ireland, Liberia, New Zealand, Northern Ireland, Scotland, the United
States, and Wales.

Transfer Credits

Credits earned at other institutions but not used to earn a degree may be applied toward the
requirements for a graduate degree, subject to restrictions outlined in the Transfer Courses
section of the Graduate Bulletin.

Subject to the limitations given below, a maximum of 10 credits of high-quality graduate work
done at a regionally accredited institution or recognized degree-granting institution may be
applied toward the requirements for the master's degree. However, credits earned to complete a
previous master's degree, whether at Penn State or elsewhere, may not be applied to a second
master's degree at Penn State. Transferred academic work must have been completed within five
years prior to the date of the first degree registration at the Graduate School of Penn State, must
be of at least B quality (grades of B- are not transferable), and must appear on an official
graduate transcript of a regionally accredited university. Pass-fail grades are not transferable to
an advanced degree program unless the "Pass" can be substantiated by the former institution as
having at least B quality.
Review of classes taken at other institutions and their relationship to equivalent classes in the ABA program will be conducted by the ABA program faculty. Although classes from other institutions may be within the field of ABA, they may not directly transfer to the ABA program’s representation of classes within the national certification board’s course sequences. The ABA program cannot guarantee approval by the Behavior Analysis Certification Board (BACB) of courses taken at other institutions, even those institutions that also have BACB University Approved Coursework. Relationships of the ABA program courses to the BACB Verified Course Sequence Requirements can be found at BACB.com or from the ABA program Professor in Charge.

Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Requirements for the M.A. in Applied Behavior Analysis include 30-36 credits in required course work, including the culminating experience master’s project paper and supervised internship experience, and 6-at least 3 elective credits for a total of 36-39 credits.

ABA Core Courses (to be offered at least annually) are required for all students in the program.

**APPLIED BEHAVIOR ANALYSIS (ABA)**

500. Experimental Analysis of Behavior—Science & Foundations of Behavior (3)
511. Behavior Modification—Behavioral Assessment and Treatment (3)
522. Single-Subject Research—Behavioral Research Methods (3)
533. Applied Analysis of Behavior—Principles of Behavior Analysis (3)
544 Behavioral Systems Support (3)
577. Behavioral Assessment and Treatment—Case Conceptualization & Development (3)
588. Ethics and Legal issues in ABA—Ethics in Research and Professional Practice (3)
594A. Research Project (3)
595. Internship (9-12)

**Elective Courses**

Additional courses that will count as electives towards this degree can be chosen from a list of approved elective courses maintained by the graduate program office.

**Elective Courses Must Choose one of the Following for BACB requirements (3 credits)**

**APPLIED BEHAVIOR ANALYSIS (ABA)**

555. Behavioral Interventions in Autism (3)
566. Behavioral Pediatrics (3)
597. Special Topics (3)

**PSYCHOLOGY (PSYCH)**
443. Treatment and Education in Developmental Disabilities (3)
592. Current Topics (3)

**Additional Electives**

**APPLIED BEHAVIOR ANALYSIS (ABA)**

594A. Research Project (3-15)

The **culminating experience** for the degree project in **ABA 594A Research Project** requires the completion of a **scholarly paper** master's project. **Examples of scholarly papers research projects** can include empirical research, training and manual construction, publication style literature reviews, etc. All **projects-scholarly papers** must relate to Applied Behavior Analysis and illustrate advanced knowledge of the research or concepts. **Type and scope of (e.g., research manuscript, training manual, literature review manuscript, or publication).** The type and scope of the scholarly paper is agreed upon by the student's research **chair and second reader.**

**Student Aid**

**Student Aid**—Graduate assistantships available to students in this program and other forms of student aid are described in the **Student Aid** section of the **Graduate Bulletin.** Students on **graduate assistantships** must adhere to the **course load limits set forth in the Graduate Bulletin.**

**Courses**

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

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**Last Revised by the Department:** Fall Semester 2012

Blue Sheet Item #: 41-04-129

Review Date: 01/15/2013

UCA Revision #1: 11/8/06
## Consultation Record

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Date contacted</th>
<th>Date responded</th>
<th>Comments (see attached)</th>
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<tbody>
<tr>
<td>David Lee</td>
<td>University Park ABA, Special Education</td>
<td>1/31/2018</td>
<td>1/31/2018</td>
<td></td>
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<tr>
<td>Gina Brelsford</td>
<td>HBG, Applied Clinical Psychology</td>
<td>1/31/2018</td>
<td>2/5/2018</td>
<td></td>
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<tr>
<td>Linda Rhen</td>
<td>HBG, Special Education</td>
<td>1/31/2018</td>
<td>2/6/2018</td>
<td></td>
</tr>
<tr>
<td>Senel Poyrazli</td>
<td>HBG, Chair Social Sciences and Psychology</td>
<td>1/31/2018</td>
<td>2/1/2018</td>
<td></td>
</tr>
</tbody>
</table>
From: David Lee  
<davidlee@psu.edu>  
Subject: Re: ABA program changes  
To: KIMBERLY ANNE SCHRECK  
<kas24@psu.edu>  
Zimbra kas24@psu.edu  
Re: ABA program changes  
Wed, Jan 31, 2018 03:34 PM  
Hello Kim,  
You should be all set (all approved from my end). Good luck with the program revision.  
Take care,  
David

From: Gina Brelsford  
<gmy103@psu.edu>  
Subject: Re: ABA curriculum changes  
To: kas24@psu.edu  
Zimbra kas24@psu.edu  
Re: ABA curriculum changes  
Mon, Feb 05, 2018 12:20 PM  
Hi Kim:  
Yes, I support this program and the curricular changes noted.  
Sincerely,  
Gina
From: Senel Poyrazli  
<poyrazli@psu.edu>  
Subject: Re: ABA curriculum changes  
To: KIMBERLY ANNE SCHRECK  
<kas24@psu.edu>  
Zimbra kas24@psu.edu  
Re: ABA curriculum changes  
Wed, Jan 31, 2018 09:45 PM  
Hi Kim, I fully support all of these curriculum changes.  
Senel  
Senel Poyrazli, Ph.D.  
Professor of Counseling Psychology  
Interim Chair, Social Sciences and Psychology

From: LINDA O RHEN  
<lxr29@psu.edu>  
Subject: Re: curriculum  
To: Dr. Kimberly  
<kas24@psu.edu>  
Zimbra kas24@psu.edu  
Re: curriculum  
Tue, Feb 06, 2018 12:23 PM  
Yes, this answers questions.
I support your proposal. Will complete review of all courses this afternoon. Let me know if you need a separate email.

Dr. Linda Rhen, Assistant Professor of Special Education Coordinator, Special Education Post-Baccalaureate Certification Program Principal Investigator, Career Studies, REACH for the DREAM Program
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: Capital College / Behavioral Sciences and Education
Department or Instructional Area: Psychology - Applied Clinical Psychology M.A.

New Graduate Program, Option, or Minor: Add

Designation of new graduate program: ____________________________
Classification of Instructional Programs (CIP) Code: ____________________________
Designation of new graduate option: ____________________________
Designation of new graduate minor: ____________________________

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change

Current designation of graduate program: Applied Clinical Psychology
Current designation of graduate option: ____________________________
Current designation of graduate minor: ____________________________

New designation of existing graduate program (if changing): ____________________________
New designation of existing graduate option (if changing): ____________________________
New designation of existing graduate minor (if changing): ____________________________

Brief description of the change (if not noted above): ____________________________

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head
Gina Bretford
Printed name
Signature
Date: 4/30/18

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:
Elizabeth J. Risdoll
Printed name
Signature
Date: 5/2/18

Approved by College/School Dean/Chancellor (or Designee):
PETER INDOW
Printed name
Signature
Date: May 3, 2018
<table>
<thead>
<tr>
<th>On Behalf of David Babb</th>
<th>[Signature]</th>
<th>Date: 10/9/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Behalf of C. Andrew Cole</td>
<td>[Signature]</td>
<td>Date: 10/9/2018</td>
</tr>
<tr>
<td>Noted by Dean of the Graduate School:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Behalf of Regina Vasilatos-Younken</td>
<td>[Signature]</td>
<td>Date: 10/9/2018</td>
</tr>
</tbody>
</table>

For use by Graduate Council only
Master of Applied Clinical Psychology
Program Change

School of Behavioral Sciences and Education
Penn State Harrisburg
CHANGES IN PROGRAMS, OPTIONS*, AND MINORS** (including program name changes)

A. A revised version of the affected area showing both the old program requirements and the new program requirements (so that the reviewers can determine what specifically is being changed). The proposal should include a side-by-side comparison of entry requirements, number of credits required, specific courses to be taken, etc. A copy of the revision to the Graduate Bulletin copy must be included, and the proposer is requested to use underlining, bolding, or italics to indicate changes.

See attached.

B. A justification for changes made, such as updating instruction, together with an indication of expected enrollments and any effects on existing programs.

The M.A. program in Applied Clinical Psychology currently requires that students complete 48 credits for the M.A. degree. This number of credits will not change, but three courses comprised within this degree will change their number of credits. Specially, PSYC 520 (Research Methods) and PSYC 521 (Statistics) will both change from 4 credits to 3 credits. The content for these courses will remain the same, but time spent discussing each topic will be shortened. The other course that will change is currently listed as PSYC 595A (Clinical Practicum) and is listed as a variable credit course. It will change to PSYC 895A due to the new Graduate Council requirements related to course number and move from variable course credit to a fixed 3-credit course. These changes will allow the program to remain at 48 credits thereby allowing students to complete the program in just over 2 years. We strive to maintain the integrity and rigor of the program, while holding the credits required for graduation stable. Also, to align with PSYC 895A (Clinical Practicum), the Clinical Internship course (PSYC 595B) will remain variable credit, but will change to PSYC 895B to reflect the Graduate Council requirements for 800 vs. 500 level courses. The course will also change from 1-18 credits to 1-6 credits as students can only complete up to 6 credits of this course, in total. Lastly, the recently approved PSYC 573 (Career Counseling: Research, Assessment and Intervention) course will replace PSYC 502 as a core psychology course. PSYC 502 will now be an elective course not required for graduation from the program. This change was made to comply with Pennsylvania state licensure requirements for an LPC (Licensed Professional Counselor).

These changes will not affect other graduate programs. The only other graduate program to offer these courses in the past was the Applied Psychological Research M.A. program also at Penn State Harrisburg. This program will not be affected as we are no longer accepting students into this degree and the program is closing in the near future. This is similarly the case with the IUG B.S./M.A. in Applied Psychological Research only offered at Penn State Harrisburg. This program is also no longer accepting students and will also be closing. All students currently enrolled in these aforementioned programs have already taken the courses noted above. No
other campus offers the Applied Psychological Research M.A. or the IUG B.S./M.A. in Applied Psychological Research. However, the only other campus to offer the Applied Clinical Psychology program was consulted and entered into collaborative discussions prior to making these program changes. Thus, these changes are made with the support and collaboration of Penn State Erie psychology faculty.

C. Include written response from departments affected by the changes.

See attached.

To note, the faculty at Penn State Erie has also agreed to these changes as the Applied Clinical Psychology M.A. program has been extended to their campus. Dr. Hetzel-Riggin (PIC at Penn State Erie) is also a co-submitter of these changes.
**Applied Clinical Psychology Program Changes**

**changes in bold**

<table>
<thead>
<tr>
<th>Old Courses/credits/names/etc.</th>
<th>Course Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 595A Clinical Practicum (variable credits)</td>
<td>PSYC 895A Clinical Practicum (3 credits) <strong>credit change and course number change</strong></td>
</tr>
<tr>
<td>PSYC 595B Clinical Internship (1-18 variable credits)</td>
<td>PSYC 895B Clinical Internship (1-6 variable credits) <strong>course number change</strong></td>
</tr>
<tr>
<td>PSYC 520 Research Methods (4 credits)</td>
<td>PSYC 520 Research Methods (3 credits) <strong>credit change</strong></td>
</tr>
<tr>
<td>PSYC 521 Statistics (4 credits)</td>
<td>PSYC 521 Statistics (3 credits) <strong>credit change</strong></td>
</tr>
<tr>
<td>PSYC 573 Career Counseling: Research, Assessment and Intervention (elective)</td>
<td>PSYC 573 Career Counseling: Research, Assessment and Intervention (required) <strong>move from elective to a required course</strong></td>
</tr>
<tr>
<td>PSYC 502 Social Psychology (required)</td>
<td>PSYC 502 Social Psychology (elective) <strong>move from a required to an elective course</strong></td>
</tr>
</tbody>
</table>
Applied Clinical Psychology (ACPSY)

The Program
The Master of Arts in Applied Clinical Psychology program helps students prepare to work as mental health professionals in a variety of settings and is intended to provide a broad training program in empirically validated clinical psychology which, when accompanied by an additional 12 credits in advanced graduate studies in psychology and/or counseling, can provide the academic training necessary for graduates to apply for master's level licensing as a professional counselor in the Commonwealth of Pennsylvania. The M.A. program requires 48 credits of course work. An optional 12-credit certificate program is available for students seeking licensure. The overall model emphasizes the scientific bases of behavior, including biological, social, and individual difference factors. The training model is health-oriented rather than pathology-oriented and emphasizes the development of helping skills, including both assessment and intervention.

The degree program is intended for both part- and full-time students. Students are admitted fall semester only. The deadline for admission is May 1.

Admission Requirements
Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Students will be admitted on a competitive basis and must submit the following:
• completed application form with the application fee
• Official transcripts of all colleges and universities attended
• three professional letters of recommendation
• a brief (two-page) interest statement
• verbal, quantitative, and analytical scores on the Graduate Record Examinations

The applicant must have a bachelor's degree from a regionally accredited academic institution or the equivalent, must have completed at least 18 credits in psychology, and must have a cumulative grade-point average of 3.0 or above in the last 60 credits of undergraduate course work. The undergraduate work must include a statistics course and a psychology research methods course with grades of B or higher. A personal interview is required.

Transfer Credits

Penn State allows a maximum of 10 transfer credits of high-quality graduate work to be applied toward the requirements for a graduate degree, subject to restrictions outlined in the Transfer Courses section of the Graduate Bulletin.

Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

The M.A. in Applied Clinical Psychology requires 48 credits of coursework. At least 20 must be earned at the established graduate campus where the program is offered. Included in the core courses are 100 hours of clinical practicum, 600 hours of supervised internship experience, and a master's research paper completed in association with PSYC 500.

Psychology Core Courses (23 credits) provide a foundation in professional ethics, individual differences and cultural diversity, the scientific bases of behavior, and scientific research skills. These courses are intended to facilitate the development of an awareness of the context in which clients live and in which interventions must work.

PSYCHOLOGY (PSYC)

• 500. Ethics and Professional Practice in Psychology and Counseling (3)
• 501. Cultural Competency in Psychology (3)
• 502. Applied Social Psychology (3)
• 520. Research Methods (4)
• 521. Statistics (4)
• 524. Biological Basis of Behavior (3)
• 530. Research Paper (3)

Clinical Core Courses (25 credits) provide a general background in clinical diagnosis, assessment, and interventions with appropriate supervised experience to allow students to develop the clinical skills appropriate for master's level practitioners.

PSYCHOLOGY (PSYC)

• 510. Human Growth and Development (3)
• 517. Psychopathology (3)
• 518. Interviewing and Counseling (3)
• 519. Theories and Models of Psychotherapy (3)
• 540. Group Interventions (3)
• 571. Tests and Measurement (3)
• 595A. Clinical Practicum (1)
• 595B. Clinical Internship (6)

Grade-Point Average
Students must have a 3.00 grade-point average to graduate from the program.

Financial Aid
There are a limited number of scholarhsips and research grants available, as well as graduate assistantships. Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin. Many students work full-time and take classes part-time. In many cases, employers have a tuition-reimbursement plan which reimburses employees for partial or full tuition. To find other options available to you, contact the Financial Aid Office at 717-948-6307 (Harrisburg) or 814-898-6162 (Erie).

Courses
Graduate courses carry numbers from 500 to 599 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

PSYCHOLOGY (PSYC) course list

Last Revised by the Department: Fall Semester 2015
Blue Sheet Item #: 44-04-000
Review Date: 1/12/15
Faculty linked: 8/14/14
Harrisburg coordinator updated: 5/12/16

Psychology-Cl (PSYC)

PSYC 500 Ethics and Professional Practice in Psychology and Counseling (3) This course will familiarize students with the standards of ethical conduct related to research and practice in psychology and counseling. Effective: Fall 2005 Prerequisite: admission to the Applied Clinical Psychology or Applied_Psychological Research programs

PSYC 501 Cultural Competency in Psychology (3) This course will familiarize students with the need for sensitivity to individual and group differences associated with culture and ethnicity. Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology or Applied Psychological Research programs

**PSYC 502 Applied Social Psychology** (3) An examination of social psychological applications to areas such as health, law, interpersonal relations, environment, politics, and other social issues.
Effective: Spring 1998

**PSYC 510 Human Development and Growth** (3) The course covers human development across the life span.
Effective: Spring 2005
Prerequisite: Admission to the Applied Clinical Psychology program or permission of the program.

**PSYC 514 Preventive Psychology** (3) This course focuses on the theoretical, conceptual, programmatic, and empirical issues currently in preventive psychology.
Effective: Fall 1999
Prerequisite: admission to program

**PSYC 515 Clinical Health Psychology** (3) This course examines wellness maintenance, early detection, and the impact of health care on individuals and the community.
Effective: Spring 1997
Prerequisite: admission to program

**PSYC 516 Child Health Psychology** (3) This course will familiarize students with health issues in the context of child development and family systems.
Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology program

**PSYC 517 Psychopathology** (3) A broad spectrum view of psychopathology including biological, social, cognitive, psychological, and neuropsychological approaches, is emphasized, with an applied focus.
Effective: Fall 2001
Prerequisite: admission to program

**PSYC 518 Interviewing and Counseling** (3) This course covers basic clinical interviewing and counseling techniques from both the didactic and experiential perspectives.
Effective: Spring 2005
Prerequisite: admission to the Applied Clinical Psychology program

**PSYC 519 Theories and Models of Psychotherapy** (3) An advanced level of psychotherapies and applications in diverse settings.
Effective: Summer 2005
Prerequisite: **PSYC 518**

**PSYC 520 Research Methods** (4) The course will review experimental, quasi-experimental designs, program evaluation, between subject designs, and within subject or intra-subject designs.
Effective: Fall 1999
Prerequisite: admission to program

**PSYC 521** Statistics (4) The nature, computation, computer analysis, interpretation, and APA-style write-up will be discussed for a number of statistical tests.
Effective: Spring 2000
Prerequisite: **PSYC 520** admission to program satisfactory performance on a statistics proficiency exam

**PSYC 524** Biological Basis of Behavior (3) This course focuses on biological determinants of behavior, including evolution, hormones, sensory systems, internal states, reproduction, emotions, learning, and memory.
Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology or Applied Psychological Research programs

**PSYC 525** Forensic Psychology (3) This course will explore social, cognitive, civil and criminal issues related to forensic psychology.
Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology program

**PSYC 530** Research Paper (3) Supervised research in psychology for degree candidates.
Effective: Spring 2001
Prerequisite: **PSYC 520, PSYC 521** and permission of the program

**PSYC 535** Behavioral Management (3) Analysis of determinants of behavior and behavioral ecology. Emphasis on data collection and data evaluation techniques.
Effective: Fall 1997

**PSYC 540** Group Interventions (3) This course covers applications of psychotherapeutic techniques to a group setting.
Effective: Fall 2005
Prerequisite: **PSYC 518**

**PSYC 571** Tests and Measurements (3) Administration, analysis, and interpretation of psychological evaluation methods will be reviewed.
Effective: Spring 2005
Prerequisite: permission of the Applied Clinical Psychology program

**PSYC 572** Neuropsychological Assessment (3) This course will review the biological bases of behavior, emphasizing brain-behavioral relationships and assessment of these relationships.
Effective: Fall 2001
Prerequisite: **PSYC 524, PSYC 571**

**PSYC 594** Research Topics (1-18) Supervised student activities on research projects identified on an individual or small group basis.
Effective: Summer 2003

**PSYC 595** Internship (1-18) Supervised off-campus, nongroup instruction, including field experiences, practicums, or internships. Written and oral critique of activity required.
Effective: Spring 1995

**PSYC 595A Clinical Practicum** (1-18) Provides practicum experience component for interviewing and counseling course.
Effective: Fall 2005
Prerequisite: **PSYC 500, PSYC 517, PSYC 518, PSYC 519**; professional liability insurance

**PSYC 595B Clinical Internship** (1-18) Supervised clinical experience in a community setting. This course is repeatable.
Effective: Spring 2005
Prerequisite: **PSYC 595A** and professional liability insurance

**PSYC 596 Individual Studies** (1-9) Creative projects, including nonthesis research, that are supervised on an individual basis and which fall outside the scope of formal courses.
Effective: Fall 1996

**PSYC 597 Special Topics** (1-9) Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or semester.
Effective: Spring 1995

Last Import from UCM: March 17, 2018 3:00 AM
Applied Clinical Psychology (ACPSY)

GINA BRELSFORD, Graduate Program Coordinator
Penn State Harrisburg
W-311 Olmsted Building
777 West Harrisburg Pike
Middletown, PA 17057
717-948-6759

MELANIE HETZEL-RIGGIN, Graduate Program Coordinator
Penn State Behrend
170 Irvin Kochel Center
4951 College Drive
Erie, PA 16563
814-898-6949

Degree Conferred:
M.A.

The Graduate Faculty (Harrisburg)
The Graduate Faculty (Erie)

The Program
The Master of Arts in Applied Clinical Psychology program helps students prepare to work as mental health professionals in a variety of settings and is intended to provide a broad training program in empirically validated clinical psychology which, when accompanied by an additional 12 credits in advanced graduate studies in psychology and/or counseling, can provide the academic training necessary for graduates to apply for master's level licensing as a professional counselor in the Commonwealth of Pennsylvania. The M.A. program requires 48 credits of course work. An optional 12-credit certificate program is available for students seeking licensure.

The overall model emphasizes the scientific bases of behavior, including biological, social, and individual difference factors. The training model is health-oriented rather than pathology-oriented and emphasizes the development of helping skills, including both assessment and intervention.

The degree program is intended for both part- and full-time students. Students are admitted fall semester only. The deadline for admission is May 1—applications is April 30.

Admission Requirements
Admission requirements listed here are in addition to requirements stated in the
GENERAL INFORMATION section of the Graduate Bulletin.

Students will be admitted on a competitive basis and must submit the following:
• completed Graduate School online application form with the application fee
• Official transcripts of all colleges and universities post-secondary institutions attended
• three professional letters of recommendation, two of which need to be from academic letter writers
• a brief (two-page) interest statement
• verbal, quantitative, and analytical scores on the Graduate Record Examinations

The applicant must have a bachelor’s degree from a regionally accredited academic institution or the equivalent, must have completed at least 18 credits in psychology, and must have a cumulative grade-point average of 3.0 or above in the last 60 credits of undergraduate course work. The undergraduate work must include a statistics course and a psychology research methods course with grades of B or higher. A personal interview is required.

Transfer Credits
Credits earned at other institutions but not used to earn a degree may be applied toward the requirements for a graduate degree, subject to restrictions outlined in GCAC-309 Transfer Credit.

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PSYCHOLOGY (PSYC)
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• 502. Applied Social Psychology (3)
• 573. Career Counseling: Research, Assessment and Intervention (3)
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**Grade-Point Average**

Students must have a minimum 3.00 grade-point average to graduate from the program.

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There are a limited number of scholarships and research grants available, as well as graduate assistantships. Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

Many students work full time and take classes part-time. In many cases, employers have a tuition reimbursement plan which reimburses employees for partial or full tuition. To find other options available to you, contact the Financial Aid Office at 717-948-6307 (Harrisburg) or 814-898-6162 (Erie).

**Courses**

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Psychology-CI (PSYC)

**PSYC 500 Ethics and Professional Practice in Psychology and Counseling** (3) This course will familiarize students with the standards of ethical conduct related to research and practice in psychology and counseling.
Effective: Fall 2005
Prerequisite: admission to the Applied Clinical Psychology or Applied Psychological Research programs

**PSYC 501 Cultural Competency in Psychology** (3) This course will familiarize students with the need for sensitivity to individual and group differences associated with culture and ethnicity.
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Prerequisite: **PSYC 518**

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Prerequisite: **PSYC 520** admission to program satisfactory performance on a statistics proficiency exam

**PSYC 524 Biological Basis of Behavior** (3) This course focuses on biological determinants of behavior, including evolution, hormones, sensory systems, internal states, reproduction, emotions, learning, and memory.
Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology or Applied Psychological Research programs

**PSYC 525 Forensic Psychology** (3) This course will explore social, cognitive, civil and criminal issues related to forensic psychology.
Effective: Spring 2001
Prerequisite: admission to the Applied Clinical Psychology program

**PSYC 530 Research Paper** (3) Supervised research in psychology for degree candidates.
Effective: Spring 2001
Prerequisite: **PSYC 520, PSYC 521** and permission of the program

**PSYC 535 Behavioral Management** (3) Analysis of determinants of behavior and behavioral ecology. Emphasis on data collection and data evaluation techniques.
Effective: Fall 1997

**PSYC 540 Group Interventions** (3) This course covers applications of psychotherapeutic techniques to a group setting.
Effective: Fall 2005
Prerequisite: **PSYC 518**
**PSYC 571** Tests and Measurements (3) Administration, analysis, and interpretation of psychological evaluation methods will be reviewed.
Effective: Spring 2005
Prerequisite: permission of the Applied Clinical Psychology program

**PSYC 572** Neuropsychological Assessment (3) This course will review the biological bases of behavior, emphasizing brain-behavioral relationships and assessment of these relationships.
Effective: Fall 2001
Prerequisite: **PSYC 524, PSYC 571**

**PSYC 573** Career Counseling: Research, Assessment and Intervention (3)
This course is designed to acquaint students with the knowledge of career counseling theories, assessments, and methods based in psychological research.
Effective: Fall 2017
Prerequisite: permission of the Applied Clinical Psychology program

**PSYC 594** Research Topics (1-18) Supervised student activities on research projects identified on an individual or small group basis.
Effective: Summer 2003

**PSYC 595** Internship (1-18) Supervised off-campus, non-group instruction, including field experiences, practicums, or internships. Written and oral critique of activity required.
Effective: Spring 1995

**PSYC 595A** PSYC 895A Clinical Practicum (1-18) (3) Provides practicum experience component for interviewing and counseling course.
Effective: Fall 2005
Prerequisite: **PSYC 500, PSYC 517, PSYC 518, PSYC 519**; professional liability insurance

**PSYC 595B** PSYC 895B Clinical Internship (1-18) (1-6) Supervised clinical experience in a community setting. This course is repeatable.
Effective: Spring 2005
Prerequisite: **PSYC 595A** PSYC 500, PSYC 517, PSYC 518, PSYC 519, PSYC 895A and professional liability insurance

**PSYC 596** Individual Studies (1-9) Creative projects, including nonthesis research, that are supervised on an individual basis and which fall outside the scope of formal courses.
Effective: Fall 1996

**PSYC 597** Special Topics (1-9) Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or semester.
Effective: Spring 1995
Informal Consultations (see below)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Date of Consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melanie Hetzel-Riggin</td>
<td>Professor of Psychology, Penn State Erie</td>
<td>3/18/18</td>
</tr>
<tr>
<td>Senel Poyrazli</td>
<td>Professor of Psychology, Penn State Harrisburg</td>
<td>3/18/18</td>
</tr>
<tr>
<td>Marissa Harrison</td>
<td>Associate Professor of Psychology, Penn State Harrisburg</td>
<td>3/18/18</td>
</tr>
<tr>
<td>Stephanie Winkeljohn Black</td>
<td>Assistant Professor of Psychology, Penn State Harrisburg</td>
<td>3/18/18</td>
</tr>
<tr>
<td>Erin Miller</td>
<td>Assistant Professor of Psychology, Penn State Harrisburg</td>
<td>3/18/18</td>
</tr>
</tbody>
</table>
I also agree with these changes.

Thanks for your work on this!

Stephanie Winkeljohn Black, Ph.D.
Assistant Professor of Psychology
Penn State Harrisburg
Department of Behavioral Sciences & Education
W311 Olmsted Building
777 West Harrisburg Pike
Middletown, PA 17057

From: "mdh33" <mdh33@psu.edu>
To: "GINA BRELSFORD" <gmy103@psu.edu>
Cc: "Senel Poyrazli" <poyrazli@psu.edu>, "mdh33" <mdh33@psu.edu>, "ERIN L FINK" <ELF17@psu.edu>, "STEPHANIE M. WINKELJOHN BLACK" <smw78@psu.edu>, "Marissa Harrison" <mah52@psu.edu>
Sent: Sunday, March 18, 2018 1:59:08 PM
Subject: Re: curricular review informal consultation

Gina,

I concur with these needed changes.

Melanie D. Hetzel-Riggin, Ph.D.
Professor of Psychology

On Mar 18, 2018, at 1:51 PM, Gina Brelsford <gmy103@psu.edu> wrote:

Hi Everyone:
I will be putting through the following curricular changes per our past discussions at faculty meetings. Can you please read over the entire set of changes and let me know if you support these changes? I will need this for the curricular review process.

Thank you.

--

**************************************************************
************************

Gina M. Brelsford, Ph.D.
Associate Professor of Psychology
Associate Editor, Psychology of Religion and Spirituality
Professor-In-Charge, Applied Clinical Psychology Master's Program
PA Licensed Clinical Psychologist

Penn State Harrisburg
W311 Olmsted Bldg.
777 W. Harrisburg Pike
Middletown PA 17057

717-948-6759 (office)
717-948-6519 (fax)

<Cover sheet_ Proposed changes to the Applied Clinical Psychology M.docx>
Hi Gina,

I support these changes.

Senel

Senel Poyrazli, Ph.D.
Professor of Counseling Psychology
Interim Chair, Social Sciences and Psychology

Pennsylvania State University-Harrisburg
School of Behavioral Sciences and Education
777 W. Harrisburg Pike, W-311
Middletown, PA 17057
Office phone: +1 717 948 6040
E-mail: poyrazli@psu.edu

---

From: "GINA BRELSFORD" <gmy103@psu.edu>
To: "Senel Poyrazli" <poyrazli@psu.edu>, "MELANIE D HETZEL-RIGGIN" <mdh33@psu.edu>, "ERIN L FINK" <ELF17@psu.edu>, "STEPHANIE M. WINKELJOHN BLACK" <smw78@psu.edu>, "MARISSA A HARRISON" <mah52@psu.edu>
Sent: Sunday, March 18, 2018 1:51:03 PM
Subject: curricular review informal consultation

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I will be putting through the following curricular changes per our past discussions at faculty meetings. Can you please read over the entire set of changes and let me know if you support these changes? I will need this for the curricular review process.
Thank you.

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******************************************************************************
*******************
Gina M. Brelsford, Ph.D.
Associate Professor of Psychology
Associate Editor, *Psychology of Religion and Spirituality*
Professor-In-Charge, Applied Clinical Psychology Master's Program
PA Licensed Clinical Psychologist

Penn State Harrisburg
W311 Olmsted Bldg.
777 W. Harrisburg Pike
Middletown PA 17057

717-948-6759 (office)
717-948-6519 (fax)

******************************************************************************

Hi Gina,

Looks fine to me, and I am in support of this.
Hi Everyone:
I will be putting through the following curricular changes per our past discussions at faculty meetings. Can you please read over the entire set of changes and let me know if you support these changes? I will need this for the curricular review process.

Thank you.

--

***************************************************************
*******************
Gina M. Brelsford, Ph.D.
Associate Professor of Psychology
Associate Editor, Psychology of Religion and Spirituality
Professor-In-Charge, Applied Clinical Psychology Master's Program
PA Licensed Clinical Psychologist

Penn State Harrisburg
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777 W. Harrisburg Pike
Middletown PA 17057

717-948-6759 (office)
717-948-6519 (fax)

--

Erin L. Miller, Ph.D.
Assistant Professor of Psychology
Penn State Harrisburg
W311 Olmsted
777 West Harrisburg Pike
Hi Everyone:
I will be putting through the following curricular changes per our past discussions at faculty meetings. Can you please read over the entire set of changes and let me know if you support these changes? I will need this for the curricular review process.

Thank you.

--

************************************************
Gina M. Brelsford, Ph.D.
Associate Professor of Psychology
Gina,

I concur with these needed changes.

Melanie D. Hetzel-Riggin, Ph.D.
Professor of Psychology

On Mar 18, 2018, at 1:51 PM, Gina Brelsford <gmy103@psu.edu> wrote:

Hi Everyone:
I will be putting through the following curricular changes per our past discussions at faculty meetings. Can you please read over the entire set of changes and let me know if you support these changes? I will need this for the curricular review process.

Thank you.

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***************

Gina M. Brelsford, Ph.D.
Associate Professor of Psychology
Associate Editor, Psychology of Religion and Spirituality
Professor-In-Charge, Applied Clinical Psychology Master's Program
PA Licensed Clinical Psychologist

Penn State Harrisburg
W311 Olmsted Bldg.
777 W. Harrisburg Pike
Middletown PA 17057
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: Earth and Mineral Sciences / University Park campus
Department or Instructional Area: Astrobiology

New Graduate Program, Option, or Minor: Add

Designation of new graduate program: __________________________
Classification of Instructional Programs (CIP) Code: _____________
Designation of new graduate option: ___________________________
Designation of new graduate minor: ___________________________

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change

Current designation of graduate program: Astrobiology Dual-Titre Ph. D.
Current designation of graduate option:
Current designation of graduate minor:

New designation of existing graduate program (if changing): Same
New designation of existing graduate option (if changing):
New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above): Change from 9 credits to 15 credits

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head

James F. Kasting
Printed name
Signature
Date: 11/3/17

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

David M. Babb
Printed name
Signature
Date: 11/9/17

Approved by College/School Dean/Chancellor (or Designee):

John R. Hellmann
Printed name
Signature
Date:
Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:

On Behalf of David Babb

Printed name

Signature

Date: 10/9/2018

Recommended by Chair, Graduate Council Committee on Programs and Courses:

On Behalf of C. Andrew Cole

Printed name

Signature

Date: 10/9/2018

Noted by Dean of the Graduate School:

On Behalf of Regina Vasilatos-Younken

Printed name

Signature

Date: 10/9/2018
Astrobiology Dual-Title Ph.D. Program Requirements Change

Submitted by James Kasting, Astrobiology Program Chair (865-3207)

Table of Contents

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C. Written responses from departments affected                   p. 9
D. Written evidence of consultation regarding SARI requirements  p. 14
Memo To: The Graduate School
Subject: Application for change in Astrobiology Dual-Title Ph.D. requirements
From: James Kasting, Astrobiology Dual-Title Program Chair

A. Justification for changes: The Astrobiology Dual-Title Ph.D. program was one of the earliest Dual-Title programs at the University, having been started around 2002. Our original requirements included only 9 credits of required coursework. Two years ago, Grad Council adopted rules requiring that all Dual-Title programs include at least 15 credits of coursework. So, we needed to expand our coursework requirements.

In addition, two other things have changed since the program was started: 1) We have lost our NASA Astrobiology Institute block funding. This makes it more difficult to run the field course that was previously required. 2) We now have a majority of participation from the Astronomy Department. Astronomy was a minor component of the program when Astrobiology started up, but since then they have hired 5 exoplanet astronomers, and many of their graduate students are interested in our program. So, we wanted to strengthen the astronomical side of the program.

B. Comparison with old program

(If you want the simple, 5-point description of the changes, jump to subsection (iii) in this section.)
i) Old program Grad Bulletin description

Astrobiology (ABIOL)

JAMES F. KASTING, Program Coordinator
2217 Earth and Engineering Sciences Building
814-865-7394; Astrobiology Research Center

Degree Conferred

Students electing this degree program through participating programs earn a degree with a dual title in the Ph.D., i.e., Ph.D. in (graduate program name) and Astrobiology.

The following graduate programs offer dual degrees in Astrobiology: Astronomy and Astrophysics; Biology; Biochemistry, Microbiology, and Molecular Biology; Geosciences; and Meteorology.

The Graduate Faculty

The Program

The Astrobiology dual-title degree program is administered by the Department of Geosciences for the participating graduate programs. A program committee with representatives from each participating department maintains program definition, defines the nature of the candidacy examination and assigns the examining committee, identifies courses appropriate to the program, and recommends policy and procedures for the program's operation to the dean of the Graduate School and to the deans of the participating colleges. The dual-title degree program is offered through participating programs in the College of Earth and Mineral Sciences and the Eberly College of Science and, where appropriate, other graduate programs in the University. The program enables students from several graduate programs to gain the perspectives, techniques, and methodologies of Astrobiology, while maintaining a close association with major program areas of application.

Astrobiology is a field devoted to the exploration of life outside of Earth and to the investigation of the origin and early evolution of life on Earth. For admission to pursue a dual-title degree under this program, a student must apply to (1) the Graduate School; (2) one of the participating major graduate programs; and (3) the Astrobiology program committee. Usually students will apply and be accepted into the major program first. Application to the dual-title degree program can occur upon matriculation, but should be completed before the candidacy examination in the major program is scheduled.
Admission Requirements

Graduate students with research and educational interests in astrobiology may apply to the Astrobiology Dual-Title Degree Program. Candidates must submit transcripts of their undergraduate and graduate course work, a written personal statement indicating the career goals they hope to serve by attaining an Astrobiology dual title, and a statement of support from their dissertation adviser. A strong undergraduate preparation in the basic sciences is expected, with evidence of an interest in multiple disciplines.

Degree Requirements

To qualify for a dual-title degree, students must satisfy the requirements of the major graduate program in which they are enrolled, in addition to the minimum requirements of the Astrobiology program. The minimum course requirements for the dual-title in Astrobiology are ABIO 574 Planetary Habitability (3 credits), ABIO 590 Astrobiology Seminar (2 credits), ABIO 570 Astrobiology Field Experience (2 credits), and at least 2 credits of 400- or 500-level course work outside of the student's major program in an area relevant to Astrobiology (through consultation with their adviser). All students must pass a candidacy examination that assesses their potential in the field of astrobiology. This examination may be part of the candidacy examination in the student's major graduate program if an Astrobiology faculty member serves on the examination committee and if acceptable to the major program. If not, the Astrobiology dual-title program will offer a second candidacy examination. The structure and timing of the second candidacy examination will be determined jointly by the dual-title and major program. The student's doctoral committee should include faculty from the Astrobiology program, but this person may be the adviser and have an appointment in the major program of study. The field of Astrobiology should be integrated into the comprehensive examination. A Ph.D. dissertation that contributes fundamentally to the field of Astrobiology is required. A public oral presentation of the dissertation is required.

Financial Aid

Financial aid is generally available through the major program and through highly competitive University Graduate Fellowships (UGF). In addition, Penn State's Astrobiology Research Center (PSARC) provides support for students through research assistantships and graduate fellowships. Typically, students in Astrobiology are supported 12 months per year on some form of assistantship, fellowship, or summer wages provided by PSARC, UGF, or their home department.

Other Relevant Information

Students intrigued by the possibility of pursuing research in Astrobiology should visit the PSARC website and the NASA Astrobiology Institute website.
Courses

Graduate courses carry numbers from 500 to 599 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

ASTROBIOLOGY (ABIOL) course list

ABIOL 570 Astrobiology Field Experience (2) Geological field excursions to sites where the early evolution of life and the environment is revealed and to modern analogues.
Effective: Summer 2004

ABIOL 574 Planetary Habitability (3) Aspects of star and planet formation, habitable zones, biospheric evolution, life in extreme environments, planet and life detection.
Effective: Summer 2004

ABIOL 590 Astrobiology Seminar (2) Student-led presentations and discussions of current and classic literatures relevant to the themes of Astrobiology.
Effective: Summer 2004

ABIOL 597 Special Topics (1-9) Formal courses given on a topical or special interest subject which may be offered infrequently.
Effective: Summer 2005

Last Import from UCM: January 14, 2017 3:00 AM
ii) Proposed Program Description

Astrobiology (ABIOL)

JAMES F. KASTING, Program Coordinator

435A Deike Building
814-865-3207

Degree Conferred

Students electing this degree program through participating programs earn a degree with a dual title in the Ph.D., i.e., Ph.D. in (graduate program name) and Astrobiology.

The following graduate programs offer dual degrees in Astrobiology: Astronomy and Astrophysics; Biochemistry, Microbiology, and Molecular Biology; Geosciences; and Meteorology & Atmospheric Science.

The Graduate Faculty

The Program

Astrobiology is a field devoted to the exploration of life outside of Earth and to the investigation of the origin and early evolution of life on Earth. This dual-title program enables students from several graduate programs to gain the perspectives, techniques, and methodologies of Astrobiology, while maintaining a close association with their primary graduate program.

Admission Requirements

Students must apply and be admitted to their primary graduate program and The Graduate School before they can apply for admission to the Astrobiology dual-title degree program. After admission to their primary program, students must apply for admission to and meet the admissions requirements of the Astrobiology dual-title program. Doctoral students must be admitted into the dual-title degree program in Astrobiology prior to taking the candidacy examination in their primary graduate program.

To apply for the Astrobiology dual-title, graduate students must submit transcripts of their undergraduate and graduate course work, a written personal statement indicating the career goals they hope to serve by attaining an Astrobiology dual title, and a statement of support from their dissertation adviser (or, if an adviser has not yet been chosen, from the Head of the student’s graduate program). A strong undergraduate preparation in the basic sciences is expected, with evidence of an interest in multiple disciplines.
Degree Requirements

To qualify for a dual-title degree, students must satisfy the requirements of the major graduate program in which they are enrolled, in addition to the minimum requirements of the Astrobiology program. The minimum requirements for the Astrobiology program include 3 credits of coursework in each of five different areas, specified as follows: 1) 3 credits of 500-level coursework related to the origin and evolution of life on Earth (GEOSC 502 Evolution of the Biosphere, or approved substitute). 2) 3 credits of 500-level coursework related to planetary formation, evolution, and exploration (ABIOL 574 Planetary Habitability, or approved substitute). 3) 3 credits of 500-level coursework related to the astronomical search for life (ASTRO 577 Exoplanets, or approved substitute). 4) 3 credits of ABIOL 590 Astrobiology seminar. The seminar course may include fieldwork, when such an option is offered. 5) 3 credits of 400, 500, or 800 level, astrobiology-related coursework in fields outside the student’s major or 3 credits of 500-level coursework within their major (through consultation with their adviser). A list of pre-approved courses is available from the Program Coordinator; other courses must be approved by him/her.

The candidacy examination committee for the dual-title Ph.D. degree must include at least one Graduate Faculty member from the Astrobiology program. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy examination, containing elements of both the primary graduate degree program and Astrobiology. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of an Astrobiology dual-title doctoral degree student must include at least one member of the Astrobiology Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the doctoral committee is not also a member of the Graduate Faculty in Astrobiology, the member of the committee representing Astrobiology must be appointed as co-chair. The Astrobiology representative on the student’s doctoral committee will develop questions for and participate in the evaluation of the comprehensive examination.

Students in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their original research and education in both their primary graduate program and Astrobiology. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

Student Aid

Graduate assistantships and other forms of student aid may be available through the student’s primary graduate program; these are described in the Student Aid section of the Graduate
Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

ASTROBIOLOGY (ABIOL) course list

The following courses are pre-approved for use in satisfying the last of the Astrobiology Dual-Title requirements described above. Other courses can be requested by petition to the Program Coordinator.

ASTRO 401 Fundamentals of Planetary Science and Astronomy (4)

ASTRO 420W Planets and Planetary System Formation (3)

BIOL 405 Molecular Evolution (3)

BIOL 419 Ecological and Environmental Problem Solving (3)

BIOL 427 Evolution (3)

BIOL 428 Population Genetics (3)

BIOL 433 Evolution of Vertebrates (3)

BIOL 436 Population Ecology and Global Climate Change (3)

BIOL 451 Biology of RNA (3)

BIOL 463 General Ecology (3)

BIOL 503 Critical Elements of Genetics and Molecular and Cellular Biology (3)

BIOL 555 (STAT 555, IBIOS 555) Statistical Analysis of Genomics Data (3)

BMB 400 Molecular Biology of the Gene (3)

BMB 402 General Biochemistry (3)
BMB 406 Molecular Biology (3)
BMB 428 Physical Chemistry with Biological Applications (3)
BMB 450 Microbial/Molecular Genetics (3)
BMB 465 Protein Structure and Function (3)
BMB 484 Functional Genomics (3)
BMMB 521 Microbial Biology (3)
BMMB 533 Protein Evolution (3)
BMMB 542 Eukaryotic Cell Biology (3)
BMMB 551 Genomics (3)
BMMB 572 Nucleic Acid Chemistry (3)
GEOSC/BIOL 474 Astrobiology (3)
GEOSC 409W Geomicrobiology (3)
GEOSC 502 Evolution of the Biosphere (4)
METEO 436 Radiation and Climate (3)
METEO 523 Modeling the Climate System (3)
METEO 535 Radiative Transfer (3)
iii) Substantive changes to the old program:

1. Because we have more credits to work with, we broadened the requirements to include 3 credits of 500-level coursework in each of three areas: i) the origin and evolution of life on Earth, ii) planetary formation, evolution, and exploration, and iii) the astronomical search for life. Broadly speaking, these cover the areas of biology, geosciences (including atmospheric and planetary science), and astronomy. These are the three broad topic areas of astrobiology.

2. We combined the field course and the seminar into one 3-credit course. Fieldwork is now optional, depending on who is teaching the course and whether they are qualified to lead a good field trip. This solves the problem described in Section A.

3) The requirement for an additional 400-level (or higher) course outside the student’s home department remains the same.

4) Astrobiology is now required to be fully integrated into the student’s candidacy exam, as required by the Graduate School.

5) We have changed the wording under the heading ‘Financial Aid’ to reflect the fact that we are no longer being funded by the NASA Astrobiology Institute.

C. Original written responses from departments affected, either by potential overlapping content or audience or by potential opportunities for collaboration (received during consultation phase). (Email approvals obtained from all five participating departments)

Geosciences
Meteorology and Atmospheric Science
Biology
Biochemistry, Microbiology, and Molecular Biology
Astronomy and Astrophysics
Email to Heads of Participating Departments

Hi Folks,
I'm sending a reminder to reply to Jim Kasting (jfk4@psu.edu) with regards to the proposed revisions to the Astrobiology Dual-Title Program. See message from January 27th below.

Thanks,
Angela

From: "Angela Packer" <amp13@psu.edu>
To: "Lee Kump" <lrk4@psu.edu>, "DAVID JONATHAN STENSRUD" <djs78@psu.edu>, "Tracy Lee Langkilde" <tl30@psu.edu>, sbs24@psu.edu, "Donald P. Schneider" <dps7@psu.edu>
Cc: "jfk4" <jfk4@psu.edu>
Sent: Friday, January 27, 2017 1:09:39 PM
Subject: Proposed Change to the Astrobiology Dual-Title Ph.D. Requirements

Hi Folks,

I'm contacting you on behalf of Jim Kasting, Astrobiology Dual-Title Program Chair, regarding the proposed changes to the Astrobiology Dual-Title Ph.D. requirements. The next step in this process is to obtain departmental permissions, see page 9 of the attached document, part C.

Please send your responses to both Jim and myself (amp13@psu.edu).

Once these are received and compiled, the information will go the the Graduate School.

Thanks,
Angela

***********************************************************************
Angela Packer
College of Earth and Mineral Sciences
Department of Geosciences
507 Deike Bldg.
amp13@psu.edu
814-865-7394 (phone)
814-863-7823 (fax)

Responses from the participating departments

1) Astronomy

From: "Donald P. Schneider" <dps7@psu.edu>
To: "ANGELA PACKER" <amp13@psu.edu>, "James Kasting" <jfk4@psu.edu>,
"Donald Schneider" <dps7@psu.edu>, "Mike Eracleous" <mxel17@psu.edu>, "Nina
Bumgarner" <ndb2@psu.edu>
Sent: Friday, February 3, 2017 6:19:41 PM
Subject: Fwd: Proposed Change to the Astrobiology Dual-Title Ph.D. Requirements

Hi Angela,
The proposed changes are fine with Astronomy. -Donald Schneider

2) Biology

Dear Jim,
I apologize for the delay and appreciate you reaching out to me. Yes, I approve this. We
will continue to make our students aware of this opportunity, and hope to have Biology
faculty involved in the future.
Best, Tracy

On Aug 28, 2017, at 9:50 AM, jfk4 <jfk4@psu.edu> wrote:

Dear Prof. Langkilde,

Pardon me, I may have sent this message to the wrong folks over there at Biology. (See
my message from Aug. 22 below.) We are trying to get the new rules for our
Astrobiology Dual-Title program through the Graduate School, and we need your
approval, as Biology is one of our participating departments. The new requirements are
attached; the old ones can be found on the link in my previous message. As my earlier
message notes, I'm not aware that there are currently any Biology faculty members listed
on our graduate faculty; however, we hope that you will keep this option available for
your students.

A reply to this message by email would be sufficient. All five other participating
departments have responded favorably.

Thanks for your attention.

Jim Kasting (Geosciences)
3) BMMB

From: "Dave Gilmore" <dsg11@psu.edu>
To: "Angela Packer" <amp13@psu.edu>
Sent: Wednesday, June 7, 2017 4:09:25 PM
Subject: Re: Proposed Revisions to the Astrobiology Dual-Title Ph.D. Requirements

Hi Angela,
These changes are alright with me. They don’t alter our requirements for the BMMB graduate program. The program needs to be aware that some of the 500-level BMMB graduate courses are only offered every other year because of the low enrollment that they have when offered every year.
Dave

******************************************************************************
David S. Gilmour
Professor of Biochemistry and Molecular Biology
Co-director of the BMMB graduate program
Center for Eukaryotic Gene Regulation
Department of Biochemistry and Molecular Biology
465A North Frear
Penn State University
University Park, PA 16802

Office: 814-863-8905
Lab: 814-865-3795
Fax: 814-863-7024
Cellphone: 814-777-4166
Research web page: http://bmb.psu.edu/directory/dsg11
BMB Department: http://bmb.psu.edu/
Center for Eukaryotic Gene Regulation: http://www.huck.psu.edu/institutes-and-centers/cgr

4) Geosciences

Hi Jim,

I approve of the changes and the revised requirements for the Astrobiology dual title.

Best,
-Demian

Demian Saffer
Professor of Geosciences  
Assoc. Dept. Head for Graduate Programs & Research  
534 Deike Building  
The Pennsylvania State University  
University Park, PA 16802  
814-865-7965

5) Meteorology

Dear Angela and Jim,

The Department of Meteorology and Atmospheric Science supports the proposed changes to the Astrobiology Dual-Title Ph.D. requirements as outlined in the attached letter. The program is updating its requirements to meet current Penn State policy for dual title degrees and may be of value to some of our students who have interest in the atmospheres of other planets.

Dave Stensrud  
Professor and Head

On 3/3/17 2:12 PM, Angela Packer wrote:

Hi All,
Just a reminder, if you haven't done so, please send your feedback on the proposed changes to the Astrobiology Dual-Title Ph.D. requirements to Jim Kasting and myself (amp13@psu.edu) as soon as possible so he can proceed with the next step of the procedure.

Thanks,
Angela
D. Written evidence of consultation with the Office for Research Protections regarding SARI requirements, as necessary, depending on the nature of the proposed change(s). For example, addition of a new degree would require such consultation, but changes to existing degree requirements may not, unless the changes affect previously approved SARI requirements for the program.
(SARI requirements are met by the students through their home departments, so this should not be an issue here.)
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

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College/School: Eberly College of Science
Department or Instructional Area: BIOL

New Graduate Program, Option, or Minor: Add

Designation of new graduate program:

Classification of Instructional Programs (CIP) Code: ___________________________

Designation of new graduate option: 

Designation of new graduate minor: 

Indicate effective semester: 
- First semester following approval
- Second semester following approval

---

Existing Graduate Program Option, or Minor: ☑ Change  ☑ Drop

Current designation of graduate program: Biology

Current designation of graduate option: dropping options CDB_0666, EMPP_0666, NEURO_0666, PLBIO_0666

Current designation of graduate minor: 

New designation of existing graduate program (if changing): 

New designation of existing graduate option (if changing): 

New designation of existing graduate minor (if changing): 

Brief description of the change (if not noted above): changing degree requirements and dropping options

Indicate effective semester: Summer 2018
- First semester following approval
- Second semester following approval

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Submitted by Graduate Program Head

Stephen W. Schaeffer
Printed name
Signature

Date: 3/2/2018

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Steve Toppolmann
Printed name
Signature

Date: 4/9/18

Approved by College/School Dean/Chancellor (or Designee):

Alessandra Slavkovic
Printed name
Signature

Date: 4/11/18
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<th>Date</th>
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<tr>
<td>On Behalf of David Babb</td>
<td>V. Huddleston</td>
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<td>10/9/2018</td>
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<tr>
<td>Recommended by Chair, Graduate Council Committee on Programs and Courses:</td>
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<tr>
<td>On Behalf of C. Andrew Cole</td>
<td>V. Huddleston</td>
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<td>10/9/2018</td>
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<td>Noted by Dean of the Graduate School:</td>
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<td>On Behalf of Regina Vasilatos-Younken</td>
<td>V. Huddleston</td>
<td></td>
<td>10/9/2018</td>
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</tbody>
</table>
PROPOSED CHANGE FOR
Biology

SUBMITTED BY
Stephen W. Schaeffer, Ph.D.
Department of Biology
The Pennsylvania State University
208 Erwin W. Mueller Laboratory
University Park, PA 16802-5301
Telephone: 814 865-3269
FAX: 814 865-9131
Justification for the Proposed Changes

State why the change is being proposed, and any expected outcomes as a result.

Change Existing Graduate Program Option or Minor – Drop Options

In about 1997, Biology adopted three graduate degree options, (1) Cell and Developmental Biology; (2) Ecological and Molecular Plant Physiology; and (3) Neuroscience. The major reason for dropping the options is that in the last 15 years, none of our graduate students have chosen to participate in these three options and we have no current students pursuing these options. Here is some background on why we have the options. The required course work for these three options were originally developed and crafted by the intercollege graduate IBIOS program. The research interests of the Biology graduate faculty are quite diverse including genetics, genomics, cellular biology, developmental biology, and ecology. In other words, DNA to organisms in their environment. Biology faculty recruited graduate students from the IBIOS program as well as other intercollege graduate degree programs based on which program the graduate student applicant wants to get their degree. This leads to faculty laboratories with students pursuing their degrees from IBIOS and other intercollege programs. We adopted the IBIOS options to allow Biology graduate students to meet the specific IBIOS option requirements and receive recognition for their effort.

In 2014, the IBIOS graduate degree program was evaluated and reorganized. Cell and Development Biology within IBIOS became part of the Molecular Cellular and Integrative Bio-sciences program. The other two IBIOS options, Ecological and Molecular Plant Physiology and Neuroscience became the stand alone programs Plant Biology and Neuroscience under the Huck Institutes of the Life Sciences. Ultimately, the IBIOS program and the options adopted by Biology no longer exist.

Biology also has had a Plant Biology option on the book for nearly 30 years. Again, in that time, we have had a hand full of students chose this option and we have no current students pursuing the option. Students with interests in plant biology apply through the Plant Biology program through the Huck Institutes of the Life Sciences rather than Biology.

Impact: Only students in the Biology graduate program would be affected by this change. Only biology students could choose these graduate degree options.

Therefore, Biology would like to drop the (1) Cell and Developmental Biology; (2) Ecological and Molecular Plant Physiology; and (3) Neuroscience, and (4) Plant Biology options.

We have consulted with Melissa Rolls, Director of Molecular, Cellular, and Integrative Bio-sciences; Teh-Hui Kao, Director of Plant Biology, and Kevin Alloway, Co-Director of Neuroscience to determine if dropping these options will impact their programs.

Remove Dual Degree Ph.D. Program in Biology and Astrobiology

The Biology Program is also unadopting the Dual Degree Ph.D. Program in Biology – Astrobiology. The only two faculty previously affiliated with this program have left the university, and there are no current faculty with any interest in participating in the program. Since the inception of the Dual-Degree PhD Program in Biology-Astrobiology, only two students have elected to participate. We have no current students pursuing the Dual Degree Ph.D. Program in Biology – Astrobiology.

Impact: This change is expected to have minimal impact because we do not have any faculty that are
recruiting students with interests in this area and it is not likely that we will recruit faculty with interests in astrobiology in the future.

We have consulted with Dr. James Kasting, Director of the Astrobiology program about the proposed drop.

**Addition of a New Course Requirement for the Biology Degree**

The only change to existing course requirements for both doctoral and master’s students, is the introduction of a pedagogy course (BIOL 593) to enhance our students’ ability to explain and communicate about science. **BIOL 893**

New course proposal submitted at the request of the Graduate School for updated information on Bulletin listings from 2010 or before in expectation of implementation of the new academic catalog management system.

Expected outcomes: Compliance with requirements of Graduate School Bulletin listings.
Comparison of Changes

A description of the proposed changes as compared to the existing program requirements, so the reviewers can determine what specifically is being changed. A table is recommended.

The only change to existing course requirements for both doctoral and master's students, is the introduction of a pedagogy course (BIOL 593) to enhance our students' ability to explain and communicate about science. **BIOL 893**

Existing course requirements are outlined in more detail in the new Bulletin listing.
Existing Graduate Bulletin Copy

A complete and current copy of the existing Bulletin page for the program, with any changes that need to be made marked by using Track Changes.
Biology (BIOL)

DOUGLAS R. CAVENER, TRACY LANGKILDE, Head of the Department
208 Erwin W. Mueller Building
814-865-4562
gainfo@email.bio.psu.edu

Degrees Conferred:
Ph.D., M.S.

The Graduate Faculty

Typically, tenure-line and tenured faculty in Biology have 1 to 5 graduate students in their laboratories leading to a low student/adviser ratio for both doctoral and master’s students.

The Programs

The department directs graduate programs in The Biology graduate program encompasses a broad spectrum of research areas, including bioinformatics, cell biology, developmental biology, ecology, evolution, genetics, neuroscience, phylogenetics, and physiology. The department houses the Institute of Molecular Evolutionary Genetics. The Ph.D. in Biology may be taken with an option in Molecular Evolutionary Biology, Plant Biology, or one of the Integrative Biosciences options adopted by the department (Molecular Medicine, Cell and Developmental Biology, Chemical Biology, Ecological and Molecular Plant Physiology, or Neuroscience). The courses of study are planned individually by the student and a graduate faculty adviser, often with input from the student’s graduate committee. Typically, tenure-line and tenured faculty in Biology have 1 to 5 graduate students in their laboratories leading to a low student/adviser ratio for both doctoral and master’s students.

Admission Requirements

Requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.
Scores from the Graduate Record Examinations (GRE) are required for admission. At the discretion of a graduate program, a student may be admitted provisionally for graduate study in a program without these scores, at the discretion of the program. Requirements listed here are in addition to general Graduate School’s requirements stated in the section of the Graduate Bulletin.

Admission is restricted to students who have the baccalaureate degree in a biological science or related field and who present a cumulative undergraduate average of at least 3.00 on a scale of 4.00. Each applicant must provide a personal statement of interests and objectives, curriculum vitae/cv/resume, and letters from three persons verifying the applicant’s academic competence/preparedness and readiness for graduate study.

Master's Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Students obtaining an M.S. degree in Biology must complete course work as described in the General Information section of this bulletin, with guidance from their academic adviser. A thesis is usually required and must be defended before a faculty committee. The research must represent an original contribution, and the time allotted to it is about one year.

A minimum of 30 credits at the 400, 500, 600, or 800 level is required, with at least 18 credits at the 500 and 600 level combined. Students are required to write a thesis, and at least 6 credits in thesis research (600 or 610) must be taken in conjunction with completing the thesis. The thesis must be accepted by the advisers and/or committee members, the head of the graduate program, and the Graduate School, and the student must pass a thesis defense. The general requirements for the M.S. degree include 30 graduate credits, a written thesis, and successful defense of the thesis before a graduate committee. The master’s program in Biology is usually completed within two years. Additional details about the requirements of the Graduate School for a master’s degree are found in the GENERAL INFORMATION section of the Graduate Bulletin.

Four Biology courses are curricular requirements for all incoming biology master’s students: BIOL 590 (2 credits—Colloquium), BIOL 592 (1 credit—Critical Evaluation of Biological Literature), BIOL 8593 (2 credits), and BIOL 400 (1 credit—Teaching in Biology), as is the successful completion of ethics training administered by the Collaborative Institutional Training Initiative (CITI). Students take BIOL 592 to fulfill part of the research ethics requirement as well as to develop critical evaluation skills both to read and to publish papers in the biological sciences. Additional course work is tailored to the student’s research interests after advance consultation with their adviser, and specific courses may be required by the adviser depending on the student’s background and research plans.

Students pursuing a master’s degree in Biology take courses at the 400- and 500-level taught by graduate faculty in the department. The Biology program has a limited number of required courses because the faculty have diverse research interests that span molecular to environmental
biology. For this reason, the courses that master’s students take are tailored to their research area in consultation with their adviser.

The culminating experience (milestone) for a master’s student—the Master of Science degree—is a research-based thesis that generally results in a peer-reviewed publication. The student will present and defend the thesis to a committee of three tenured or tenure-line Graduate Faculty members, consisting of the adviser and two other members of the Graduate Faculty. At least two members of the committee, including the adviser, must be members of the Department of Biology Graduate Faculty in the Biology graduate program.

The master’s program in Biology is usually completed within two years.

Doctoral Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

The only courses required across the department are Biology 592, Critical Evaluation of Biological Literature, and Biology 590, a colloquium covering the Biology Seminar Series.

The doctoral program in Biology is first and foremost a research-oriented program. The single most important component is the successful completion and defense of an original research project—the dissertation. Additionally, the Biology doctoral program in Biology and the Graduate School policies require that students meet certain residency requirements, maintain satisfactory scholastic performance, demonstrate mastery of the English language, and successfully pass candidacy, comprehensive, and final oral examinations, outlined in the link above. To earn the Ph.D. degree, doctoral candidates must write a dissertation that is accepted by the doctoral committee, the head of the graduate program, and the Graduate School. Details may be found in the GENERAL INFORMATION section of the Graduate Bulletin.

Four Biology courses are curricular requirements for all doctoral students: BIOL 590 (4 credits—Colloquium), BIOL 592 (Critical Evaluation of Biological Literature1 credit), and BIOL 8593 (Experiential Teaching in Biology2 credits), and BIOL 602 (4 credits), as is the successful completion of ethics training administered by the Collaborative Institutional Training Initiative (CITI). In addition, although doctoral students are required to complete xx 4 credits of BIOL 602 (Supervised Experience in College Teaching); however, these xx 4 credits cannot be counted towards the degree requirements.

Additional course work is tailored to the student’s research interests after advance consultation with their adviser and doctoral committee, and specific courses may be required by the adviser and/or doctoral committee depending on the student’s background and research plans. Course work specific to individual plans of study are decided upon by the student in consultation with their graduate adviser and Ph.D. doctoral committee. All doctoral degree students must pass a written and oral candidacy examination that is usually administered during their third semester of study. After a student has completed all of their course work and made substantial progress on
the design and execution of their thesis dissertation research, a comprehensive examination is administered by their Ph.D. doctoral committee. The Ph.D. thesis dissertation must represent a significant original contribution suitable for publication, and will usually require between two and four years of laboratory and/or field research. When complete the thesis dissertation must be defended before the student’s graduate doctoral committee (the final oral examination). The thesis defense is normally immediately preceded by a public presentation of the thesis research by the student.

**Dual-title Ph.D. in Biology and Astrobiology**

**Admissions Requirements**

Students must apply and be admitted to the graduate program in Biology and The Graduate School before they can apply for admission to the dual title degree program. After admission to their primary program, students must apply for admission to and meet the admissions requirements of the Astrobiology dual-title program. Refer to the Admission Requirements section of the Astrobiology Bulletin page. Doctoral students must be admitted into the dual-title degree program in Astrobiology prior to taking the candidacy examination in their primary graduate program.

**Degree Requirements**

To qualify for the dual title degree, students must satisfy the degree requirements for the doctoral degree in Biology, listed above. In addition, students must complete the degree requirements for the dual-title in Astrobiology, listed on the Astrobiology Bulletin page. Some courses may satisfy both Biology and Astrobiology degree requirements. Final course selection must be approved by the student’s doctoral committee.

The candidacy examination committee for the dual-title Ph.D. degree will be composed of Graduate Faculty from Biology and must include at least one Graduate Faculty member from the Astrobiology program. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy examination, containing elements of both Biology and Astrobiology. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of a Biology and Astrobiology dual-title Ph.D. student must include at least one member of the Astrobiology Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the doctoral committee is not also a member of the Graduate Faculty in Astrobiology, the member of the committee representing Astrobiology must be appointed as co-chair. The Astrobiology representative on the student’s doctoral committee will develop questions for and participate in the evaluation of the comprehensive examination.
Students in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their original research and education in Biology and Astrobiology. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

**Molecular Evolutionary Biology Options**

The department awards Ph.D. graduate degrees in Biology covering the full spectrum of subjects represented by our diverse faculty under the general Biology option in the base degree programs described above. If desired, a student may also elect to pursue one of the following options as part of his/her program of study.

**Molecular Evolutionary Biology option**

**Option Requirements:**

1. The student must meet the criteria for the M.S. or Ph.D. in Biology.
2. The student’s research adviser must be a member of the Graduate Faculty in the Biology graduate program and/or a full member of the Institute of Molecular Evolutionary Genetics. Other committee members may be chosen as needed providing that a majority of the committee is associated with the IMEG.
3. In addition to the normal Biology program requirements, the student must take (for both an M.S. or Ph.D. in Biology) 3 credits of course work in BIOL 591 and 9 credits from among the following courses (to be selected in consultation with the student's committee): BIOL 405 (3 credits), BIOL 410, BIOL 422 (3 credits), BIOL 427 (3 credits), BIOL 428 (3 credits), BIOL 501, BIOL 504, BIOL 514 (2 credits), BIOL 524, BIOL 533, BIOL 542, BIOL 590.
4. Any other course work or training deemed appropriate by the student's committee.

**Plant Biology option:**

1. The student must meet the criteria for the M.S. or Ph.D. in Biology. (2) The student's research adviser must be a member of the Biology program. Other committee members may be chosen as needed to assure that a well-rounded graduate advisory committee is established. (3) In addition to the normal Biology program requirements, the student must take the required colloquia in the field of specialization and (for both an M.S. or Ph.D. in Biology) a minimum of 6 credits from among the following courses (to be selected in consultation with the student's committee): BIOL 410, BIOL 414, BIOL 422, BIOL 427, BIOL 441, BIOL 448, BIOL 513, BIOL 514, BIOL 515, BIOL 516, BIOL 544, BIOL 591, BIOL 597, BMB 514, HORT 444. (4) Any other course work or training deemed appropriate by the student's committee.

Integrative Biosciences options are available in Molecular Medicine, Cell and Developmental Biology, Ecological and Molecular Plant Physiology, Chemical Biology, and Neuroscience. Requirements for these options that are in addition to the basic criteria for a Ph.D. in Biology are described under Integrative Graduate Program in Biosciences in this bulletin.
Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the STUDENT AID section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin. In addition, several graduate fellowships and scholarships are available for students within the Department of Biology.

Programs of study are planned to require no more than two years for the M.S. degree—and five for the Ph.D. degree. A student transferring to the department with the M.S. degree should plan on four additional years. Financial support from teaching or research assistantships or from fellowships is available to students in good standing, but not awarded beyond these limits except in unusual cases.

Courses

Graduate courses carry numbers from 500 to 599 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

BIOLOGY (BIOL) course list

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the STUDENT AID section of the Graduate Bulletin. In addition, several graduate fellowships and scholarships are available for students within the Department of Biology.

Programs of study are planned to require no more than two years for the M.S. degree—and five for the Ph.D. degree. A student transferring to the department with the M.S. degree should plan on four additional years. Financial support from teaching or research assistantships or from fellowships is available to students in good standing, but not awarded beyond these limits except in unusual cases.
Consultation

Written evidence of consultation with any departments affected by the proposed change. Consultation must include the original query and the full reply by the consultant. Consultations submitted as part of the proposal will be available to the public when the proposal is published, so private exchanges should be edited out and any references to current students should be removed.

Consultation 1 Dropping Biology Options

Consultation with
Dr. Melissa Rolls, Director of Molecular, Cellular, and Integrative Bio-sciences program within the Huck Institutes of the Life Sciences
Dr. Kevin Alloway, Co-Director of the Neuroscience program within the Huck Institutes of the Life Sciences
Dr. Teh-Hui Kao, Director of the Plant Biology program within the Huck Institutes of the Life Sciences

The following email was sent to Directors whose programs might be impacted by dropping the four options:

From "STEPHEN SCHAEFFER" <sws4@psu.edu>
To mur22@psu.edu, kda1@psu.edu, txk3@psu.edu
Subject Consultation on Biology Graduate Program to Drop IBIOS Options
Date Thu, Apr 5, 2018 09:38 AM

Safe View On [Turn Off] What is "Safe View"?
Dr. Melissa Rolls, Director of Molecular, Cellular, and Integrative Bio-sciences program within the Huck Institutes of the Life Sciences
Dr. Kevin Alloway, Co-Director of the Neuroscience program within the Huck Institutes of the Life Sciences
Dr. Teh-Hui Kao, Director of the Plant Biology program within the Huck Institutes of the Life Sciences

Drs. Rolls, Alloway, and Kao,

Biology is the process of updating its graduate degree program and would like to drop former IBIOS options (see below). I would like to officially ask whether the proposed change will have any affect on your graduate degree program. If you could respond by Monday April 9th, that would be great. If I do not hear from you, I will assume that this change is agreeable to you.

Sincerely,
Stephen W. Schaeffer
Associate Head for Graduate Education, Biology

Change Existing Graduate Program Option or Minor – Drop Options

In about 1997, Biology adopted three graduate degree options, (1) Cell and Developmental Biology; (2) Ecological and Molecular Plant Physiology; and (3) Neuroscience. The major reason for dropping the options is that in the last 15 years, none of our graduate students have chosen to participate in these three options and we have no current students pursuing these options. Here is some background on why we have the options. The required course work for these three options were originally developed and crafted by the intercollege graduate IBIOS program. The research interests of the Biology graduate faculty are quite diverse including genetics, genomics, cellular biology, developmental biology, and ecology. In other words, DNA to organisms in their environment. Biology faculty recruited graduate students from the IBIOS program as well as other intercollege graduate degree programs based on which program the graduate student applicant wants to get their degree. This leads to faculty laboratories with students pursuing their degrees from IBIOS and other intercollege programs. We adopted the IBIOS options to allow Biology graduate students to meet the
specific IBIOS option requirements and receive recognition for their effort.

In 2014, the IBIOS graduate degree program was evaluated and reorganized. Cell and Development Biology within IBIOS became part of the Molecular Cellular and Integrative Bio-sciences program. The other two IBIOS options, Ecological and Molecular Plant Physiology and Neuroscience became the stand alone programs Plant Biology and Neuroscience under the Huck Institutes of the Life Sciences. Ultimately, the IBIOS program and the options adopted by Biology no longer exist.

Biology also has had a Plant Biology option on the books for nearly 30 years. Again, in that time, we have had a hand full of students chose this option and we have no current students pursuing the option. Students with interests in plant biology apply through the Plant Biology program through the Huck Institutes of the Life Sciences rather than Biology.

**Impact:** Only students in the Biology graduate program would be affected by this change. Only biology students could choose these graduate degree options.

Therefore, Biology would like to drop the (1) Cell and Developmental Biology; (2) Ecological and Molecular Plant Physiology; and (3) Neuroscience, and (4) Plant Biology options.

**Responses:**

From Melissa Rolls <mur22@psu.edu>  
To STEPHEN SCHAEFFER <sws4@psu.edu>  
Subject Re: Consultation on Biology Graduate Program to Drop IBIOS Options  
Date Thu, Apr 5, 2018 09:56 AM  
Safe View On [Turn Off]  What is "Safe View"?

Dear Steve,

Dropping these options makes a lot of sense and I am completely supportive of it.

Melissa

Melissa Rolls  
Associate Professor of Biochemistry and Molecular Biology  
Penn State  
118 Life Sciences Building  
University Park, PA 16802  
814-867-1395, 814-933-6432  
Chair, Molecular, Cellular and Integrative Biosciences program  
http://www.huck.psu.edu/education/molecular-cellular-and-integrative-biosciences/  
Director, Center for Cellular Dynamics  
http://www.huck.psu.edu/center/cellular-dynamics

From KEVIN DOUGLAS ALLOWAY <kdal@psu.edu>  
To STEPHEN SCHAEFFER <sws4@psu.edu>
Subject: Re: Consultation on Biology Graduate Program to Drop IBIOS Options
Date: Thu, Apr 5, 2018 12:33 PM
CC: mur22 <mur22@psu.edu> ☐, Teh-hui Kao <txk3@psu.edu> ☐
Safe View: On [Turn Off] What is "Safe View"?

Stephen,
I have no concerns nor objections to your proposed change.

Kevin D. Alloway, Ph.D.
Co-Director, Graduate Program in Neuroscience
Distinguished Educator, College of Medicine
Professor, Neural and Behavioral Sciences
Center for Neural Engineering
Millennium Science Complex, W-316
Pennsylvania State University
University Park, PA 16802
Phone: (814) 867-6413

---

From: Teh-hui Kao <txk3@psu.edu> ☐
To: STEPHEN SCHAEFFER <sws4@psu.edu> ☐
Subject: Re: Consultation on Biology Graduate Program to Drop IBIOS Options
Date: Thu, Apr 5, 2018 07:41 PM
Safe View: On [Turn Off] What is "Safe View"?

Hi Steve,

I have no problems with the part of your proposal to drop EMPP (which merged with Plant Physiology in 2006 to become Plant Biology) and Plant Biology options from the Biology Graduate Program. Thanks for checking with me.

Best regards,

Teh-hui

---

Consultation 2 Dropping the Dual Degree PhD in Biology and Astrobiology

Consultation with:
Dr. James Kasting, Director Astrobiology Program

Email sent:
From: "STEPHEN SCHAEFFER" <sws4@psu.edu> ☐
To: jfk4@psu.edu ☐
Subject: Remove Dual Degree Ph.D. Program in Biology and Astrobiology
Date: Thu, Apr 5, 2018 09:26 AM

Safe View: On [Turn Off]  What is "Safe View"?

Dr. James Kasting
Director Astrobiology Program

Dr. Kasting,
I spoke with you recently about biology dropping the Dual Degree Ph.D. Program in Biology and Astrobiology (See below). I would like to officially ask whether the proposed change is fine with you as Director of the Astrobiology program. If you could respond by Monday April 9th, that would be great. If I do not hear from you, I will assume that this change is agreeable to you.

Sincerely,
Stephen W. Schaeffer
Associate Head for Graduate Education, Biology

Remove Dual Degree Ph.D. Program in Biology and Astrobiology

The Biology Program is also unadopting the Dual Degree Ph.D. Program in Biology – Astrobiology. The only two faculty previously affiliated with this program have left the university, and there are no current faculty with any interest in participating in the program. Since the inception of the Dual-Degree PhD Program in Biology-Astrobiology, only two students have elected to participate. We have no current students pursuing the Dual Degree Ph.D. Program in Biology – Astrobiology.

Impact: This change is expected to have minimal impact because we do not have any faculty that are recruiting students with interests in this area and it is not likely that we will recruit faculty with interests in astrobiology in the future.

Response

From: Jim Kasting <jfk4@psu.edu>  
To: STEPHEN SCHAEFFER <sws4@psu.edu>  
Subject: Re: Remove Dual Degree Ph.D. Program in Biology and Astrobiology  
Date: Thu, Apr 5, 2018 01:07 PM

Safe View: On [Turn Off]  What is "Safe View"?

Dear Stephen,

Right, after our phone conversation, I have assumed that Biology will drop out of the program. It would likely be meaningless to remain in it if you have no faculty who are interested. So, I understand your decision to drop out.

Best,
Jim
Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

---

**New Graduate Program, Option, or Minor:** Add

Designation of new graduate program: __________________________
Classification of Instructional Programs (CIP) Code: ____________
Designation of new graduate option: _____________________________
Designation of new graduate minor: _____________________________

Indicate effective semester:
First semester following approval
Second semester following approval

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**Existing Graduate Program Option, or Minor:** XChange Drop

Current designation of graduate program: M.Ed in Health Education
Current designation of graduate option: _________________________
Current designation of graduate minor: _________________________

New designation of existing graduate program (if changing): _________________________
New designation of existing graduate option (if changing): _________________________
New designation of existing graduate minor (if changing): _________________________

Brief description of the change (if not noted above): Updating the language in University Bulletin listing to align with the new language policies of the Graduate School, and to better describe the program

Indicate effective semester:
XFirst semester following approval
Second semester following approval

---

**Submitted by Graduate Program Head**

_Holly Angelique_  
_Printed name_  
_Signature_  
_Date: 4/24/18_

**Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:**

_Elizabeth J. Tisdell_  
_Printed name_  
_Signature_  
_Date: 4/3/18_

**Approved by College/School Dean/Chancellor (or Designee):**

_Peter Idowu_  
_Printed name_  
_Signature_  
_Date: April 30, 2018_
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<td>On Behalf of David Babb</td>
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<td>10/9/2018</td>
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<td>On Behalf of Regina Vasilatos-Younken</td>
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<td>10/9/2018</td>
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</table>
PROGRAM CHANGE PROPOSAL FOR
Health Education (HLHED)

SUBMITTED BY
Weston Kensinger, PhD, CHES
Professor-in-Charge (PIC) Health Education Graduate Program
Assistant Teaching Professor of Health Education
Penn State Harrisburg: School of Behavioral Sciences and Education
W314 Olmsted, 777 West Harrisburg Pike, Middletown, PA 17057-4898
Email: wsk120@psu.edu Phone: (717)948-6515
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B. Comparison of Changes ..................................................................... 4
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Justification for the Proposed Changes

*State why the change is being proposed, and any expected outcomes as a result.*

The purpose of this request is to update the information about the Health Education Graduate Program as required for the new bulletin listing. This will provide more detailed information about the program to bulletin readers and have language consistent with university policies. The expected outcome is to bring the bulletin listing up-to-date with the new university requirements, as requested by the university.
Comparison of Changes

A description of the proposed changes as compared to the existing program requirements, so the reviewers can determine what specifically is being changed. A table is recommended.

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<thead>
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<th>Criteria</th>
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<th>New Listing</th>
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<td>Program Name and Code</td>
<td>NONE</td>
<td>Health Education (HLHED)</td>
<td>Health Education (HLHED)</td>
</tr>
<tr>
<td>Program Head and Program Head Contact Information</td>
<td>Updated current PIC information</td>
<td>WESTON KENSINGER, Program Coordinator Penn State Harrisburg W314 Olmsted Building 777 W. Harrisburg Pike Middletown, PA 17057-4898 717-948-6730</td>
<td>WESTON KENSINGER, Ph.D., CHES, Professor-in-Charge Penn State Harrisburg W314 Olmsted Building 777 W. Harrisburg Pike Middletown, PA 17057-4898 717-948-6515</td>
</tr>
<tr>
<td>Program Email</td>
<td>Updated to current PIC</td>
<td>Email: <a href="mailto:orl100@psu.edu">orl100@psu.edu</a></td>
<td>Email: <a href="mailto:wsk120@psu.edu">wsk120@psu.edu</a></td>
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<td>List of Degrees Conferring</td>
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<td>Link to Graduate</td>
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<td><a href="http://www.gradschool.psu.edu/gs/faculty/facultylist.cfm?program=91">http://www.gradschool.psu.edu/gs/faculty/facultylist.cfm?program=91</a></td>
<td><a href="http://www.gradschool.psu.edu/gs/faculty/facultylist.cfm?program=91">http://www.gradschool.psu.edu/gs/faculty/facultylist.cfm?program=91</a></td>
</tr>
<tr>
<td>Faculty List</td>
<td>Program Description</td>
<td>Updated to current description</td>
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<tr>
<td>The Health Education program emphasizes behavioral and organizational strategies to plan, implement, and evaluate interventions that enable individuals, groups and communities to achieve personal, environmental, and social health. It complements other professional fields such as education, nutrition, physical therapy, occupational therapy, dental hygiene, nursing, health care administration, and preventive psychology. The program follows a professional development focus, as many of the students are employed in the broad areas of disease prevention and health promotion and are pursuing graduate study on a part-time basis. The M.Ed. is a professional degree emphasizing applied research. The program requires a research-based culminating experience. The faculty has a broad range of interests, including health promotion, family systems, teaching and training methods, violence and substance abuse prevention and control, and multicultural health issues. A minimum of 30 graduate credits is required for the completion of the degree. A 3 credit research-based culminating writing experience is required. The program requires students to complete 21 credits in Prescribed Core courses and 9 credits in Elective courses.</td>
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<tr>
<td>The Penn State Harrisburg Master of Education in Health Education applies education, public health, and behavioral theories to prepare health education specialists to work in any setting in which the aim is to promote health and wellness. The goal of the master’s degree in health education is to educate professionals who help individuals, families, and their communities maximize and maintain healthy lifestyles. Health education specialists teach people about behaviors that promote health and wellness and are trained to collect and analyze data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments. Health educators may serve as resource to assist individuals, other health professionals, or the community, and may administer fiscal resources for health education programs. The health education program is designed for working professionals and recent bachelor’s degree graduates to pursue the master’s program in health education part-time or full-time. The program is customizable, allowing students the flexibility to choose from a wide range electives within and outside the program to meet their career and professional goals. All students must complete a capstone course as the culminating experience for the degree, which includes a guided research-based scholarly project that...</td>
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</table>
further enhances their professional experiences and refines the skills necessary to function as a professional health education specialist.

The master’s program in health education is aligned with the Responsibilities and Competencies for Health Education Specialists as stated by the National Commission for Health Education Credentialing, Inc. (NCHEC). After completion of the program, students are eligible to sit for the Certified Health Education Specialist (CHES) exam.

| Admissions Requirements | Added require statement (first sentence) | Students must have a baccalaureate degree from an accredited college or university, an overall minimum undergraduate grade-point average of 2.50 and a junior/senior GPA of 3.00 (on a 4.00 scale) for admission into the program. Students are also required to submit:
- A completed application form with application fee;
- Two copies of an official transcript from an accredited, college-level university;
- Supplementary application. An application is available on the Web at www.hbg.psu.edu (Opens New Window) or by calling 717-948-6250. |
| Admissions Requirements | Added requirement statement (first sentence) | Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission. Students must have a baccalaureate degree from an accredited college or university, an overall minimum undergraduate grade-point average of 2.50 and a junior/senior GPA of 3.00 (on a 4.00 scale) for admission into the program. Students are required to submit official transcripts from all post-secondary institutions attended. |
| Degree Requirements | Added required statement (first sentence) | A minimum of 30 graduate credits is required for the completion of the degree. A 3-credit research-based culminating experience is required. Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin. |
The program has a required core of courses totaling 18 credits as follows:

**Prescribed Core Courses:** 21 credits
- HLHED 415 Planning and Development of Health Education Programs (3)
- HLHED 456 Advanced Techniques in School and Community Health Education (3)
- EDUC 440 Education Statistics and Measurement (3) or EDPSY 400 Introduction to Statistics in Educational Research (3)
- HLHED 552 Current Health Education Issues (3)
- HLHED 553 Multicultural Health Issues (3)
- EDUC 586 Educational Research Design (3) or HLHED 530 Research Techniques in Health Education (3)
- **Culminating Experience:** HLHED 591 Culminating Health Education Seminar (3) or HLHED 587 Master’s Project (3)

**Elective Courses:** 9 credits
A minimum of 12 credits is to be selected from the following HLHED courses: HLHED 420, 421, 443, 497, 501, 516, 590, 596, or 597.

Students also may select electives from suitable courses in Psychology, Community Psychology and Social Change, Education, Training and Development, or Health.

A minimum of 30 credits at the 400 or 500 level is required, with a minimum of 18 credits at the 500 level, including at least 6 elective credits at the 500 level. This includes 21 credits in the following prescribed core courses:

- HLHED 415 Planning and Development of Health Education Programs (3)
- HLHED 456 Advanced Techniques in School and Community Health Education (3)
- EDUC 440 Education Statistics and Measurement (3) or EDPSY 400 Introduction to Statistics in Educational Research (3)
- HLHED 552 Current Health Education Issues (3)
- HLHED 553 Multicultural Health Issues (3)
- EDUC 586 Educational Research Design (3) or HLHED 530 Research Techniques in Health Education (3)
- **Culminating Experience:** HLHED 591 Capstone Seminar in Health Education (3)

Students must also complete 9 credits in elective courses. Students can choose elective courses in health education, psychology, community psychology and social change, teacher education, training and development, lifelong learning and adult education, public health sciences, health and public administration, and more. A list of approved elective courses is available from the program office.

Note that a minimum of 6 elective credits must be at the 500 level. The **culminating experience for the degree is the capstone course HLHED 591**.
| Administration programs. Note that 6 credits must be at the 500 level. Please contact the program office for further information about electives. |
|---|---|
| **Student Aid** | Added link to Student Aid | Refer to the [Student Aid](#) section of the Graduate Bulletin. Students in this program are not eligible for graduate assistantships. |
| **Courses** | Updated to required wording | **Courses** | Graduate courses carry numbers from 500 to 599 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree. | Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree. |
| [HEALTH EDUCATION (HLHED) course list](#) | | [HEALTH EDUCATION (HLHED) course list](#) |
Health Education (HLHED)

Program Home Page (Opens New Window)

WESTON KENSINGER, Ph.D., CHES, Professor-in-Charge
Penn State Harrisburg
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777 W. Harrisburg Pike
Middletown, PA 17057-4898
717-948-6515
Email: wsk120@psu.edu

Degrees Conferred:
M.Ed.

The Graduate Faculty

The Program

The Penn State Harrisburg Master of Education in Health Education applies education, public health, and behavioral theories to prepare health education specialists to work in any setting in which the aim is to promote health and wellness. The goal of the master’s degree in health education is to educate professionals who help individuals, families, and their communities maximize and maintain healthy lifestyles. Health education specialists teach people about behaviors that promote health and wellness and are trained to collect and analyze data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments. Health educators may serve as resource to assist individuals, other health professionals, or the community, and may administer fiscal resources for health education programs.

The health education program is designed for working professionals and recent bachelor’s degree graduates to pursue the master’s program in health education part-time or full-time. The program is customizable, allowing students the flexibility to choose from a wide range electives within and outside the program to meet their career and professional goals. All students must complete a capstone course as the culminating experience for the degree, which includes a guided research-based scholarly project that further enhances their professional experiences and refines the skills necessary to function as a professional health education specialist.

The master’s program in health education is aligned with the Responsibilities and Competencies for Health Education Specialists as stated by the National Commission for Health Education Credentialing,
Inc. (NCHEC). After completion of the program, students are eligible to sit for the Certified Health Education Specialist (CHES) exam.

**Admission Requirements**

Admission requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Students must have a baccalaureate degree from an accredited college or university, an overall minimum undergraduate grade-point average of 2.50 and a junior/senior GPA of 3.00 (on a 4.00 scale) for admission into the program. Students are required to submit official transcripts from all post-secondary institutions attended.

**Degree Requirements**

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

A minimum of 30 credits at the 400 or 500 level is required, with a minimum of 18 credits at the 500 level, including at least 6 elective credits at the 500 level. This includes 21 credits in the following prescribed core courses:

- HLHED 415 Planning and Development of Health Education Programs (3)
- HLHED 456 Advanced Techniques in School and Community Health Education (3)
- EDUC 440 Education Statistics and Measurement (3) or EDPSY 400 Introduction to Statistics in Educational Research (3)
- HLHED 552 Current Health Education Issues (3)
- HLHED 553 Multicultural Health Issues (3)
- EDUC 586 Educational Research Design (3) or HLHED 530 Research Techniques in Health Education (3)
- Culminating Experience: HLHED 591 Capstone Seminar in Health Education (3)

Students must also complete 9 credits in elective courses. Students can choose elective courses in psychology, community psychology and social change, teacher education, training and development, lifelong learning and adult education, public health sciences, health and public administration, and more. A list of approved elective courses is available from the program office. Note that a minimum of 6 elective credits must be at the 500 level. The culminating experience for the degree is the capstone course HLHED 591.

**Student Aid**
Refer to the Student Aid section of the Graduate Bulletin. Students in this program are not eligible for graduate assistantships.

**Courses**

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

**HEALTH EDUCATION (HLHED) course list**

**Consultation**

Written evidence of consultation with any departments affected by the proposed change. Consultation must include the original query and the full reply by the consultant. Consultations submitted as part of the proposal will be available to the public when the proposal is published, so private exchanges should be edited out and any references to current students should be removed.

No other departments are affected with this update to the university bulletin.
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

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<th>College/School:</th>
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<td>Human Development and Family Studies</td>
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<td>Designation of new graduate option: Dual Title in HDFS and Clinical Translational Sciences</td>
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<td>Designation of new graduate minor:</td>
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<td>Current designation of graduate minor:</td>
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<tbody>
<tr>
<td>Lisa Gatzke-Kopp</td>
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| Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses: |
|-----------------------------------------------------------------------------------------------------------------
| Printed name | Signature | Date: | 5-17-18 |

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<tr>
<th>Approved by College/School Dean/Chancellor (or Designee):</th>
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<tbody>
<tr>
<td>Kathryn Drager</td>
</tr>
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</table>
Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:

On Behalf of David Babb                               
Printed name  
Signature  

Date: 10/9/2018

Recommended by Chair, Graduate Council Committee on Programs and Courses:

On Behalf of C. Andrew Cole                           
Printed name  
Signature  

Date: 10/9/2018

Noted by Dean of the Graduate School:

On Behalf of Regina Vasilatos-Younken                 
Printed name  
Signature  

Date: 10/9/2018
A Proposal to Graduate Council to Adopt the
Dual-Title Doctoral Degree Program in
Clinical and Translational Sciences

Submitted by
Department of Human Development & Family Studies

Contact:
Doug Teti
Head, Department of Human Development & Family Studies
HHD 105
814-863-9570
dmt16@psu.edu

Lisa Gatzke-Kopp
Professor-in-Charge of Human Development & Family Studies Graduate Program
HHD 228
814-867-2371
lmk18@psu.edu
I. Overview

The graduate program in Human Development & Family Studies proposes to adopt the dual-title Ph.D. degree program in Clinical and Translational Sciences.

II. Justification for the Dual-Title Ph.D. in HDFS and Clinical and Translational Sciences

The Department of Human Development and Family Studies (HDFS) has a strong international reputation in the area of Prevention and Intervention Science. Prevention/Intervention constitutes one of the 4 core scientific domains of the graduate program (methods, individual development, prevention/intervention, and family systems) and we consistently receive applications from students interested in pursuing graduate training in this domain. Our graduate program offers multiple advanced courses related to the science of behavioral interventions relevant to a wide range of physical and psychological health targets, with a particular emphasis on the contexts in which programs are delivered (e.g. school, family, workplace) as well as issues related to experimental design and analysis of program effects. In addition, our faculty members have leadership roles in associated research centers. The Edna Bennett Pierce Prevention Research Center, founded by HDFS Professor Mark Greenberg, along with the Methodology Center (founded and directed by HDFS Professor Linda Collins) jointly administers the Prevention and Methodology Training Grant, which has received continuous funding from the National Institute on Drug Abuse for nearly 15 years. These renowned researchers and training opportunities for graduate students routinely attract high quality graduate trainees seeking to establish careers in the development, dissemination, and delivery of preventive interventions.

Given these objectives, we believe that certain students would benefit tremendously from the additional educational and training opportunities afforded by the dual-title program in Clinical and Translational Sciences. This program would expand and compliment the training HDFS students already receive in Prevention/Intervention Science by offering additional training in epidemiology, as well as training in the regulatory environment, and communication of scientific principles in applied settings. Several of the components of the CTS degree, including training in statistics and experimental design for intervention science applications, design of clinical interventions, and program evaluation, are already available in the HDFS department, illustrating the natural synergy HDFS has with the CTS dual degree. With the expanded training and the internship opportunities, students graduating with the dual degree will be prepared to transition into leadership positions in policy and program delivery.

In summary, the proposed dual-title Ph.D. in Human Development & Family Studies and Clinical and Translational Sciences will:

- Provide a cohesive curriculum for in-depth training that combines (i) training provided by HDFS in the design and evaluation of intervention programs aimed at improving human health with (ii) training provided by the CTS on the logistical processes and real-world challenges involved in translating scientific knowledge into practice.
- Prepare graduates seeking to navigate the policy environment and become leaders in the integration of science-based practice and public policy.
- Prepare graduates seeking to become leaders in the domain of personalized medicine, particularly with an emphasis on how school, family, community, and service provider contexts...
can be harnessed to support human development across the life span.

III. Description of Required Clinical and Translational Sciences Course Work

A. General Course Work Requirements in the Dual-Title Ph.D. program in Clinical and Translational Sciences

The dual-title Ph.D. degree in Clinical and Translational Sciences requires 26 credits distributed as follows:

• CTS 590 colloquium, two semesters (2 credits)
• A total of 18 credits of elective coursework distributed across the following domains
  o Statistics (3 credits)
  o Epidemiology (3 credits)
  o Bioinformatics (3 credits)
  o Experimental design and interpretation (3 credits)
  o The regulatory environment (3 credits)
  o Scientific communication (3 credits)
• Internship (6 credits)

Students must also be conducting original research in basic sciences, clinical sciences and community engagement focused on diagnosis, and/or treatment and prevention to enhance human health. The program is organized to facilitate co-mentoring by clinical and/or translational scientists during dissertation research.

As available coursework expands, requests for course substitutions from the approved elective list (e.g. 597 courses) may be approved by the CTS Program Heads. Students may also request to have specific courses counted toward both their home degree and the dual-title, with the permission of each Program Head (up to a maximum of 12 credits).

B. Course Work Requirements, Dual-Title Ph.D. in HDFS and Clinical and Translational Sciences

The following provides a side-by-side summary of how Clinical and Translational Sciences course work requirements align with HDFS course work requirements in the dual-title.

<table>
<thead>
<tr>
<th>Table 1. Comparison of Course work Requirements</th>
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<td>Ph.D. in HDFS</td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>Total credits</td>
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<tr>
<td>A minimum of 42.5 post-baccalaureate credits of course work.</td>
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<tr>
<td>Required substantive core courses</td>
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<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>All students must take the following courses:</td>
</tr>
<tr>
<td>• HDFS 501 (3 credits)</td>
</tr>
<tr>
<td>• HDFS 503 (3 credits)</td>
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<tr>
<td>• HDFS 525 (3 credits)</td>
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<thead>
<tr>
<th>Required methods course work</th>
<th>Required methods course work</th>
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<tbody>
<tr>
<td>• HDFS 516/518 (4 credits)</td>
<td>• HDFS 516/518* (4 credits)</td>
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<tr>
<td>• HDFS 519 (3 credits)</td>
<td>• HDFS 519* (3 credits)</td>
</tr>
<tr>
<td>• HDFS 523 (3 credits)</td>
<td>• HDFS 523 (3 credits)</td>
</tr>
<tr>
<td>• HDFS 526 (3 credits)</td>
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*also satisfy CTS elective requirement

<table>
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<tr>
<th>Additional Electives</th>
<th>Additional electives</th>
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<tbody>
<tr>
<td>A total of 18 elective credits with the following distribution requirements</td>
<td>HDFS: A total of 18 elective credits with the following distribution requirements</td>
</tr>
<tr>
<td>• Minimum of 6 credits in methodology</td>
<td>• Minimum of 6 credits in methodology</td>
</tr>
<tr>
<td>• Minimum of 6 credits in non-methodology</td>
<td>• Minimum of 6 credits in non-methodology</td>
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</table>

CTS: A total of 18 elective credits with the following distribution requirements
• Statistics (3 credits)*
• Epidemiology (3 credits)^
• Bioinformatics (3 credits)#
• Experimental design and interpretation (3 credits)#
• The regulatory environment (3 credits)
• Scientific communication (3 credits)

*met by required HDFS course
^can be satisfied with HDFS elective course
#can be applied toward HDFS elective requirement
(Cross counted credits limited to 12)

<table>
<thead>
<tr>
<th>Professional development seminar</th>
<th>Professional development seminar</th>
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<tbody>
<tr>
<td>• HDFS 590 (1 credit)</td>
<td>• HDFS 590 (1 credit)</td>
</tr>
<tr>
<td>• HDFS 515 (1.5 credits)</td>
<td>• HDFS 515 (1.5 credits)</td>
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Required Clinical and Translational Sciences
seminars
- CTS 590 (2 credits)

Required CTS internship
- 6 credits distributed as appropriate for student
  - CTS 595A: Clinical Science Internship (3-6 credits)
  - CTS 595B: Translational Science Internship (3-6 credits)

Scholarship and Research Integrity
SARI@PSU requirement is fulfilled through HDFS orientation before start of year, HDFS first year orientation seminar, HDFS 515, and certification of CITI course completion.

Scholarship and Research Integrity
SARI@PSU requirement is fulfilled through HDFS orientation before start of year, HDFS first year orientation seminar, HDFS 515, and certification of CITI course completion.

C. Example Course Work Path, Dual-Title Ph.D. in HDFS and Clinical Translational Science

Table 2 illustrates an example path through course work and other milestone requirements of the dual-title Ph.D. in HDFS and CTS.

Table 2. Example Path Through Dual-Title Ph.D.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>HDFS</th>
<th>CTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1 Fall (Semester 1)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDFS 501: Human Development</td>
<td>3</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HDFS 525: Introduction to Family Studies</td>
<td>3</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HDFS 516: Methods of Research in Human Development</td>
<td>3</td>
<td>Core</td>
<td>Statistics</td>
</tr>
<tr>
<td>HDFS 518: Applied Statistics Lab</td>
<td>1</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HDFS 590: HDFS Seminar</td>
<td>1</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td><strong>Year 1 Spring (Semester 2)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDFS 503: Human Development Intervention</td>
<td>3</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HDFS 519: Methods of Statistical Analysis in Human Develop</td>
<td>3</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HDFS 527: Social Epidemiology</td>
<td>3</td>
<td>Elective</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>HDFS 600: Thesis (if needed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS 590: CTS colloquium</td>
<td>1</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td><strong>Year 2 Fall (Semester 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDFS 526: Measurement in Human Development</td>
<td>3</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>HPA 528: Health Data Analysis for Research</td>
<td>3</td>
<td>Methods</td>
<td>Bioinformatics</td>
</tr>
</tbody>
</table>
HDFS 506: Design and Evaluation of Prevention Programs  3  Elective  Exp. design
CTS 590: CTS Colloquium  1  Core
HDFS 600: Thesis (if needed)

**Year 2 Spring (Semester 4)**
HDFS 523: Data Analysis in Developmental Research  3  Core
HDFS 515: Professional Issues in HDFS  1.5  Core
HDFS 530: Structural Equation Modeling  3  Methods
PHS 518: Health Policy and Law*  3  Reg. envir.
M.S. Thesis defense (if needed)
Qualifying

**Year 3**
KINES 588: Scientific writing  3  Comm.
HDFS 508: Best Practices in Intervention  3  Elective
HDFS 502: Biological Systems  3  Elective

**Year 4**
Comprehensive Exam

**Year 5**
Dissertation
Total credits required by program  42.5  26
Unique credits required by program (does not double count)  30.5  12
Total course credits completed by student (not including thesis)  56.5

- Core = course required of all students completing the degree
- Elective = course fulfills general elective category toward HDFS degree
- Methods = course fulfills general methodology elective category toward HDFS degree
- Others = specific elective domain that course fulfills toward CTS degree

### IV. Additional Requirements, Dual-Title Ph.D. in Clinical and Translational Sciences

The following provides a side-by-side summary of how additional Clinical and Translational Sciences requirements align with HDFS requirements for the dual-title Ph.D.

<table>
<thead>
<tr>
<th>Table 3. Comparison of Other Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D. in HDFS</td>
</tr>
<tr>
<td>Qualifying Examination Committee</td>
</tr>
<tr>
<td>Qualifying examination committees must consist of 5 committee members including the student’s academic advisor, and one representative from each of the 4 departmental program areas (methodology, individual development, family,</td>
</tr>
</tbody>
</table>
Committee composition must be approved by the Graduate P.I.C.

Qualifying examinations are held after the student has completed the Master’s degree. For most students this takes place in the Fall of the 3rd year, but will take place earlier for students for whom the Master’s degree requirement is waived (i.e. students with a master’s degree from another program, whose thesis is approved by the Graduate PIC).

Faculty members who hold appointments in both programs may serve in a combined role.

### Qualifying Exam

Students generate a dossier consisting of (1) a personal statement including long term professional goals, (2) CV, (3) grades in all completed coursework (4) all prior annual plans of study, and (5) a professional writing sample to be circulated to the Committee 2 weeks prior to the qualifying examination meeting. The Committee will discuss the student’s progress and proposed plans in light of their future goals and provide structured feedback following the Department’s Qualifying Examination evaluation form. The Committee presents their evaluation of the student to the HDFS faculty at large, after which the full HDFS faculty vote to pass the student or to recommend termination from the program.

There will be a single qualifying examination, containing elements of both Human Development and Family Studies and CTS. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

### Doctoral Committee

After passing the qualifying examination students must form their doctoral committee. In accordance with Graduate Council requirements, the doctoral committee is composed of at least four members of the graduate faculty, at least one of whose primary appointment is not in HDFS, and one whose research is outside of the students chosen field of study (based on scholarly work or field in which the Ph.D. was received). A minimum of two committee members must hold primary appointments in HDFS. One faculty member is designated as the chair of the doctoral committee.

The committee composition for students completing the dual title in Clinical and Translational Sciences follows the same general structure with the following requirements:

- The committee must be co-chaired by a member of the HDFS faculty and a member of the CTS faculty, or a single chair who holds both appointments.
- If the committee is co-chaired, the CTS faculty member could also serve as the outside member of the committee.
committee; typically this person is also the student’s general adviser. In the event that a student is conducting dissertation research under the direct supervision of two faculty members, faculty may be appointed as co-chairs of the dissertation committee.

<table>
<thead>
<tr>
<th>Comprehensive Exam</th>
<th>Comprehensive Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>In consultation with their doctoral committee, students will select between 2 formats for completing the comprehensive exam. Formats differ only with regard to the timing of the reading and writing components of the process. In both formats, students will prepare a research statement describing the domain of research expertise they seek to achieve. Students also identify 2 of the 4 Departmental program areas (methodology, individual development, prevention/intervention, family) that will inform the theoretical framework from which they examine their research area. Along with this statement, students compile a reading list consisting of no more than 100 readings selected to provide students with depth and breadth of exposure to the pertinent literature. The doctoral committee provides feedback and guidance on the reading list, and composes a set of comprehensive exam questions designed to evaluate the student’s acquired knowledge and ability to critically evaluate the state of the field at the level needed to make meaningful scientific contributions to the field. Students respond to the exam questions in written format, which is followed by an oral defense.</td>
<td>The comprehensive exam process follows the same structure but the content of the exam must align with the objective of developing the student’s expertise in their chosen area of clinical and translational science, as deemed appropriate by the CTS-affiliated committee chair.</td>
</tr>
</tbody>
</table>
| • Option 1: Students generate the statement and reading list. The committee generates an appropriate set of questions which must be approved by the Department. The student engages in a preparation period based on the prepared reading list. The student selects the start date for the written component of the exam, and schedules the oral defense accordingly (a minimum of 2 weeks following the completion of the writing phase). On the starting date for the written component the | }
Department provides the student with the approved questions and the student has 3 weeks to complete and submit their written response.

- Option 2: The above process is modified such that the student contributes collaboratively with the committee in the development of the exam questions prior to their submission for Departmental approval. Once approved, the student has a maximum of 4 months to complete and submit their written responses as guided by their prepared reading list (i.e. the reading and writing phases are combined).

**Dissertation Proposal**

The dissertation proposal occurs after passing the comprehensive exam. The student submits a dissertation proposal to the doctoral committee, outlining the proposed research study(ies) that will comprise the dissertation. A proposal defense is scheduled in which the committee can provide feedback regarding the student’s proposed approach, and approve the dissertation plan.

**Dissertation Proposal**

As with the comprehensive exam, the dissertation study(ies) of any student pursuing the dual-title is expected to demonstrate research expertise in an area of clinical and translational science, defined by the CTS program as “incorporating research that translates a biomedical discovery into applications with the goal of improving human health”. As described in the CTS handbook, “Research could range from (pre)clinical trials to community health to policy formation.”

**Dissertation Defense**

Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The oral examination is administered by the doctoral committee. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

**Dissertation Defense**

The dissertation defense requirements are identical.

---

V. Proposed Amendment to Graduate Bulletin for Human Development & Family Studies (HDFS)

(Changes relevant to dual-title program tracked in red)

**Human Development and Family Studies (HDFS)**
Program Home Page
(Opens New Window)

DOUGLAS M. TETI, Department Head, Human Development and Family Studies
LISA GATZKE-KOPP, Professor in Charge of Graduate Programs in Human Development and Family Studies
119 Health and Human Development
814-863-8000

Degrees Conferred

Ph.D., M.S. (The program does not admit applicants for the terminal master’s degree.)
Dual-Title Ph.D. in HDFS and Demography
Dual-Title Ph.D. in HDFS and Social Data Analytics
Dual-Title Ph.D. in HDFS and Clinical and Translational Sciences

The Graduate Faculty

The Program

This interdisciplinary program is one of the graduate programs of the College of Health and Human Development. It is administered through the Department of Human Development and Family Studies. The Human Development and Family Studies graduate program is designed to educate students about research, theory, and methodology related to the study of individuals and families across diverse populations and diverse settings. There is a strong interest in the ways in which social institutions and settings such as day care facilities, schools, neighborhoods, and social policy institutions facilitate (or inhibit) opportunities for development and change for individuals and families. Understanding the characteristics and conditions that place individuals or families at risk for developing problems, designing effective prevention programs to address those risks, and mounting rigorous evaluations of such programs is a growing emphasis in the program. All students, regardless of substantive area, are encouraged to develop strong skills in research methods, a hallmark of our graduate training. Through course work and apprenticeship experiences, students develop an understanding of the program’s multidisciplinary life span/life course, and applied orientation. As students progress through the program, they are expected to develop specialized expertise in two or more of the department’s areas of concentration: individual development, family studies, intervention research, and research methods.

Admission Requirements

Requirements listed here are in addition to general Graduate School requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants apply for admission to the program via the Graduate School application for admission.

Scores from the Graduate Record Examinations (GRE) are required for admission. Entering students should have some course work in social sciences, such as developmental and family science courses from psychology or sociology programs; and foundational courses in research methods and statistics. At the discretion of the program, students not meeting these requirements may be provisionally admitted with limited deficiencies to be made up concurrently with their graduate work.
Students with appropriate backgrounds will be considered for admission for fall semester only. The best-qualified applicants will be accepted up to the number of spaces that are available for new students.

**Degree Requirements**

Requirements listed here are in addition to requirements stated in the [DEGREE REQUIREMENTS](#) section of the Graduate Bulletin.

Students who enter the graduate program without a master's degree must complete a master's degree en route to the Ph.D. For the Master of Science degree, a minimum of 31 credits at the 400, 500, or 800 level is required, with at least 18 credits in the 500 and 600 series combined. Students are required to complete (3) 3-credit substantive core courses: HDFS 501, HDFS 503, HDFS 525; (2) 3-credit courses in research methods: HDFS 516 and HDFS 519, and (1) 1-credit methods lab course: HDFS 518. In addition to the required courses, students take a minimum of 9 credits of course work (400 and 500 level) in their substantive field, 6 of which must be in HD FS (excluding independent study), and 6 credits of thesis research (HDFS 600 or 610). The thesis must be accepted by the advisers and/or committee members, the head of the graduate program, and the Graduate School, and the student must pass a thesis defense. Course work completed for the HD FS master's degree at Penn State can be applied to satisfy the degree requirements for the HD FS Ph.D.

For the Ph.D., a minimum of 42.5 credits at the 400, 500, or 800 level is required. Students are required to complete (3) 3-credit substantive core courses: HDFS 501, HDFS 503, HDFS 525; (4) 3-credit courses in research methods: HDFS 516, HDFS 519, HDFS 523, HDFS 526, and (1) methods lab course HDFS 518. In addition to the required courses, students must take a minimum of 18 additional credits in elective course work, 15 of which must be HDFS courses. Of the 18 elective credits, a minimum of 6 must be in methodology courses, and a minimum of 6 must be in non-methodology courses. In addition, all students must take HDFS 590: Professional Development Orientation (1 credit) in their first year and HDFS 515 (1.5 credits) by the end of their second year in the program.

All doctoral students must pass a candidacy qualifying examination, a comprehensive written and oral examination, and a final oral examination (the dissertation defense). To earn the Ph.D. degree, doctoral students must also write a dissertation that is accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

**Student Aid**

Graduate assistantships available to students in this program and other forms of student aid are described in the [Student Aid](#) section of the Graduate Bulletin. Students on graduate assistantships must adhere to the [course load limits set forth in the Graduate Bulletin](#).

**Courses**

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.
HUMAN DEVELOPMENT AND FAMILY STUDIES (HDFS) course list

Dual-Title Doctoral Degree in HDFS and Demography

This program is designed for students who want to integrate Population Studies (including such foci as fertility, marriage, cohabitation, labor force participation, mortality) with the study of human development and family studies. Details can be obtained from the HDFS graduate officer or director of the graduate program in Demography. Please see the Demography website for more information.

Admission Requirements

Students must apply and be admitted to the graduate program in HDFS and the Graduate School before they can be admitted to a dual-title degree program. Applicants interested in the dual-title degree program may note their interest in their applications to HDFS. Students admitted to the HDFS program will be admitted to the dual-title program in Demography upon the recommendation of a Demography Program faculty member in HDFS. Ph.D. students must apply and be admitted to the dual-title degree program in Demography prior to taking the candidacy qualifying exam.

Additional admissions requirements are listed in the Admissions Requirements section of the Demography Bulletin page.

Degree Requirements

To qualify for the dual-title degree, students must satisfy the requirements of the Ph.D. in HDFS, listed above. In addition, students pursuing the dual-title Ph.D. in HDFS and Demography must complete the degree requirements for the dual-title Demography Ph.D., listed on the Demography Bulletin page.

The Candidacy Qualifying Examination committee for the dual-title degree will be composed of Graduate Faculty from HDFS and must include at least one Graduate Faculty member from Demography. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy qualifying examination, containing elements of both HDFS and Demography. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy qualifying examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for dissertation committees, the chair and at least one additional member of the student’s doctoral committee must be members of the Graduate Faculty in Demography. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. The Demography faculty members on the student's committee are responsible for administering an examination in demography that constitutes a portion of the comprehensive examination of the doctoral student in the dual-title.

Ph.D. candidates must complete a dissertation on a topic that reflects their original research and
In order to earn the dual-title Ph.D. degree, the dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School, and the student must pass a final oral examination (the dissertation defense).

**Dual-Title Doctoral Degree in HDFS and Social Data Analytics**

HDFS doctoral students interested in having a degree that reflects interdisciplinary training in an array of tools, techniques, and methodologies for social data analytics, while maintaining a close association with HDFS, may apply to pursue a dual-title Ph.D. in HDFS and Social Data Analytics.

Social data analytics is the integration of social scientific, computational, informational, statistical, and visual analytic approaches to the analysis of large or complex data that arise from human interaction. The dual-title Ph.D. program provides additional training with the aim of providing scientists with the skills required to expand the field of social data analytics, creatively answer important social scientific questions, and communicate effectively with both academic and nonacademic audiences.

**Admission Requirements**

Students must apply and be admitted to the graduate program in HDFS and the Graduate School before they can be admitted to a dual-title degree program. Applicants interested in the dual-title degree program may note their interest in their applications to HDFS. Students admitted to the HDFS program will be admitted to the dual-title program in Social Data Analytics upon the recommendation of a Social Data Analytics Program faculty member in HDFS. Students must apply and be admitted to the dual-title degree program in Social Data Analytics prior to taking the candidacy qualifying exam.

Additional admissions requirements are listed in the Admissions Requirements section of the Social Data Analytics Bulletin page.

**Degree Requirements**

To qualify for the dual-title degree, students must satisfy the requirements of the Ph.D. in HDFS, listed above. In addition, students pursuing the dual-title Ph.D. in HDFS and Social Data Analytics must complete the degree requirements for the dual-title Social Data Analytics Ph.D., listed on the Social Data Analytics Bulletin page.

The Candidacy Qualifying Examination committee for the dual-title degree will be composed of Graduate Faculty from HDFS and must include at least one Graduate Faculty member from Social Data Analytics. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy qualifying examination, containing elements of both HDFS and Social Data Analytics. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy qualifying examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for dissertation committees, the doctoral
dissertation committee of a dual-title doctoral degree student must include at least one member of the Social Data Analytics Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the committee representing HDFS is not also a member of the Graduate Faculty in Social Data Analytics, the member of the committee representing Social Data Analytics must be appointed as co-chair. The Social Data Analytics representative on the student’s doctoral committee will develop questions for and participate in the evaluation of the comprehensive examination.

Ph.D. candidates must complete a dissertation on a topic that reflects their original research and education in both HDFS and Social Data Analytics. In order to earn the dual-title Ph.D. degree, the dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School, and the student must pass a final oral examination (the dissertation defense).

Dual-Title Doctoral Degree in HDFS and Clinical and Translational Sciences

HDFS doctoral students interested in having a degree that reflects advanced training in the design, analysis, interpretation, implementation, and dissemination of clinical prevention/intervention programs aimed at improving human health across a range of contexts and developmental stages may apply to pursue a dual-title Ph.D. in HDFS and Clinical and Translational Sciences. The dual-title program is applicable for students pursuing academic careers in the area of basic research focused on processes that can be targeted through intervention practice, the development or improvement of intervention programs, or the science of translation and dissemination; or for students pursuing non-academic careers related to public health, policy, service delivery, cost effectiveness or cost-benefit program evaluation. The CTS dual-title complements the expertise students in HDFS acquire in individual development across the lifespan, contextual processes that influence individual development (communities, schools, families, workplace) and may be a target for intervention, a context for providing an intervention, or a potential impediment to effective service delivery of an intervention.

Admission Requirements

Students must apply and be admitted to the graduate program in HDFS and the Graduate School before they can be admitted to a dual-title degree program. Applicants interested in the dual-title degree program may note their interest in their applications to HDFS. Students admitted to the HDFS program will be admitted to the dual-title program in Clinical and Translational Sciences upon the recommendation of a faculty member affiliated with the dual-title. Refer to the Admission Requirements section of the CTS Bulletin page. Students must apply and be admitted to the dual-title degree program prior to taking the candidacy qualifying exam.

Degree Requirements

To qualify for the dual-title degree, students must satisfy the requirements of the Ph.D. in HDFS, listed above. In addition, students pursuing the dual-title Ph.D. in HDFS and Clinical and Translational Sciences must complete the degree requirements for the dual-title Clinical and Translational Sciences Ph.D., listed
on the Clinical and Translational Sciences Bulletin page.

Students’ Candidacy Qualifying Examination committee for the dual-title degree must fulfill composition requirements for HDFS, and at least one of the committee members must hold Graduate Faculty status in Clinical and Translational Sciences. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy qualifying examination, containing elements of both HDFS and Clinical and Translational Sciences. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy qualifying examination may be delayed one semester beyond the normal period allowable.

Similarly, in addition to the general Graduate Council requirements for dissertation committees, the Doctoral Committee of a dual-title doctoral degree student must either be chaired by a faculty member holding appointments in both HDFS and Clinical and Translational Sciences, or be co-chaired by two faculty members who each represent one discipline. The Doctoral Committee will oversee the Comprehensive Exam, which must meet the requirements established in the HDFS department, as well as requires the demonstration of expertise in an area deemed relevant to Clinical and Translational Sciences by the Committee chair or co-chair.

Ph.D. candidates must complete a dissertation on a topic that reflects their original research on a topic approved by the CTS program; specifically, one that “translates biomedical discovery into applications with the goal of improving human health”. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the dissertation committee, the head of the graduate program, and the Graduate School.

VI. Proposed Revision, Human Development & Family Studies

Graduate Student Handbook

The Handbook already accurately describes how general requirements apply to dual-title students in the existing Demography, and Social Data Analytics programs. However, the Handbook will be revised such that, on page 6, letter ‘D’ in the outline will represent the broader category “Dual Titles”, followed by a statement defining the purpose of dual title programs. Under this heading the individual dual title programs with which HDFS is affiliated will be listed and briefly described. Language for the Demography and Social Data Analytics programs is unchanged. Additional language for the CTS program is added. The revised section appears below, with the new language highlighted in red.

D. Dual-Title Doctoral Degree programs in HDFS

The Graduate School and Penn State grants specialized doctoral degrees carrying a dual-title recognizing the home graduate degree program and a dual title program which provides a fully integrated program of study that integrates both the graduate major and dual-title fields early in the program. HDFS currently affiliates with 3 dual-title programs that provide extensive and sophisticated training in areas that readily integrate with core research domains in HDFS. Students interested in pursuing a dual title must comply with the coursework and research requirements of both programs, and must demonstrate the
commitment to the integrated training prior to the first doctoral benchmark, the qualifying exam. HDFS’s dual training affiliations are listed below.

1. HDFS and Demography. Penn State offers a dual-title program in Human Development and Family Studies and Demography. The program is designed for students who want to integrate Population Studies (including such foci as fertility, marriage, cohabitation, labor force participation, mortality) with the study of individual and family development. Participation in the program requires admission by both HDFS and Demography, the completion of specified coursework, and thesis research on a demographic topic. It is possible to earn a dual-title masters, Ph.D., or both. Additional information is available in the Appendix.

2. HDFS and Social Data Analytics. HDFS doctoral students interested in having a degree that reflects interdisciplinary training in an array of tools, techniques, and methodologies for social data analytics, while maintaining a close association with HDFS, may apply to pursue a dual-title Ph.D. in HDFS and Social Data Analytics. Social data analytics is the integration of social scientific, computational, informational, statistical, and visual analytic approaches to the analysis of large or complex data that arise from human interaction. The dual-title Ph.D. program provides additional training with the aim of providing scientists with the skills required to expand the field of social data analytics, creatively answer important social scientific questions, and communicate effectively with both academic and nonacademic audiences.

3. HDFS and Clinical and Translational Sciences. HDFS doctoral students interested in having a degree that reflects advanced training in the design, analysis, interpretation, implementation, and dissemination of clinical prevention/intervention programs aimed at improving human health across a range of contexts and developmental stages may apply to pursue a dual-title Ph.D. in HDFS and Clinical and Translational Sciences. The dual-title program is applicable for students pursuing academic careers in the area of basic research focused on processes that can be targeted through intervention practice, the development or improvement of intervention programs, or the science of translation and dissemination; or for students pursuing non-academic careers related to public health, policy, cost effectiveness or cost-benefit program evaluation. The CTS dual-title complements the expertise students in HDFS acquire in individual development across the lifespan, and the contextual processes that influence individual development such as communities, schools, families, and workplace. These contexts serve as possible targets for intervention, contexts for delivering an intervention, or potential impediments to effective intervention delivery.
ENDORSEMENTS FROM OTHER PROGRAMS:
February 12, 2018

Vicki Hewitt, Ed.D.
Director of Graduate Education Administration
The Graduate School
Office of the Dean
210A Kern Graduate Building
The Pennsylvania State University
University Park, PA 16802

Dear Dr. Hewitt,

We are pleased to support the affiliation of the Human Development and Family Studies (HDFS) graduate program with the Clinical & Translational Sciences dual-title Ph.D. Biobehavioral Health and HDFS have many points of intersection with our complimentary research interests in human health. This common interest is especially evident in the extensive involvement from both departments in the Prevention Research Center within the College of Health and Human Development. The research conducted within the Prevention Research Center is ideally aligned with the training supported by the CTS dual-title. The addition of HDFS to the suite of programs already affiliated with the CTS dual-title will support additional synergy across our disciplines in terms of research collaboration and graduate training.

Sincerely,

Tom

Thomas J. Gould, Ph.D.
Jean Phillips Shibley Professor of Biobehavioral Health
Department Head
Department of Biobehavioral Health
219 Biobehavioral Health Bldg
The Pennsylvania State University
University Park, PA 16802
January 11 2018

Vicki Hewitt, Ed.D.
Director of Graduate Education Administration
The Graduate School
Office of the Dean
210A Kern Graduate Building
The Pennsylvania State University
University Park, PA 16802

Dear Dr. Hewitt:

For the past year faculty in the Human Development and Family Studies graduate program (HDFS) have discussed the possibility to add the Clinical & Translational Sciences dual-title PhD. CTS has been involved with the development of this proposal from its early inception. After extensive discussion, graduate faculty from HDFS voted in favor of affiliation with CTS. The interest in formalizing the HDFS/CTS program affiliation is mutual and is reflected in the collaborative approach to the major program modification.

The graduate program in HDFS provides a cohesive curriculum that focuses on the design and evaluation of preventive intervention programs aimed at improving human health. The additional training that CTS affords in the logistical processes and real-world challenges involved in translating scientific knowledge into practice creates a natural synergy between HDFS and CTS.

Several of the components of the CTS program, including training in statistics, experimental design of clinical interventions, and program evaluation, are already available in the HDFS program. With the expanded training and the internship opportunities, students graduating with the HDFS/CTS dual-title degree will be prepared to transition into leadership positions in policy, as well as program delivery in clinical or community settings.

This new offering does not duplicate other degree programs or other IDGPs in the University. CTS welcomes the opportunity to affiliate and we wholeheartedly endorse the HDFS proposal. If there is any additional information you require from CTS, please let me know.

Sincerely,

Jim Pawelczyk, Ph.D.
Associate Professor of Physiology and Kinesiology
Co-Director, Dual-title PhD Program in Clinical and Translational Sciences

cc: Gail Thomas, PhD
    Karen Shields
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: Nursing
Department or Instructional Area:

New Graduate Program, Option, or Minor: Add

Designation of new graduate program:
Classification of Instructional Programs (CIP) Code: ____________
Designation of new graduate option:
Designation of new graduate minor:

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change X Drop

Current designation of graduate program: Nursing
Current designation of graduate option: M.S.N. all options
Current designation of graduate minor:

New designation of existing graduate program (if changing):
New designation of existing graduate option (if changing):
New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above): Change in course requirements for all options.

Indicate effective semester:
First semester following approval X
Second semester following approval

Submitted by Graduate Program Head

Judith Hupcey  
Printed name  
Signature  
Date: 07/16/2018

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Kelly Wolgast  
Printed name  
Signature  
Date: 07/16/2018

Approved by College/School Dean/Chancellor (or Designee):

Judith Hupcey  
Printed name  
Signature  
Date: 07/16/2018
Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:

On Behalf of David Babb  
Printed name  
Signature  
Date: 10/9/2018

Recommended by Chair, Graduate Council Committee on Programs and Courses:

On Behalf of C. Andrew Cole  
Printed name  
Signature  
Date: 10/9/2018

Noted by Dean of the Graduate School:

On Behalf of Regina Vasilatos-Younken  
Printed name  
Signature  
Date: 10/9/2018
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A. Justification for proposed changes

Overview of Changes

• Drop NURS 513 (Evidence-Based Practice in Professional Nursing) for all M.S.N. options
• Add a 3-credit graduate nursing elective for the Family Nurse Practitioner, Adult Gerontology Primary Care Nurse Practitioner, and Adult Gerontology Acute Care Nurse Practitioner options
• Increase the credits from 4 to 6 for the Nurse Administrator option capstone course (NURS 848)
• Increase the credits from 4 to 6 for the Nurse Educator option capstone course (NURS 843)

Rationale

The graduate faculty in the College of Nursing have been working on updates to the M.S.N. core curriculum to match the national guidelines for master’s education in nursing (AACN: The Essentials of Master’s Education in Nursing) and re-aligning the competencies that are now part of the Doctor of Nursing Practice degree (D.N.P.) and not the M.S.N. degree (AACN: The Essentials of Doctoral Education for Advanced Nursing Practice). The course objectives for NURS 513 (Evidence-Based Practice in Professional Nursing) align with the D.N.P. essentials and not the updated M.S.N. essentials. Thus, we propose dropping NURS 513 from all the M.S.N. options.

Presently, the three nurse practitioner options are very prescriptive without any electives. We propose replacing the 3 credit NURS 513 with one of the presently offered graduate nursing courses. The following courses are potential elective courses for these options:

NURS 522 Comprehensive Assessment of the Older Adult
NURS 523 Interventions for Common Health Issues in Older Adults
NURS 588 Healthcare Policy for Nurses and Healthcare Scholars
NURS 808 Population Health Perspectives
NURS 824 Primary Palliative Care: An Interdisciplinary Approach
NURS 825 Primary Palliative Care: Interdisciplinary Management of Advanced Serious Illness
NURS 828 Person Centered Care
NURS 836 Healthcare Informatics
NURS 840 Nursing Education Theories and Strategies
NURS 841 Assessment and Evaluation in Nursing Education
NURS 842 Curriculum and Program Development in Nursing Education
NURS 845 Healthcare Economics and Policy for Nurse Administrators
NURS 846 Leadership Concepts and Theories for Nurse Administrators
NURS 847 Human Resource and Work Force Issues for Nurse Administrators

The Nurse Educator and Nurse Administrator options are presently both 37 credits, we propose to decrease these options to 36 credits. In both options, the capstone practicum course (NURS 843 and NURS 848) is 4 credits (180 hours of practicum 1 credit=45 hours). We plan to increase these courses to 6 credits (270 hours of practicum). The additional practicum hours will allow for
expanded experiences and better position the students for doctoral nursing programs that require 1000 hours of post-baccalaureate practicum. A course proposal change is submitted for both NURS 843 and NURS 848.

B. Revised version of the affected areas showing the old program requirements and new program requirements

Present Curriculum with Additions Underlined, Strikethrough of Changes/Deletions

(A) M.S.N. Core (9–12 credits)
- NURS 501: Issues in Nursing and Health Care (3 credits)
- NURS 510: Theoretical and Scientific Foundations of Advanced Nursing Practice (3 credits)
- NURS 830: Evidence-Based Practice I: Theory and Research Methods (3 credits)
- NURS 513: Evidence-Based Practice in Professional Nursing

(B) Advanced Nursing Practice Courses (9–10 credits) [NP and Nurse Educator Options]
- NURS 802: Advanced Health Assessment of Adult Populations (NP options, 3 credits)
- NURS 802A: Advanced Health Assessment of Pediatric Populations (FNP, 1 credit)
- NURS 802B: Physical Assessment Through the Lifespan (Nurse Educator option 3 credits)
- NURS 803: Pathophysiology (3 credits)
- NURS 804: Pharmacologic Therapy (3 credits)

(C) Option-Specific Courses

**Family Nurse Practitioner Option (23 credits) Total credits: 45**
- NURS 870: Nurse Practitioner Role with Healthy Individuals and Families (3 credits)
- NURS 871: Nurse Practitioner Role with Individuals and Families with Complex and/or Chronic Health Problems (3 credits)
- NURS 872: Family Nurse Practitioner Practicum I (3 credits)
- NURS 873: Family Nurse Practitioner Practicum II (FNP, 4 credits)
- NURS 874: Family Nurse Practitioner Integrative Practicum (6 credits) CAPSTONE COURSE
- NURS 875: Nurse Practitioner Role with Children and Families (2 credits)
- NURS 876: Family Nurse Practitioner Practicum with Pediatric Populations (2 credits)

**Adult Gerontology Primary Care Nurse Practitioner Option (20 credits) Total credits: 41**
- NURS 870: Nurse Practitioner Role with Healthy Individuals and Families (3 credits)
• NURS 871: Nurse Practitioner Role with Individuals and Families with Complex and/or Chronic Health Problems (3 credits)
• NURS 872A: Adult Gerontology Primary Care Nurse Practitioner Practicum I (4 credits)
• NURS 873A: Adult Gerontology Primary Care Nurse Practitioner Practicum II (4 credits)
• NURS 874A: Adult Gerontology Primary Care Nurse Practitioner Integrative Practicum (6 credits) CAPSTONE COURSE

**Adult Gerontology Acute Care Nurse Practitioner Option (22 credits) Total credits: 43**
• NURS 860: Adult Gerontology Acute Care Nurse Practitioner Role I (3 credits)
• NURS 861: Adult Gerontology Acute Care Nurse Practitioner Role II (3 credits)
• NURS 862: Adult Gerontology Acute Care Nurse Practitioner Practicum I (4 credits)
• NURS 863: Adult Gerontology Acute Care Nurse Practitioner Practicum II (4 credits)
• NURS 864: Adult Gerontology Acute Care Nurse Practitioner Integrative Practicum (6 credits) CAPSTONE COURSE
• NUR 865: Pharmacology for Acute Care Nurse Practitioners (1 credit)
• NURS 866: Health Assessment of the Adult Gerontology Population in Acute Care (1 credit)

**Nurse Administrator Option (16-18 credits) Total credits: 36**
• NURS 836: Healthcare Informatics (3 credits)
• NURS 845: Healthcare Economics and Policy for Nurse Administrators (3 credits)
• NURS 846: Leadership Concepts and Theories for Nurse Administrators (3 credits)
• NURS 847: Human Resource and Workforce Issues for Nurse Administrators (3 credits)
• NURS 848: Synthesis and Application of the Nurse Administrator Role (4-6 credits)
  CAPSTONE COURSE

**Nurse Educator Option (13-15 credits) Total credits: 36**
• NURS 840: Nursing Education Theories and Strategies (3 credits)
• NURS 841: Assessment and Evaluation in Nursing Education (3 credits)
• NURS 842: Curriculum and Program Development in Nursing Education (3 credits)
• NURS 843: Synthesis and Application of the Nurse Educator Role (4-6 credits)
  CAPSTONE COURSE

(D) Electives
• Family Nurse Practitioner Option (3 credits)
• Adult Gerontology Primary Care Nurse Practitioner Option (3 credits)
• Adult Gerontology Acute Care Nurse Practitioner Option (3 credits)
• Nurse Administrator Option (9 credits)
• Nurse Educator Option (3 credits)

**C. Departments affected**

No departments will be affected by these program revisions.
D. Consultation with ORP
Not needed; no changes to SARI requirements in any of the options/degrees.

E-1. Graduate Bulletin with Track Changes
A copy of the existing Graduate Bulletin description, with all changes marked.

Nursing (NURS)

Degrees Conferred:

Ph.D., D.N.P., M.S., M.S.N.
Dual-Title Ph.D. in Nursing and Bioethics (BIOET)
Dual-Title Ph.D. in Nursing and Clinical and Translational Sciences

The Graduate Faculty

The Programs

The graduate programs emphasize productive scholarship and research in the development of nursing knowledge and the translation of knowledge into practice. Advanced study is in human health and development throughout the life span, and in nursing’s role in providing health services to individuals, families, and communities.

The Ph.D. program, the dual-title Ph.D. program in nursing and bioethics, and the dual-title Ph.D. program in nursing and clinical and translational sciences prepare nurse scientists to provide leadership in nursing education, practice and research. Individualized curricula prepare nursing graduates to assume positions as faculty, researchers and leaders in educational, community, governmental, or institutional settings.

The D.N.P. degree program prepares nurse administrators and advanced practice nurses to assume leadership roles in practice settings in the community, governmental agencies, or healthcare institutions.

The M.S. degree program with a major in nursing prepares nurse scientists and clinical scholars who plan to complete a Ph.D. in nursing or dual-title Ph.D. in nursing and bioethics or a dual-title Ph.D. in nursing and clinical and translational sciences.

The M.S.N. degree in Nursing consists of a base program and five options. The options include: Family Nurse Practitioner, Adult Gerontology Primary Care Nurse Practitioner, Adult Gerontology Acute Care Nurse Practitioner, Nurse Administrator, and Nurse Educator.

The M.S., M.S.N., and D.N.P. degree programs in Nursing are accredited by the Commission on Collegiate Nursing Education.

The Nurse Practitioner options are designed to help prepare the professional nurse to function in an expanded nursing role providing direct care to specific groups of clients in a variety of health care settings. Since that practice is inherently
interdisciplinary in nature, advanced knowledge and research from nursing is combined with knowledge from science, medicine, and related disciplines. The Nurse Practitioner may also function in supervisory, consultative, education, and research roles.

The Nurse Administrator option enables the student to acquire advanced knowledge of organizational leadership, health policy, and evidence-based health care delivery. The program is designed to prepare students for leadership and administrative roles in a variety of health care settings.

The Nurse Educator option enables the student to acquire advanced knowledge of evidence-based teaching and learning principles, curriculum development, and evaluative techniques. The program is designed to prepare students for educator roles in a variety of academic and health care settings.

Admission Requirements for M.S., M.S.N., D.N.P., and Ph.D. Programs

Requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants must apply for admission to the program via the Graduate School application for admission.

1. For admission to the Nursing program, an applicant must hold either (1) a bachelor’s degree in Nursing from a U.S. regionally accredited institution or (2) a postsecondary degree in Nursing that is equivalent to a U.S. baccalaureate degree earned from an officially recognized degree-granting international institution. Students entering the doctoral program via the traditional post-master’s route must have earned a master’s degree in a major in nursing from a program accredited by a national accrediting agency for nursing. Well-qualified Ph.D. applicants with a baccalaureate degree in nursing and master’s degree in a related discipline (e.g., public health) will be evaluated individually to assess the need for prerequisite master’s-level course work in nursing for doctoral program admission.

2. Applicants must submit official transcripts from all post-secondary institutions attended. For M.S.N. applicants, a cumulative grade-point average of 3.3 (on a 4.0 scale) for the baccalaureate degree is expected with a B or better in all science and nursing courses. For M.S. applicants, a cumulative grade-point average of 3.5 (on a 4.0 scale) for the baccalaureate degree is expected with a B or better in all science and nursing courses. College chemistry and statistics are also required (chemistry is not required for the nurse administrator option). B.S.N. to D.N.P. applicants are expected to have a cumulative undergraduate grade-point average of 3.5 (on a 4.0 scale). For master’s to Ph.D. or D.N.P. applicants, a cumulative grade-point average 3.5 (on a 4.0 scale) for master’s and subsequent course work is expected.

3. Two letters of reference are required for the M.S.N. degree program and three letters of reference are required for the M.S., D.N.P., and Ph.D. degree programs. The letters should be solicited from professional supervisors and faculty who can attest to the applicant’s ability.

4. All applicants must submit a statement of purpose. In addition, M.S., D.N.P., and Ph.D. degree applicants must also submit a published or unpublished scientific paper, thesis, or other scholarly writing sample and a complete curriculum vitae.

5. GRE scores are required for admission to the M.S. and Ph.D. programs. GRE scores are not required for the M.S.N. or D.N.P. applicants, but if the scores are submitted to Penn State they will be reviewed as part of the application.

6. The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency section of the Graduate Bulletin Application and Admission Procedures page for more information. Applicants to the Nursing program must have a minimum TOEFL score of 80 with a 25 on the speaking section for the internet-based test (iBT). For the paper-based test, taken prior to July 2017, a minimum of 580 is required.

7. Applicants to the M.S.N. options and D.N.P. degree offered online via the World Campus must hold a current license to practice professional nursing in at least one U.S. state or in a foreign country. All other applicants to the M.S. and M.S.N. degree programs must hold a current Pennsylvania license to practice professional nursing. Applicants to the Ph.D. degree must be licensed to practice professional nursing in at least one state or in a foreign country.

8. Applicants to the Adult Gerontology Acute Care Nurse Practitioner Option are required to have two years of acute care hospital experience.

9. Applicants to the M.S.N. degree program are encouraged to discuss program options with the faculty; however, an interview is not required. Doctoral (B.S.N. - Ph.D., B.S.N.- D.N.P., D.N.P., and Ph.D.) applicants will be contacted by the College of Nursing to schedule a required interview (either in person or via internet-based video conferencing).
Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Candidates in the Master of Science (M.S.) degree program in nursing (B.S.N.- Ph.D.) are required to complete a minimum of 30 credits, with at least 18 credits in the 500 and 600 series combined, to be awarded an M.S. degree. A minimum of 12 credits in course work (400, 500, and 800 series), as contrasted with research, must be completed in the major program. There are 9 credits required in M.S. core coursework, including NURS 510 Theoretical and Scientific Foundations of Advanced Nursing Practice (3 credits); NURS 808: Population Health Perspectives (3 credits); and NURS 836: Healthcare Informatics (3 credits. In addition, 9-12 credits are required in research and statistics courses approved in advance by the student's adviser. Additional courses that will count as electives towards this degree can be chosen from a list of approved elective courses maintained by the graduate program office.

If the M.S. student chooses to complete a thesis, at least 6 credits in thesis research (600 or 610) must be taken in conjunction with the thesis. The thesis must be accepted by the advisers and/or committee members, the head of the graduate program, and the Graduate School, and the student must pass a thesis defense. If the student chooses the non-thesis track, the students must submit a satisfactory scholarly paper while enrolled in NURS 596 (3 credits). If no thesis is required, at least 18 credits of course work must be in 500-level courses.

The Master of Science in Nursing (M.S.N.) requires a minimum of 30 credits, with at least 6 credits at the 500 level, including 942 credits of M.S.N. Program Core courses, 135 credits of electives, and at least 3 credits in a capstone course or project. The M.S.N. Program Core Courses are: NURS 501: Issues in Nursing and Health Care (3 credits), NURS 510 Theoretical and Scientific Foundations of Advanced Nursing Practice (3 Credits), and NURS 830: Evidence-Based Practice I: Theory and Research Methods (3 credits) and NURS 813 Evidence-Based Practice in Professional Nursing (3 credits). Additional courses that will count as electives towards this degree can be chosen from a list of approved elective courses maintained by the graduate program office. Students in the M.S.N. degree program are required to complete a capstone course or project, which demonstrates the application of theory and research to a clinical problem based on review of the literature and research utilization for that problem. For M.S.N. students who do not choose to complete an option, the capstone project is completed while enrolled in NURS 596 (3 credits).

The five advanced role options offered in the M.S.N. degree program include nurse educator, nurse administrator, family nurse practitioner, adult gerontology primary care nurse practitioner, and adult gerontology acute care nurse practitioner. Students in these options complete the 942 credits of M.S.N. Program Courses as described above. The option-specific course requirements described below replace the requirement for 135 credits of electives.

Students must earn a minimum of 45 credits for the M.S.N. with the Family Nurse Practitioner option. The option-specific course requirements total 27 credits, including: NURS 802 (3), NURS 802A (1), NURS 803 (3), NURS 804 (3), NURS 870 (3), NURS 871 (3), NURS 872 (3), NURS 873 (4), NURS 875 (2), and NURS 876 (2). The capstone course for students completing this option is NURS 874 (6). Students in this option are required to take 3 additional elective credits chosen from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 41 credits for the M.S.N. with the Adult Gerontology Primary Care Nurse Practitioner option. The option-specific course requirements total 23 credits, including: NURS 802 (3), NURS 803 (3), NURS 804 (3), NURS 870 (3), NURS 871 (3), NURS 872A (4) and NURS 873A (4). The capstone course for students completing this option is NURS 874A (6). Students in this option are required to take 3 additional elective credits chosen from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 43 credits for the M.S.N. with the Adult Gerontology Acute Care Nurse Practitioner option. The option-specific course requirements total 25 credits, including: NURS 802 (3), NURS 803 (3), NURS 804 (3), NURS 860 (3), NURS 861 (3), NURS 862 (4), NURS 863 (4), NURS 865 (1), and NURS 866 (1). The capstone course for students completing this option is NURS 864 (6). Students in this option are required to take 3 additional elective credits chosen from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 367 credits for the M.S.N. with the Nurse Administrator option. The option-specific course requirements total 12 credits, including: NURS 836 (3), NURS 845 (3), NURS 846 (3), and NURS 847 (3). The capstone course for students completing this option is NURS 848 (6). Students in this option are required to take 9 additional elective credits chosen from a list of approved elective courses maintained by the graduate program office.
Students must earn a minimum of 367 credits for the M.S.N. with the Nurse Educator option. The option-specific course requirements total 18 credits, including: NURS 802B (3), NURS 803 (3), NURS 804 (3), NURS 840 (3), NURS 841 (3), and NURS 842 (3). The capstone course for students completing this option is NURS 843 (64). Students in this option are required to take 3 additional elective credits chosen from a list of approved elective courses maintained by the graduate program office.

**D.N.P. Degree Requirements**

Requirements listed here are in addition to requirements stated in the **DEGREE REQUIREMENTS** section of the **Graduate Bulletin**.

Students may enter the program directly with a B.S.N. degree or following completion of a Master's degree in nursing.

For the B.S.N. to the D.N.P., a core of master's courses is required. A minimum of 61 credits, 1000 hours of practicum time, and a DNP project is required. The 61 credits include:

- 9 credits of Master's Core Courses: NURS 501(3), NURS 510(3), and NURS 842 830(3)
- 13 credits of Nurse Administrator Option Courses: NURS 845(3), NURS 846(3), NURS 847(3), and NURS 848A(4).
- 42 credits of D.N.P. Core Courses: NURS 830(3), NURS 831(3), NURS 832(3), and NURS 833(3).
- 8 credits of Other Required Courses: NURS 590(1), NURS 587(1), NURS 808(3), and NURS 836(3).
- 5 credits of Advanced Practice Clinical (needed to meet the 1000 hour practicum requirement): NURS 834(5)
- 6 credits of DNP Project: NURS 835(6)
- 11 credits of electives chosen from a list of approved elective courses maintained by the graduate program office

The Master of Science in Nursing (M.S.N.) to D.N.P. program requires a minimum of 30 post-master's degree credits completed at Penn State. The curriculum is individualized based on previous coursework and number of practicum hours completed during the master's program. A maximum of 550 practicum hours from the previous master's program will be accepted to fulfill to 1000 hours of required practicum hours. The curriculum is composed of 5 components, for a minimum of 38 credits:

- 12 credits of D.N.P. Core Courses: NURS 830 (3), NURS 831 (3), NURS 832 (3), and NURS 833 (3).
- 14 credits of Other Required Courses: NURS 510 (3), NURS 590 (1), NURS 587 (1), NURS 808 (3), NURS 836 (3) and NURS 845 (3).
- 6 credits of DNP Project: NURS 835 (6)
- 6 credits of electives chosen from a list of approved elective courses maintained by the graduate program office

In addition to the minimum 38 credits, up to 8 credits of NURS 834 may be required for M.S.N. to D.N.P. students, depending on the number of practicum hours completed in the student's M.S.N. program.

For both entry options, students are required to participate in 3 intensives offered at the University Park or Hershey Medical Center campus. For full-time students, the first intensive is August of semester I for M.S.N. to D.N.P. and Semester III for B.S.N. to D.N.P. students. Intensive 2 is the beginning of the subsequent semester, Intensive 3 is at the end of semester II for M.S.N. to D.N.P. and semester IV for B.S.N. to D.N.P. students.

In addition to coursework, all students are required to complete a series of three benchmarks, Qualifying Examination, Comprehensive Examination, and a Final Oral Presentation.

**D.N.P. Doctoral Committee Composition:** The doctoral committee will consist of the student's academic adviser, the DNP project course (NURS 835) instructor, and a third member of the graduate faculty, all from the graduate program in Nursing. The academic adviser will be the chair of the committee.

**Qualifying Examination:** All students must satisfactorily complete the qualifying examination, which is designed to evaluate the student's past performance and potential for successfully completing the program. The qualifying examination typically occurs prior to the 2nd intensive, which follows completion of one semester of full-time study for the M.S.N. to D.N.P. student and after within three semesters of full-time study for the B.S.N. to D.N.P. student. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.
Comprehensive Examination: The comprehensive examination marks the student's progression into their D.N.P. project. This occurs during the 3rd intensive, when students present their D.N.P. project proposal. The comprehensive examination needs to be successfully completed prior to the submission of the proposal for human subjects' review or carrying out the project (if it does not require a review). Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

Final Oral Presentation: Upon completion of the project, the Final Oral Presentation is scheduled. Students are required to present the project for approval by their doctoral committee. The Associate Dean for Graduate Education & Research will sign off on the final paper, following completion of the paper during NURS 835 and the student's passing of the oral presentation. Students who fail the presentation on the first attempt may repeat it once. The student's final paper will be made publicly available through ScholarSphere.

Ph.D. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Students may enter the program directly with a B.S.N. degree (and may receive an M.S. degree en route to the Ph.D.) or a concurrent M.S.N. (nurse practitioner option) or following completion of a B.S.N. and a Master's degree (either in Nursing or non-Nursing). A dual-title Ph.D. degree in Nursing and Bioethics, and a dual-title Ph.D. degree in Nursing and Clinical and Translational Sciences are also available.

Students entering with an M.S.N. will complete a minimum of 43 credits. The curriculum is composed of 3 components:

1. Nursing Science Core: minimum of 16 credits, consisting of NURS 580 (3), NURS 582 (4), NURS 583 (3), NURS 587 (1), NURS 588 (3), and NURS 590 (2). NURS 596 (3) will also be required of students who are not research assistants on an active faculty research study.
2. Research Methodology and Statistics: minimum of 15 credits approved by the student's adviser and/or doctoral committee.
3. Courses for Individual Specialty: minimum of 12 credits; minimum of 15 credits for a minor.

In addition to coursework, all students are required to complete a series of examinations: The Qualifying Examination, the Comprehensive Examination (written and oral components), the Dissertation Proposal Defense, and Final Oral Examination. Students are required to pass the Final Oral Examination, have the dissertation approved and submitted, and graduate within five years of passing the qualifying examination.

Qualifying Examination: All students must satisfactorily complete the qualifying examination, which is designed to confirm the student's mastery of basic nursing theory and research methods. For students entering the doctoral program with a master's degree, the qualifying examination must be taken at the end of the first year of full-time study or the equivalent. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

Comprehensive Examination: The comprehensive examination is designed to test the student's mastery of and ability to synthesize and integrate the theoretical basis for nursing science, advanced research methods, and the chosen specialty area. This examination is taken when a candidate has substantially completed all coursework. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

Dissertation and Final Oral Examination (the Dissertation Defense): Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Each student is required to conduct an original and independent research project which adds to nursing's body of knowledge, and to communicate the research report in a written dissertation. A written dissertation proposal is required and must be approved at a proposal hearing by a majority vote of the student's doctoral committee. A majority vote is also required for approval of the completed written dissertation at the Final Oral Examination (the dissertation defense). The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

Dual-Title Ph.D. in Bioethics
Nursing Ph.D. students may pursue additional training in bioethics through the dual-title Ph.D. program in Bioethics. Students must apply and be admitted to the graduate program in Nursing and the Graduate School before they can apply for admission to the dual-title degree program. Admission to the dual-title is determined upon review of all application materials (forwarded from the College of Nursing) by the admissions committee in Bioethics. Refer to the Admissions Requirements section of the Bioethics Bulletin page. Students must apply and be admitted to the dual-title degree program in Bioethics prior to taking the qualifying exam.

To qualify for the dual-title degree, students must satisfy the requirements of the Nursing Ph.D. program. In addition, they must satisfy the requirements described below, as established by the Bioethics program committee. Refer to the Degree Requirements section of the Bioethics Bulletin page. Within this framework, final course selection is determined by the student, their Nursing adviser, and their Bioethics program adviser.

The dual-title Ph.D. in Nursing and Bioethics requires a minimum of 1 credit of coursework beyond the requirements for the Ph.D. in Nursing (17 credits of the 18 Bioethics credits are part of the current degree requirements in Nursing), as follows:

- 10 credits: 7 required credits (BIOET 501 (3), BIOET 502 (3), and BIOET 590 (1)), plus at least 3 additional BIOET credits at the 500 level. These credits can be applied to the Courses for Individual Specialty requirement for the Nursing Ph.D.
- 8 additional credits from a list of approved electives at the 400 or 500 level, at least two of these courses must be at the 500 level. Many of the available electives that students may wish to take are 3-credit courses, so 9 additional credits may be a more typical number for most students. The list of elective courses will be maintained by the Director of the Bioethics Graduate Program in consultation with the Bioethics Program Committee. The Nursing Science core constitutes 7 of these elective credits.

**Qualifying Examination**: In order to be admitted to the Ph.D. dual-title degree program, students must meet the Ph.D. qualifying requirements specified by Nursing; a single qualifying examination will be administered that includes assessment of both Nursing and Bioethics. At least one member of the qualifying examination committee must have a Graduate Faculty appointment in Bioethics. Because students must first be admitted to a graduate major program of study before they may apply to and be considered for admission into a dual-title graduate degree program, dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

**Comprehensive Examination**: In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of a Nursing and Bioethics dual-title Ph.D. student must include at least one member of the Bioethics Graduate Faculty. Graduate faculty members who hold appointments in both programs may serve in a combined role. If the chair of the committee representing Nursing is not also a member of the Graduate Faculty in Bioethics, the member of the committee representing Bioethics must be appointed as co-chair. The faculty member (or members) affiliated with the Bioethics Program will be responsible for administering a portion of the comprehensive exam that will require the student to demonstrate an understanding of various theoretical and methodological approaches to bioethics, and an ability to apply them to issues and problems (including, where appropriate, practical problems) in their nursing.

**Dissertation and Final Oral Examination (the Dissertation Defense)**: Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Students enrolled in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their original research and expertise in Nursing and Bioethics. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

**Dual-Title Ph.D. in Clinical and Translational Sciences**

Nursing Ph.D. students may pursue additional training in CTS through the dual-title Ph.D. program in CTS. Students must apply and be admitted to the graduate program in Nursing and the Graduate School before they can apply for admission to the dual-title degree program. Admission to the dual-title is determined upon review of all application materials (forwarded from the College of Nursing) by the admissions committee in CTS. Refer to the Admissions Requirements section of the Clinical and Translational Sciences Bulletin page. Students must apply and be admitted to the dual-title degree program in CTS prior to taking the qualifying examination.

To qualify for the dual-title degree, students must satisfy the requirements of the Nursing Ph.D. program. In addition, they must satisfy the requirements described below, as established by the CTS program committee. Refer to the Degree Requirements section of the Clinical and Translational Sciences Bulletin page. Within this framework, final course selection is determined by the student, their Nursing adviser, and their CTS program adviser.
The CTS dual-title requires 26 credits: 18 credits from a list of approved electives in each of the following areas (at least half of which must be at the 500 or 800 level): Statistics (3 cr.), Epidemiology (3 cr.), Bioinformatics (3 cr.), Experimental Design and Interpretation (3 cr.), The Regulatory Environment (3 cr.), and Scientific Communication (3 cr.); 2 credits of CTS 590; and 6 credits of CTS 595 or BMS 571. Of the 18 elective credits required, 12 credits can be double-counted from the required courses for the Ph.D. in Nursing: STAT 500/PHS 520 meets the 3-credit requirement for Statistics, and an additional 9 credits of Individual Specialization Coursework required for Nursing can be selected from the list of CTS approved electives to meet the 3-credit requirements in Epidemiology, Bioinformatics, and The Regulatory Environment. Therefore, dual-title Ph.D. students in Nursing and CTS may require a minimum of 14 credits of additional coursework, consisting of approved electives in Experimental Design and Interpretation (3 cr.) and Scientific Communication (3 cr.), 2 credits of CTS 590; and 6 credits of CTS 595 or BMS 571.

Qualifying Examination: In order to be admitted to the Ph.D. dual-title degree program, students must meet the Ph.D. qualifying requirements specified by Nursing; a single qualifying examination will be administered that includes assessment of both Nursing and CTS. At least one member of the qualifying examination committee must have a graduate faculty appointment in CTS. Because students must first be admitted to a graduate major program of study before they may apply to and be considered for admission into a dual-title graduate degree program, dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

Comprehensive Examination: In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of a Nursing and CTS dual-title Ph.D. student must include at least one member of the CTS Graduate Faculty. Graduate faculty members who hold appointments in both programs may serve in a combined role. If the chair of the committee representing Nursing is not also a member of the Graduate Faculty in CTS, the member of the committee representing CTS must be appointed as co-chair. The faculty member (or members) affiliated with the CTS Program will be responsible for administering a portion of the comprehensive exam that will require the student to demonstrate an understanding of various theoretical and methodological approaches to CTS, and an ability to apply them to issues and problems (including, where appropriate, practical problems) in their nursing.

Dissertation and Final Oral Examination (the Dissertation Defense): Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Students enrolled in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their dissertation research and expertise in Nursing and CTS. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

In addition to the Student Aid section of the Graduate Bulletin, the following awards typically have been available to graduate students in this program:

U.S. PUBLIC HEALTH SERVICE TRAINEESHIPS IN NURSING
Open to selected registered nurse, full-time students in nursing; stipend may be available plus tuition. Apply to Associate Dean for Graduate Education & Research, College of Nursing.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students but courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

NURSING (NURS) course list

Last Revised by the Department: Summer 2018
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Nursing (NURS)

Program Home Page

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Degrees Conferred:

Ph.D., D.N.P., M.S., M.S.N.
Dual-Title Ph.D. in Nursing and Bioethics (BIOET)
Dual-Title Ph.D. in Nursing and Clinical and Translational Sciences

The Graduate Faculty

The Programs

The graduate programs emphasize productive scholarship and research in the development of nursing knowledge and the translation of knowledge into practice. Advanced study is in human health and development throughout the life span, and in nursing’s role in providing health services to individuals, families, and communities.

The Ph.D. program, the dual-title Ph.D. program in nursing and bioethics, and the dual-title Ph.D. program in nursing and clinical and translational sciences prepare nurse scientists to provide leadership in nursing education, practice and research. Individualized curricula prepare nursing graduates to assume positions as faculty, researchers and leaders in educational, community, governmental, or institutional settings.

The D.N.P. degree program prepares nurse administrators and advanced practice nurses to assume leadership roles in practice settings in the community, governmental agencies, or healthcare institutions.

The M.S. degree program with a major in nursing prepares nurse scientists and clinical scholars who plan to complete a Ph.D. in nursing or dual-title Ph.D. in nursing and bioethics or a dual-title Ph.D. in nursing and clinical and translational sciences.

The M.S.N. degree in Nursing consists of a base program and five options. The options include: Family Nurse Practitioner, Adult Gerontology Primary Care Nurse Practitioner, Adult Gerontology Acute Care Nurse Practitioner, Nurse Administrator, and Nurse Educator.

The M.S., M.S.N., and D.N.P. degree programs in Nursing are accredited by the Commission on Collegiate Nursing Education.

The Nurse Practitioner options are designed to help prepare the professional nurse to function in an expanded nursing role providing direct care to specific groups of clients in a variety of health care settings. Since that practice is inherently interdisciplinary in nature, advanced knowledge and research from nursing is combined with knowledge from science, medicine, and related disciplines. The Nurse Practitioner may also function in supervisory, consultative, education, and research roles.

The Nurse Administrator option enables the student to acquire advanced knowledge of organizational leadership, health policy, and evidence-based health care delivery. The program is designed to prepare students for leadership and administrative roles in a variety of health care settings.
The Nurse Educator option enables the student to acquire advanced knowledge of evidence-based teaching and learning principles, curriculum development, and evaluative techniques. The program is designed to prepare students for educator roles in a variety of academic and health care settings.

Admission Requirements for M.S., M.S.N., D.N.P., and Ph.D. Programs

Requirements listed here are in addition to requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin. Applicants must apply for admission to the program via the Graduate School application for admission.

10. For admission to the Nursing program, an applicant must hold either (1) a bachelor's degree in Nursing from a U.S. regionally accredited institution or (2) a postsecondary degree in Nursing that is equivalent to a U.S. baccalaureate degree earned from an officially recognized degree-granting international institution. Students entering the doctoral program via the traditional post-master's route must have earned a master's degree with a major in nursing from a program accredited by a national accrediting agency for nursing. Well-qualified Ph.D. applicants with a baccalaureate degree in nursing and master's degree in a related discipline (e.g., public health) will be evaluated individually to assess the need for prerequisite master's-level coursework in nursing for doctoral program admission.

11. Applicants must submit official transcripts from all post-secondary institutions attended. For M.S.N. applicants, a cumulative grade-point average of 3.3 (on a 4.0 scale) for the baccalaureate degree is expected with a B or better in all science and nursing courses. For M.S. applicants, a cumulative grade-point average of 3.5 (on a 4.0 scale) for the baccalaureate degree is expected with a B or better in all science and nursing courses. College chemistry and statistics are also required (chemistry is not required for the nurse administrator option). B.S.N. to D.N.P. applicants are expected to have a cumulative undergraduate grade-point average of 3.5 (on a 4.0 scale). For master's to Ph.D. or D.N.P. applicants, a cumulative grade-point average 3.5 (on a 4.0 scale) for master's and subsequent coursework is expected.

12. Two letters of reference are required for the M.S.N. degree program and three letters of reference are required for the M.S., D.N.P., and Ph.D. degree programs. The letters should be solicited from professional supervisors and faculty who can attest to the applicant's ability.

13. All applicants must submit a statement of purpose. In addition, M.S., D.N.P., and Ph.D. degree applicants must also submit a published or unpublished scientific paper, thesis, or other scholarly writing sample and a complete curriculum vitae.

14. GRE scores are required for admission to the M.S. and Ph.D. programs. GRE scores are not required for the M.S.N. or D.N.P. applicants, but if the scores are submitted to Penn State they will be reviewed as part of the application.

15. The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. Consult the English Proficiency section of the Graduate Bulletin Application and Admission Procedures page for more information. Applicants to the Nursing program must have a minimum TOEFL score of 80 with a 25 on the speaking section for the internet-based test (iBT). For the paper-based test, taken prior to July 2017, a minimum of 580 is required.

16. Applicants to the M.S.N. options and D.N.P. degree offered online via the World Campus must hold a current license to practice professional nursing in at least one U.S. state or in a foreign country. All other applicants to the M.S. and M.S.N. degree programs must hold a current Pennsylvania license to practice professional nursing. Applicants to the Ph.D. degree program must be licensed to practice professional nursing in at least one state or in a foreign country.

17. Applicants to the Adult Gerontology Acute Care Nurse Practitioner Option are required to have two years of acute care hospital experience.

18. Applicants to the M.S.N. degree program are encouraged to discuss program options with the faculty; however, an interview is not required. Doctoral (B.S.N. - Ph.D., B.S.N. - D.N.P., D.N.P., and Ph.D.) applicants will be contacted by the College of Nursing to schedule a required interview (either in person or via internet-based video conferencing).

M.S. and M.S.N. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Candidates in the Master of Science (M.S.) degree program in nursing (B.S.N.- Ph.D.) are required to complete a minimum of 30 credits, with at least 18 credits in the 500 and 600 series combined, to be awarded an M.S. degree. A minimum of 12 credits in course work (400, 500, and 800 series), as contrasted with research, must be completed in the major program.
There are 9 credits required in M.S. core coursework, including NURS 510 Theoretical and Scientific Foundations of Advanced Nursing Practice (3 credits); NURS 808: Population Health Perspectives (3 credits); and NURS 836: Healthcare Informatics (3 credits). In addition, 9-12 credits are required in research and statistics courses approved in advance by the student's adviser. Additional courses that will count as electives towards this degree can be chosen from a list of approved elective courses maintained by the graduate program office.

If the M.S. student chooses to complete a thesis, at least 6 credits in thesis research (600 or 610) must be taken in conjunction with the thesis. The thesis must be accepted by the advisers and/or committee members, the head of the graduate program, and the Graduate School, and the student must pass a thesis defense. If the student chooses the non-thesis track, the students must submit a satisfactory scholarly paper while enrolled in NURS 596 (3 credits). If no thesis is required, at least 18 credits of course work must be in 500-level courses.

The Master of Science in Nursing (M.S.N.) requires a minimum of 30 credits, with at least 6 credits at the 500 level, including 9 credits of M.S.N. Program Core courses, 18 credits of electives, and at least 3 credits in a capstone project. The M.S.N. Program Core Courses are: NURS 501: Issues in Nursing and Health Care (3 credits), NURS 510 Theoretical and Scientific Foundations of Advanced Nursing Practice (3 Credits), and NURS 830: Evidence-Based Practice I: Theory and Research Methods (3 credits). Additional courses that will count as electives towards this degree can be chosen from a list of approved elective courses maintained by the graduate program office. Students in the M.S.N. degree program are required to complete a capstone course, which demonstrates the application of theory and research to a clinical problem based on review of the literature and research utilization for that problem. For M.S.N. students who do not choose to complete an option, the capstone project is completed while enrolled in NURS 596 (3 credits).

The five advanced role options offered in the M.S.N. degree program include nurse educator, nurse administrator, family nurse practitioner, adult gerontology primary care nurse practitioner, and adult gerontology acute care nurse practitioner. Students in these options complete the 9 credits of M.S.N. Program Courses as described above. The option-specific course requirements described below replace the requirement for 18 credits of electives.

Students must earn a minimum of 45 credits for the M.S.N. with the Family Nurse Practitioner option. The option-specific course requirements total 27 credits, including: NURS 802 (3), NURS 802A (1), NURS 803 (3), NURS 804 (3), NURS 870 (3), NURS 871 (3), NURS 872 (3), NURS 873 (4), NURS 875(2), and NURS 876 (2). The capstone course for students completing this option is NURS 874 (6). Students in this option are required to take 3 additional elective credits from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 41 credits for the M.S.N. with the Adult Gerontology Primary Care Nurse Practitioner option. The option-specific course requirements total 23 credits, including: NURS 802 (3), NURS 803 (3), NURS 804 (3), NURS 870 (3), NURS 871 (3), NURS 872A (4) and NURS 873A (4). The capstone course for students completing this option is NURS 874A (6). Students in this option are required to take 3 additional elective credits from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 36 credits for the M.S.N. with the Adult Gerontology Acute Care Nurse Practitioner option. The option-specific course requirements total 25 credits, including: NURS 802 (3), NURS 803 (3), NURS 804 (3), NURS 860 (3), NURS 861 (3), NURS 862 (4), NURS 863 (4), NURS 865 (1), and NURS 866 (1). The capstone course for students completing this option is NURS 864 (6). Students in this option are required to take 3 additional elective credits from a list of approved nursing elective courses maintained by the graduate program office.

Students must earn a minimum of 36 credits for the M.S.N. with the Nurse Administrator option. The option-specific course requirements total 12 credits, including: NURS 836 (3), NURS 845 (3), NURS 846 (3), and NURS 847 (3). The capstone course for students completing this option is NURS 848 (6). Students in this option are required to take 9 additional elective credits from a list of approved elective courses maintained by the graduate program office.

Students must earn a minimum of 36 credits for the M.S.N. with the Nurse Educator option. The option-specific course requirements total 18 credits, including: NURS 802B (3), NURS 803 (3), NURS 804 (3), NURS 840 (3), NURS 841 (3), and NURS 842 (3). The capstone course for students completing this option is NURS 843 (6). Students in this option are required to take 3 additional elective credits from a list of approved elective courses maintained by the graduate program office.

D.N.P. Degree Requirements
Requirements listed here are in addition to requirements stated in the Degree Requirements section of the Graduate Bulletin.

Students may enter the program directly with a B.S.N. degree or following completion of a Master's degree in nursing.

For the B.S.N. to D.N.P., a core of master's courses is required. A minimum of 61 credits, 1000 hours of practicum time, and a DNP project is required. The 61 credits include:

- 9 credits of Master's Core Courses: NURS 501(3), NURS 510(3), and NURS 830(3)
- 13 credits of Nurse Administrator Option Courses: NURS 845(3), NURS 846(3), NURS 847(3), and NURS 848A(4).
- 9 credits of D.N.P. Core Courses: NURS 831(3), NURS 832(3), and NURS 833(3).
- 8 credits of Other Required Courses: NURS 590(1), NURS 587(1), NURS 808(3), and NURS 836(3).
- 5 credits of Advanced Practice Clinical (needed to meet the 1000 hour practicum requirement): NURS 834(5)
- 6 credits of DNP Project: NURS 835(6)
- 11 credits of electives chosen from a list of approved elective courses maintained by the graduate program office

The Master of Science in Nursing (M.S.N.) to D.N.P. program requires a minimum of 30 post-master's degree credits completed at Penn State. The curriculum is individualized based on previous coursework and number of practicum hours completed during the master's program. A maximum of 550 practicum hours from the previous master's program will be accepted to fulfill to 1000 hours of required practicum hours. The curriculum is composed of 5 components, for a minimum of 38 credits:

- 12 credits of D.N.P. Core Courses: NURS 830 (3), NURS 831 (3), NURS 832 (3), and NURS 833 (3).
- 14 credits of Other Required Courses: NURS 510 (3), NURS 590 (1), NURS 587 (1), NURS 808 (3), NURS 836 (3) and NURS 845 (3).
- 6 credits of DNP Project: NURS 835 (6)
- 6 credits of electives chosen from a list of approved elective courses maintained by the graduate program office

In addition to the minimum 38 credits, up to 8 credits of NURS 834 may be required for M.S.N. to D.N.P. students, depending on the number of practicum hours completed in the student's M.S.N. program

For both entry options, students are required to participate in 3 intensives offered at the University Park or Hershey Medical Center campus. For full-time students, the first intensive is August of semester I for M.S.N. to D.N.P. and Semester III for B.S.N. to D.N.P. students. Intensive 2 is the beginning of the subsequent semester, Intensive 3 is at the end of semester II for M.S.N. to D.N.P. and semester IV for B.S.N. to D.N.P. students.

In addition to coursework, all students are required to complete a series of three benchmarks, Qualifying Examination, Comprehensive Examination, and a Final Oral Presentation.

DNP Doctoral Committee Composition: The doctoral committee will consist of the student's academic adviser, the DNP project course (NURS 835) instructor, and a third member of the graduate faculty, all from the graduate program in Nursing. The academic adviser will be the chair of the committee.

Qualifying Examination: All students must satisfactorily complete the qualifying examination, which is designed to evaluate the student's past performance and potential for successfully completing the program. The qualifying examination typically occurs prior to the 2nd intensive, which follows completion of one semester of full-time study for the M.S.N. to D.N.P. student and within three semesters of full-time study for the B.S.N. to D.N.P. student. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

Comprehensive Examination: The comprehensive examination marks the student's progression into their D.N.P. project. This occurs during the 3rd intensive, when students present their D.N.P. project proposal. The comprehensive examination needs to be successfully completed prior to the submission of the proposal for human subjects' review or carrying out the project (if it does not require a review). Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

Final Oral Presentation: Upon completion of the project, the Final Oral Presentation is scheduled. Students are required to present the project for approval by their doctoral committee. The Associate Dean for Graduate Education & Research will sign off on the final paper, following completion of the paper during NURS 835 and the student's passing of the oral
presentation. Students who fail the presentation on the first attempt may repeat it once. The student's final paper will be made publicly available through ScholarSphere.

**Ph.D. Degree Requirements**

Requirements listed here are in addition to requirements stated in the Degree Requirements section of the Graduate Bulletin.

Students may enter the program directly with a B.S.N. degree (and may receive an M.S. degree en route to the Ph.D.) or a concurrent M.S.N. (nurse practitioner option) or following completion of a B.S.N. and a Master's degree (either in Nursing or non-Nursing). A dual-title Ph.D. degree in Nursing and Bioethics, and a dual-title Ph.D. degree in Nursing and Clinical and Translational Sciences are also available.

Students entering with an M.S.N. will complete a minimum of 43 credits. The curriculum is composed of 3 components:

1. **Nursing Science Core:** minimum of 16 credits, consisting of NURS 580 (3), NURS 582 (4), NURS 583 (3), NURS 587 (1), NURS 588 (3), and NURS 590 (2). NURS 596 (3) will also be required of students who are not research assistants on an active faculty research study.
2. **Research Methodology and Statistics:** minimum of 15 credits approved by the student's adviser and/or doctoral committee.
3. **Courses for Individual Specialty:** minimum of 12 credits; minimum of 15 credits for a minor.

In addition to coursework, all students are required to complete a series of examinations: The Qualifying Examination, the Comprehensive Examination (written and oral components), the Dissertation Proposal Defense, and Final Oral Examination. Students are required to pass the Final Oral Examination, have the dissertation approved and submitted, and graduate within five years of passing the qualifying examination.

**Qualifying Examination:** All students must satisfactorily complete the qualifying examination, which is designed to confirm the student's mastery of basic nursing theory and research methods. For students entering the doctoral program with a master's degree, the qualifying examination must be taken at the end of the first year of full-time study or the equivalent. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

**Comprehensive Examination:** The comprehensive examination is designed to test the student's mastery of and ability to synthesize and integrate the theoretical basis for nursing science, advanced research methods, and the chosen specialty area. This examination is taken when a candidate has substantially completed all coursework. Students who fail the examination on the first attempt may repeat it once. Students who fail the examination the second time are terminated from the program.

**Dissertation and Final Oral Examination (the Dissertation Defense):** Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Each student is required to conduct an original and independent research project which adds to nursing's body of knowledge, and to communicate the research report in a written dissertation. A written dissertation proposal is required and must be approved at a proposal hearing by a majority vote of the student's doctoral committee. A majority vote is also required for approval of the completed written dissertation at the Final Oral Examination (the dissertation defense). The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

**Dual-Title Ph.D. in Bioethics**

Nursing Ph.D. students may pursue additional training in bioethics through the dual-title Ph.D. program in Bioethics. Students must apply and be admitted to the graduate program in Nursing and the Graduate School before they can apply for admission to the dual-title degree program. Admission to the dual-title is determined upon review of all application materials (forwarded from the College of Nursing) by the admissions committee in Bioethics. Refer to the Admissions Requirements section of the Bioethics Bulletin page. Students must apply and be admitted to the dual-title degree program in Bioethics prior to taking the qualifying exam.

To qualify for the dual-title degree, students must satisfy the requirements of the Nursing Ph.D. program. In addition, they must satisfy the requirements described below, as established by the Bioethics program committee. Refer to the Degree
Qualifying Examination: In order to be admitted to the Ph.D. dual-title degree program, students must meet the Ph.D. qualifying requirements specified by Nursing; a single qualifying examination will be administered that includes assessment of both Nursing and Bioethics. At least one member of the qualifying examination committee must have a Graduate Faculty appointment in Bioethics. Because students must first be admitted to a graduate major program of study before they may apply to and be considered for admission into a dual-title graduate degree program, dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

Comprehensive Examination: In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of a Nursing and Bioethics dual-title Ph.D. student must include at least one member of the Bioethics Graduate Faculty. Graduate faculty members who hold appointments in both programs may serve in a combined role. If the chair of the committee representing Nursing is not also a member of the Graduate Faculty in Bioethics, the member of the committee representing Bioethics must be appointed as co-chair. The faculty member (or members) affiliated with the Bioethics Program will be responsible for administering a portion of the comprehensive exam that will require the student to demonstrate an understanding of various theoretical and methodological approaches to bioethics, and an ability to apply them to issues and problems (including, where appropriate, practical problems) in their nursing.

Dissertation and Final Oral Examination (the Dissertation Defense): Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Students enrolled in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their original research and expertise in Nursing and Bioethics. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

Dual-Title Ph.D. in Clinical and Translational Sciences

Nursing Ph.D. students may pursue additional training in CTS through the dual-title Ph.D. program in CTS. Students must apply and be admitted to the graduate program in Nursing and the Graduate School before they can apply for admission to the dual-title degree program. Admission to the dual-title is determined upon review of all application materials (forwarded from the College of Nursing) by the admissions committee in CTS. Refer to the Admission Requirements section of the Clinical and Translational Sciences Bulletin page. Students must apply and be admitted to the dual-title degree program in CTS prior to taking the qualifying examination.

To qualify for the dual-title degree, students must satisfy the requirements of the Nursing Ph.D. program. In addition, they must satisfy the requirements described below, as established by the CTS program committee. Refer to the Degree Requirements section of the Clinical and Translational Sciences Bulletin page. Within this framework, final course selection is determined by the student, their Nursing adviser, and their CTS program adviser.

The CTS dual-title requires 26 credits: 18 credits from a list of approved electives in each of the following areas (at least half of which must be at the 500 or 800 level): Statistics (3 cr.), Epidemiology (3 cr.), Bioinformatics (3 cr.), Experimental Design and Interpretation (3 cr.), The Regulatory Environment (3 cr.), and Scientific Communication (3 cr.); 2 credits of CTS 590; and 6 credits of CTS 595 or BMS 571. Of the 18 elective credits required, 12 credits can be double-counted from the required courses for the Ph.D. in Nursing: STAT 500/PHS 520 meets the 3-credit requirement for Statistics, and an additional 9 credits of Individual Specialization Coursework required for Nursing can be selected from the list of CTS approved electives to meet the 3-credit requirements in Epidemiology, Bioinformatics, and The Regulatory Environment. Therefore, dual-title Ph.D. students in Nursing and CTS may require a minimum of 14 credits of additional coursework, consisting of approved electives in Experimental Design and Interpretation (3 cr.) and Scientific Communication (3 cr.), 2
credits of CTS 590; and 6 credits of CTS 595 or BMS 571.

Qualifying Examination: In order to be admitted to the Ph.D. dual-title degree program, students must meet the Ph.D. qualifying requirements specified by Nursing; a single qualifying examination will be administered that includes assessment of both Nursing and CTS. At least one member of the qualifying examination committee must have a graduate faculty appointment in CTS. Because students must first be admitted to a graduate major program of study before they may apply to and be considered for admission into a dual-title graduate degree program, dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

Comprehensive Examination: In addition to the general Graduate Council requirements for doctoral committees, the doctoral committee of a Nursing and CTS dual-title Ph.D. student must include at least one member of the CTS Graduate Faculty. Graduate faculty members who hold appointments in both programs may serve in a combined role. If the chair of the committee representing Nursing is not also a member of the Graduate Faculty in CTS, the member of the committee representing CTS must be appointed as co-chair. The faculty member (or members) affiliated with the CTS Program will be responsible for administering a portion of the comprehensive exam that will require the student to demonstrate an understanding of various theoretical and methodological approaches to CTS, and an ability to apply them to issues and problems (including, where appropriate, practical problems) in their nursing.

Dissertation and Final Oral Examination (the Dissertation Defense): Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Students enrolled in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their doctoral committee and reflects their dissertation research and expertise in Nursing and CTS. The dissertation must be accepted by the doctoral committee, the head of the graduate program, and the Graduate School.

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in The Graduate Bulletin.

In addition to the STUDENT_AID section of the Graduate Bulletin, the following awards typically have been available to graduate students in this program:

U.S. PUBLIC HEALTH SERVICE TRAINEESHIPS IN NURSING
Open to selected registered nurse, full-time students in nursing; stipend may be available plus tuition. Apply to Associate Dean for Graduate Education & Research, College of Nursing.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students but courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

NURSING (NURS) course list

Last Revised by the Department: Summer 2018
Blue Sheet Item #: 46-07
Review Date: 6/26/2018
Faculty linked: 6/27/14
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Office of the Dean of the Graduate School, 211 Kern Building, University Park. For more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: College of Medicine
Department or Instructional Area: Department of Public Health Sciences

New Graduate Program, Option, or Minor: Add

Designation of new graduate program:
Classification of Instructional Programs (CIP) Code:
Designation of new graduate option:
Designation of new graduate minor: Penn State Graduate School

Indicate effective semester:
First semester following approval
Second semester following approval

Existing Graduate Program Option, or Minor: Change Drop

Current designation of graduate program: Public Health
Current designation of graduate option:
Current designation of graduate minor:

New designation of existing graduate program (if changing):
New designation of existing graduate option (if changing):
New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above): M.P.H. in Public Health program is proposing to add an integrated undergraduate-graduate (IUG) degree program with the B.S. in Health Policy and Administration program.

Indicate effective semester:
First semester following approval
Second semester following approval

Submitted by Graduate Program Head

Wenke Hwang
Printed name
Signature
Date: 8/20/2018

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses:

Rebecca Craven
Printed name
Signature
Date: 8/21/2018

Approved by College/School Dean/Chancellor (or Designee):

Charles Lang
Printed name
Signature
Date: 8/21/18
<table>
<thead>
<tr>
<th>Role</th>
<th>Printed name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended by Chair, Graduate Council Subcommittee on New and Revised Programs and Courses:</td>
<td></td>
<td></td>
<td>10/9/2018</td>
</tr>
<tr>
<td>On Behalf of David Babb</td>
<td></td>
<td></td>
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<tr>
<td>Recommended by Chair, Graduate Council Committee on Programs and Courses:</td>
<td></td>
<td></td>
<td>10/9/2018</td>
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<tr>
<td>On Behalf of C. Andrew Cole</td>
<td></td>
<td></td>
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<tr>
<td>Noted by Dean of the Graduate School:</td>
<td></td>
<td></td>
<td>10/9/2018</td>
</tr>
<tr>
<td>On Behalf of Regina Vasilatos-Younken</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
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I. Justification for Proposed Changes

We respectfully submit this program change proposal to offer an Integrated Undergraduate-Graduate (IUG) degree program between the Master of Public Health (M.P.H.) in Public Health program at Penn State College of Medicine in Hershey and the Bachelor of Science (B.S.) in Health Policy and Administration (HPA) program at University Park. This program change proposal is in accordance with the Graduate Council’s policy, *Information and Guidelines for Establishing Integrated Undergraduate-Graduate (IUG) Degree Programs* at [http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs/](http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs/).

This proposal will allow for the following 12 credits of graduate course work to be applied to the B.S. and M.P.H. degrees:

- PHS 520: Principles of Biostatistics (3 credits) or STAT 500: Applied Statistics (3 credits)
- PHS 504: Behavioral Health Intervention Strategies (3 credits) or BBH 504: Behavioral Health Intervention Strategies (3 credits)
- PHS 550: Principles of Epidemiology (3 credits) or HPA 540: Epidemiological Applications in Health Services Research (3 credits) or STAT 507: Epidemiological Research Methods (3 credits)
- PHS 571: Health Systems Organization and Delivery (3 credits) or HPA 520: Introduction to Health Systems Organizations and Delivery (3 credits)

The STAT-, BBH-, and HPA-designated courses can be completed at the University Park campus during the students’ fourth year; the STAT-designated courses also can be completed online via World Campus.

Changes to the M.P.H. in Public Health program are being proposed at this time to (1) better address the public health workforce shortage by expediting the pace at which highly qualified, well-prepared students in public health can enter the public health workforce; and (2) establish a cohesive and coordinated pipeline with an undergraduate major that closely aligns with public health.

**Address the public health workforce shortage.** This proposed IUG will expedite the pace at which highly qualified, well-prepared students can enter the public health workforce. The public health profession currently faces a workforce shortage, in part, due to the large proportion of public health professionals who are aging into retirement. Previous reports have estimated that by 2012, approximately one-quarter of the existing public health workforce will have retired (Rosenstock, 2008). Further, the Public Health Workforce Interests and Needs Survey of 2014 found that approximately one-quarter of state public health employees “...are considering leaving their job within the next year” (Liss-Levinson, 2015). Recommendations on expediting the recruitment of new talent into the public health workforce include mechanisms that allow individuals to pursue formal public health training opportunities at a reduced cost and in a shorter length of time than what might typically be required (Hilliard, 2012). The IUG is one model that meets this recommendation.

**Establish a cohesive and coordinated pipeline.** Health policy is an integral part of public health. B.S. in HPA students develop the skills and knowledge needed to understand the complex societal problem of providing access to quality health care at a reasonable cost. The HPA students understand the
determinants of population health and risk factors for illness, health behavior and its impact on the
health care system through substantial undergraduate training in public health, including areas of
statistics, epidemiology, health policy, population health, and health economics. B.S. in HPA students
are, thus, well-prepared for advanced study in public health, and well suited to pursue M.P.H. degree
programs following graduation. The proposed IUG degree program between the M.P.H. in Public Health
and the B.S. in HPA degree programs would create a cohesive and coordinated pipeline by establishing a
structured, formalized pathway through which a subset of highly qualified, well-prepared B.S. in HPA
students pursue the M.P.H. in Public Health degree.

References:

Journal of Preventive Medicine, 42*(5S1), S1-S28.

Liss-Levinson, R. B. (2015, November/December). Loving and Leaving Public Health: Predictors of
Intentions to Quit Among State Health Agency Workers. *Journal of Public Health Management &
Practice, 21*, S91-S101.

II. Overview of Program Changes: Side by Side Comparison

The table below and continued on the next page provides a side-by-side comparison of the current M.P.H. in Public Health curriculum (42 credits) and proposed IUG curriculum (42 credits). As can be noted, the graduate curricula for the standalone MPH degree student and the IUG student are identical. Courses below are presented as follows: course number: title (credit total) (campus).

<table>
<thead>
<tr>
<th>Current Curriculum (42 credits)</th>
<th>Proposed IUG Curriculum (42 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Core Didactic MPH Courses (18 credits)</strong></td>
<td><strong>1. Core Didactic MPH Courses (18 credits)</strong></td>
</tr>
<tr>
<td>• PHS 504: Behavioral Health Intervention Strategies (3) (Hershey) or BBH 504: Behavioral Health Intervention Strategies (3) (University Park)</td>
<td>• PHS 504: Behavioral Health Intervention Strategies (3) (Hershey) or BBH 504: Behavioral Health Intervention Strategies (3) (University Park)</td>
</tr>
<tr>
<td>• PHS 520: Principles of Biostatistics (3) (Hershey) or STAT 500: Applied Statistics (3) (University Park or World Campus)</td>
<td>• PHS 520: Principles of Biostatistics (3) (Hershey) or STAT 500: Applied Statistics (3) (University Park or World Campus)</td>
</tr>
<tr>
<td>• PHS 538: Mixed Methods Research (3) (Hershey)</td>
<td>• PHS 538: Mixed Methods Research (3) (Hershey)</td>
</tr>
<tr>
<td>• PHS 550: Principles of Epidemiology (3) (Hershey) or HPA 540: Epidemiological Applications in Health Services Research (3) (University Park) or STAT 507: Epidemiological Research Methods (3) (University Park or World Campus)</td>
<td>• PHS 550: Principles of Epidemiology (3) (Hershey) or HPA 540: Epidemiological Applications in Health Services Research (3) (University Park) or STAT 507: Epidemiological Research Methods (3) (University Park or World Campus)</td>
</tr>
<tr>
<td>• PHS 571: Health Services Organization and Delivery (3) (Hershey) or HPA 520: Introduction to Health Services Organizations and Delivery (3) (University Park)</td>
<td>• PHS 571: Health Services Organization and Delivery (3) (Hershey) or HPA 520: Introduction to Health Services Organizations and Delivery (3) (University Park)</td>
</tr>
<tr>
<td>• PHS 809: Principles of Public Health (3) (Hershey)</td>
<td>• PHS 809: Principles of Public Health (3) (Hershey)</td>
</tr>
<tr>
<td><strong>2. Practicum Experience (3 credits)</strong></td>
<td><strong>2. Practicum Experience (3 credits)</strong></td>
</tr>
<tr>
<td>• PHS 895A: Master of Public Health Internship (3) (Hershey)</td>
<td>• PHS 895A: Master of Public Health Internship (3) (Hershey)</td>
</tr>
<tr>
<td><strong>3. Culminating Experience (3 credits)</strong></td>
<td><strong>3. Culminating Experience (3 credits)</strong></td>
</tr>
<tr>
<td>• PHS 894: Capstone Experience (3) (Hershey)</td>
<td>• PHS 894: Capstone Experience (3) (Hershey)</td>
</tr>
</tbody>
</table>
### Electives (18 credits)

- **Community and Behavioral Health**
  - PHS 505: Public Health Program Planning and Evaluation (3)
  - PHS 506: Behavioral Health Intervention Strategies II (3)
  - PHS 807: Public Health Education Methods (3)
- **Epidemiology and Biostatistics**
  - PHS 521: Applied Biostatistics (3)
  - PHS 522: Multivariate Biostatistics (3)
  - PHS 551: Advanced Epidemiological Methods (3)
  - PHS 580: Clinical Trials Design and Analysis (3)
  - PHS 801: Data Management (1)
- **Health Systems Organization and Policy**
  - PHS 535: Quality of Care Measurement (3)
  - PHS 537: Health Policy and Law (3)
  - PHS 540: Decision Analysis (1)
  - PHS 570: Health Economics and Economic Evaluation (3)
- **Global Health**
  - PHS 803: Principles of Global Health (3)

Six credits from any of the following:
- PHS 557: Global Impact of Infectious Diseases (3)
- PHS 804: Integrating Systems Thinking in Global Health (3)
- PHS 890: GHEP Colloquium (3)
III. Description of Proposed Changes

A. Double-Counting of Courses

This proposal will allow for the following 12 credits of graduate course work to be applied to the B.S. and M.P.H. degrees:

- PHS 520: Principles of Biostatistics (3 credits) or STAT 500: Applied Statistics (3 credits)
- PHS 504: Behavioral Health Intervention Strategies (3 credits) or BBH 504: Behavioral Health Intervention Strategies (3 credits)
- PHS 550: Principles of Epidemiology (3 credits) or HPA 540: Epidemiological Applications in Health Services Research (3 credits) or STAT 507: Epidemiological Research Methods
- PHS 571: Health Systems Organization and Delivery (3 credits) or HPA 520: Introduction to Health Systems Organizations and Delivery (3 credits)

The PHS-designated courses can be completed in Hershey, but the STAT-, BBH-, and HPA-designated courses can be completed at the University Park campus; the STAT-designated courses also can be completed online via World Campus. Given the primary location of B.S. in Health Policy and Administration students, we anticipate that the majority of IUG students will choose the BBH-, STAT-, and HPA-designated courses at University Park or the STAT-designated courses online via World Campus. The M.P.H. in Public Health program has obtained support from the Heads of the Department of Statistics and the Department of Biobehavioral Health for IUG students to enroll in their respective courses at University Park or World Campus. We will work closely with both departments to ensure that all course options will be offered.

These double counted courses will fulfill the following B.S. in HPA curricular requirements:

<table>
<thead>
<tr>
<th>Double Counted Course</th>
<th>Will Fulfill</th>
<th>B.S. in HPA Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHS 504 or BBH 504</td>
<td></td>
<td>3 of 15 credits of HPA electives</td>
</tr>
<tr>
<td>PHS 520 or STAT 500</td>
<td></td>
<td>3 of 12 credits of university-wide offerings</td>
</tr>
<tr>
<td>PHS 550 or HPA 540 or STAT 507</td>
<td></td>
<td>HPA 440</td>
</tr>
<tr>
<td>PHS 571 or HPA 520</td>
<td></td>
<td>3 of 9 credits of Human and Developmental Sciences</td>
</tr>
</tbody>
</table>

B. Admissions Requirements

Admission to the IUG is dependent on admission to the Graduate School at Penn State and the M.P.H. in Public Health degree program. The requirements below are in addition to the Graduate School’s requirements for admission.
To be eligible to apply to the IUG program, applicants must meet the following requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Guidelines</th>
</tr>
</thead>
</table>
| GPA          | • Cumulative GPA: 3.25 or greater  
               • GPA in HPA major courses: 3.0 or greater |
| Education    | • Enrollment in the B.S. in HPA degree program  
               • Completion of the following courses: HPA 101, HPA 311, STAT 200 or STAT 250 |

The M.P.H. in Public Health program will continue to monitor the academic performance of undergraduate students who apply and are admitted to the IUG program. If students fall below the GPA requirements during the undergraduate portion of the IUG plan of study, they may be put on probation or terminated from the IUG program altogether.

IUG application requirements include the following:

- Completed online Penn State Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
- Two letters of recommendation, including one from the student’s undergraduate academic adviser that proves the academic adviser has worked with the student to develop a draft IUG plan of study
- Official transcripts from all colleges and universities attended
- Preliminary draft plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser as the student advances through the program.

C. Time of Admission to the Program

Students apply to the IUG before January 15th of their junior year of the B.S. in HPA degree program. The IUG will officially begin in the fall semester of the student’s senior year of the B.S. in HPA degree program. This is in accordance with the Graduate Council’s policy on IUG programs (available at http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs), which states “Students shall be admitted to an IUG program no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of expected conferral of the undergraduate degree, as specified in the proposed IUG plan of study.”
### D. Sample Plan of Study

A sample plan of study with double counting is presented below. Courses are presented as follows: course prefix and number: course title (credits). The M.P.H. courses listed in year 4 will double count for both the undergraduate and the graduate degrees. Semesters in which programs do not require course work are blocked off.

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>IUG Course Work by Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fall</td>
</tr>
<tr>
<td>1</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>B.S. in HPA</td>
<td>PHS S20: Principles of Biostatistics (3) or STAT 500: Applied Statistics (3) PHS 571: Health Systems Organization and Delivery (3) or HPA 520: Introduction to Health Systems Organizations and Delivery (3)</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>B.S. in HPA</td>
<td>PHS 501: Principles of Public Health (3) PHS 538: Mixed Methods (3) Track and Elective Courses (9)</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
</tbody>
</table>

It is important to note that this sample plan represents the **minimum** time required to complete the B.S. in HPA and M.P.H. in Public Health. Also, while this is a typical plan of study, it may not reflect the individual experiences of all IUG students. Individualized plans of study will be created for each student who enrolls in the IUG program. In accordance with the Graduate Council’s policy on IUG programs (available at [http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs](http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs)), the individualized plan of
study will be created by the undergraduate student in consultation with his/her undergraduate academic adviser.

A preliminary draft of the plan, which will include the entire time period of the IUG program, will be submitted by the student with the Graduate School application for admission. Prior to being admitted to the IUG, the M.P.H. in Public Health program will work with the student and his/her undergraduate academic adviser to finalize the plan of study. The plan will be reviewed each semester with the student’s advisers. Also, in the development of the plan, in accordance with the Graduate Council’s policy on IUG programs, B.S. in HPA students in the IUG program will “…be advised to fulfill basic undergraduate requirements first so that if, for some reason, they cannot continue in the integrated program they will be able to receive their undergraduate degree without a significant loss of time.”

E. Advising of Students

The M.P.H. in Public Health program will assign IUG students with an academic adviser. This adviser is in addition to the one assigned to them as undergraduate students enrolled in the B.S. in HPA degree program. The M.P.H. in Public Health adviser will be a faculty member from the Department of Public Health Sciences at the Penn State College of Medicine in Hershey, PA who is a member of the Graduate Faculty. The academic adviser will be assigned upon entry into the M.P.H. degree program. If advisers are on different campuses than their respective students, they will communicate with their students through a combination of videoconferencing (via Skype or other mechanism), phone, email, and in person meetings.
IV. Proposed Graduate Bulletin

Public Health (PH)

Program Home Page

VERNON M. CHINCHILLI, Chair of the Department of Public Health Sciences
College of Medicine, Penn State Milton S. Hershey Medical Center
Hershey, PA 17033
717-531-7178

Degrees Conferred:
M.P.H., Dr.P.H.
Integrated B.S. in Health Policy and Administration and Master of Public Health (M.P.H.)
Joint M.D./M.P.H.
Joint J.D./M.P.H.
Joint Pharm.D./M.P.H.

The Graduate Faculty

The Program

The Master of Public Health (M.P.H.) in Public Health program is a professional degree program that builds knowledge and skills in the areas of systems thinking, evidence-based public health, leadership, program planning and management, public health and health systems, communication, and interprofessional practice. In addition, the M.P.H. in Public Health program advances expertise in community and behavioral health, epidemiology and biostatistics, global health, and health systems organization and policy. The M.P.H. degree leads to careers in a wide variety of fields and settings, including local, state, and federal government agencies; health care settings; health insurance industry; health services networks; nonprofits; and the pharmaceutical industry.

The Doctor of Public Health (Dr.P.H.) in Public Health program is a professional degree program that provides advanced public health education and training to prepare its graduates for evidence-based practice and leadership in the application of translational science and implementation research findings. It allows graduates to pursue career opportunities in the federal, state, and local government, as well as in the non-profit, academic, and private sectors. Educationally it places an emphasis on discovery, teaching, integration, and application with a primary purpose of bridging research and practice to protect and improve the public’s health. The Dr.P.H. builds on Master of Public Health (M.P.H.) competency domains and, as a professional degree, integrates public health practice and project-based learning with local, state, and federal networks to enrich learning in health policy and program development and implementation. Dr.P.H. program of study includes course work, an advanced field experience, and integrative doctoral research and provides an opportunity for further specialization within a specified cognate.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission. Requirements listed here are in addition to general Graduate Council requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin.

M.P.H. Admission Requirements

Admission to the Penn State M.P.H. Program is granted jointly by the M.P.H. Program and the Graduate School at Penn State. For admission to the M.P.H. Program, applicants must submit:

- Completed online Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
• Two letters of recommendation
• Official transcripts from all post-secondary institutions attended
• Official scores from one of the following standardized tests taken within the past five years; Graduate Record Examination (GRE), Medical College Admission Test (MCAT), or Law School Admission Test (LSAT)

Standardized Test Requirement Waiver 1: This requirement is waived for applicants who have an advanced degree beyond the baccalaureate.

Standardized Test Requirement Waiver 2: This requirement may be waived at the discretion of the program for applicants who, prior to submitting the application for admission, have successfully completed (with a grade of B or better in each course):
• At least one 3-credit graduate-level course in biostatistics; AND
• At least one 3-credit graduate-level course in epidemiology; AND
• At least one 3-credit graduate-level course in the social and behavioral sciences or health services administration core areas of public health

Dr.P.H. Admission Requirements
• Completed online Graduate School application with nonrefundable application fee
• Three recommenders to provide letters of academic and professional reference
• Statement of purpose
  o Describe why you want to pursue a Dr.P.H., how you plan to use your education and training, the needs and/or challenges you perceive as important in your field of study, and any personal qualities, characteristics, skills and experiences you believe will enable you to be successful in public health
• Official Graduate Record Examination (GRE) scores taken within the past five years
• Official transcripts from all post-secondary institutions attended
• CV or resume

M.P.H. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin. M.P.H. students must complete a total of 42 credits of graduate level course work, the majority of which are 500 level courses, specifically:
• 24 credits in prescribed courses, including:
  o 18 credits of core classroom-based courses
  o 3 credit practicum experience
  o 3 credit capstone course
• 18 credits in elective courses

The capstone course (PHS 894) provides the students with the knowledge and skills to design, carry out, and present a scholarly public health project based upon competencies gained in previous courses. Topics include defining a scholarly project, selecting a topic and project type, describing the problem, reviewing the literature, identifying project methodology, presenting project results, ethics and scholarly work, writing and critiquing scholarly work, and creating and delivering a poster presentation.

Prescribed Courses: 24 credits

PHS 809 (3), PHS 504(3) or BBH 504(3), PHS 520(3) or STAT 500(3), PHS 538(3), PHS 550(3) or HPA 540(3) or STAT 507(3), PHS 571(3) or HPA 520(3), PHS 894(3), PHS 895A(3).

Additional Courses: 18 credits

The 18 credits of electives may be selected from a list of approved courses that is maintained by the graduate program office. Multiple tracks of specialization are available. Please visit med.psu.edu/mph to learn more about the approved elective courses and available tracks.
Joint Degree Offering with the Penn State Hershey College of Medicine

Degrees Conferred:

M.D. (Hershey)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and M.D. Program at Penn State Hershey College of Medicine offer a joint degree program leading to the degrees of Doctor of Medicine (M.D.) and Master of Public Health (M.P.H.).

Admission Requirements

Admissions requirements for the M.D./M.P.H. program are the same as those for the M.D. and M.P.H. in Public Health programs. M.D./M.P.H. students will have to meet the admissions requirements of both programs, and each program will make a separate admissions decision. The admission requirements for the M.P.H. degree are listed above. Admissions requirements and applications for admission to the Penn State College of Medicine are available at the M.D. Program section of the Penn State College of Medicine website. Students will first apply and be accepted to the M.D. program at the Penn State College of Medicine. After being accepted to and matriculating at the Penn State M.D. program, M.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. M.D. students may submit an application starting their first semester in the M.D. program up through the fall semester of their third year of medical school.

M.D./M.P.H. students who, for whatever reason, withdraw from the M.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

M.D./M.P.H. Degree Requirements

M.D./M.P.H. degree requirements are the same as that of the standalone M.P.H. degree program. Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the M.D. program are listed on the M.D. Program section of the Penn State College of Medicine website. Degree requirements for the M.P.H. degree are listed on the Degree Requirements tab.

Double-Counting of Courses

Sixteen credits of M.D. course work may be double-counted toward the M.P.H. degree.

Advising of Students

All students in the M.D./M.P.H. program will have two academic advisers, one in the M.P.H. degree program and one in the M.D. program.

Joint Degree Offering with Penn State Dickinson Law

Degrees Conferred:

J.D. (Dickinson)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and J.D. Program at Penn State Dickinson Law offer a joint degree program leading to the degrees of Juris Doctor (J.D.) and Master of Public Health (M.P.H.).
Admission Requirements

Admissions requirements for the J.D./M.P.H. program are the same as those for the J.D. and M.P.H. in Public Health programs. J.D./M.P.H. students will have to meet the admissions requirements of both programs, and each program will make a separate admissions decision. Admissions requirements and applications for admission for Dickinson Law are listed in the J.D. Admissions section of the Dickinson Law website. The admission requirements for the Master of Public Health are listed above. Students will first apply and be accepted to the J.D. program at the Penn State Dickinson Law. After being accepted to and matriculating at the Penn State Dickinson Law, J.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. J.D. students may submit an application starting their first semester in the J.D. program up through the fourth semesters of law school.

J.D./M.P.H. students who, for whatever reason, withdraw from the J.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

J.D./M.P.H. Degree Requirements

Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the J.D. program are listed on the Penn State Dickinson Law website. Degree requirements for the M.P.H. degree are listed in the M.P.H. Degree Requirements section on the Degree Requirements tab.

Double-Counting of Courses

Twelve credits of J.D. coursework may be double-counted toward the M.P.H. degree. In lieu of PHS 895A, J.D./M.P.H. students will complete IHCLN 997 Medical-Legal Partnership Clinic (3 cr.), which will double-count for both degrees. In addition, up to 9 law school elective credits will be double-counted towards the M.P.H. Up to 9 credits of M.P.H. course work may be applied towards the J.D. degree. The Associate Dean for Academic Affairs at Dickinson Law will approve, in advance of the student’s enrollment in M.P.H. elective courses, which of those courses will double-count towards J.D. degree.

Advising of Students

All students in the J.D./M.P.H. program will have two academic advisors, one in the M.P.H. degree program and one in the J.D. program.

Joint Degree Offering with Taipei Medical University (T.M.U.)

Degrees Conferred:

M.D. (T.M.U.) or Pharm.D. (T.M.U.)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and T.M.U. offer a joint degree program leading to the degrees of Doctor of Medicine (M.D.) from T.M.U. and Master of Public Health (M.P.H.) from Penn State and Doctor of Pharmacy (Pharm.D.) from T.M.U. and M.P.H from Penn State.

Admission Requirements

Admissions requirements for this program are the same as those for the T.M.U. M.D., T.M.U. Pharm.D., and M.P.H. in Public Health programs. Students will have to meet the admissions requirements of both programs (T.M.U. and Penn State program), and each program will make a separate admissions decision. Admissions requirements for T.M.U. pharmacy and medical students are listed in the Admissions section of the T.M.U. website. The admission requirements for the Master of Public Health are listed on the Admission Requirement tab. Students will first apply and be accepted to the M.D. or Pharm.D. program at T.M.U. After being accepted to and matriculating at T.M.U., M.D. and Pharm.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. T.M.U. students may submit an application starting their first semester in the medical or pharmacy program up through their fourth year of school.
M.D./M.P.H. and Pharm.D./M.P.H. students who, for whatever reason, withdraw from the M.D. or Pharm.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

**M.D./M.P.H. and Pharm.D./M.P.H. Degree Requirements**

Degree requirements for T.M.U. students are the same as that of the standalone M.P.H. degree program including the completion of 42 credits. Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the transfer of credits as outlined below. Degree requirements for the M.P.H. degree are listed in the M.P.H. Degree Requirements section above. For degree requirements for the M.D. or Pharm.D., contact Taipei Medical University.

**Transfer of Courses**

Sixteen credits of coursework completed at Taipei Medical University may be transferred toward the M.P.H. degree.

**Advising of Students**

All students in the M.D./M.P.H. and Pharm.D./M.P.H. program will have two advisors, one administrative advisor and one academic advisor in the M.P.H. degree program.

**Integrated Undergraduate-Graduate (IUG) Degree Program with the Penn State College of Health and Human Development, Department of Health Policy and Administration**

The M.P.H. in Public Health program at Penn State Hershey College of Medicine and the B.S. in Health Policy and Administration at University Park offer an Integrated Undergraduate-Graduate (IUG) degree program leading to the degrees of Bachelor of Science (B.S.) and Master of Public Health (M.P.H.).

**Admissions Requirements**

Students must apply to and meet the admissions requirements of the Graduate School, as well as the graduate program in which they intend to receive their master’s degree. Admission to the IUG and the M.P.H. degree program is granted jointly by the MPH Program and the Graduate School at Penn State. The requirements presented here are in addition to the Graduate School’s requirements for admission. To be eligible to apply to the IUG program, applicants must meet the following requirements:

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<td><strong>GPA</strong></td>
<td>Cumulative GPA: 3.25 or greater</td>
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<tr>
<td></td>
<td>GPA in HPA major courses: 3.0 or greater</td>
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<tr>
<td><strong>Education</strong></td>
<td>Enrollment in the B.S. in HPA degree program</td>
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<tr>
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<td>Completion of the following courses: HPA 101, HPA 311, STAT 200 or STAT 250</td>
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The M.P.H. in Public Health program will continue to monitor the academic performance of the undergraduate students who apply and are admitted to the IUG program. If students fall below the GPA requirements during the undergraduate portion of the IUG plan of study, they may be put on probation or terminated from the IUG program altogether.

IUG application requirements include the following:

- Completed online Penn State Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
- Two letters of recommendation, including one from the student’s undergraduate academic adviser that proves the academic adviser has worked with the student to develop a draft IUG plan of study
- Official transcripts from all post-secondary institutions attended
- Preliminary draft plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser as the student advances through the program.

Students apply to the IUG before January 15th of their junior year of the B.S. in HPA degree program. The IUG will officially begin in the fall semester of the student’s senior year of the B.S. in HPA degree program.
B.S./M.P.H. Degree Requirements

B.S./M.P.H. degree requirements are the same as that of the standalone M.P.H. degree program. Students must fulfill all degree requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the Bachelor of Science in Health Policy and Administration are listed in the Undergraduate Bulletin. Degree requirements for the Master of Public Health degree are listed on the Degree Requirements tab. Students must sequence their courses so all undergraduate degree requirements are fulfilled before taking courses to count solely towards the graduate degree. If students accepted into the IUG program are unable to complete the M.P.H. degree, they are still eligible to receive their undergraduate degree if all the undergraduate degree requirements have been satisfied.

Double-Counting of Courses

Up to 12 credits of M.P.H. degree course work will double count towards the B.S. in Health Policy and Administration degree requirements. The following courses will double count towards the B.S. and the M.P.H. degree requirements: PHS 504 (3) or BBH 504 (3); PHS 520 (3) or STAT 500 (3); PHS 550 (3) or HPA 540 (3) or STAT 507 (3); and PHS 571 (3) or HPA 520 (3).

Advising of Students

The M.P.H. in Public Health program will assign IUG students with an academic adviser. This adviser is in addition to the one assigned to them as undergraduate students enrolled in the B.S. in HPA degree program. The M.P.H. in Public Health adviser will be a faculty member from the Department of Public Health Sciences at the Penn State College of Medicine in Hershey, PA who is a member of the Graduate Faculty. The academic adviser will be assigned upon entry into the M.P.H. degree program. If advisers are on different campuses than their respective students, they will communicate with their students through a combination of videoconferencing (via Skype or other mechanism), phone, email, and in person meetings.

Dr.P.H. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Dr.P.H. students must complete a minimum of 60 credits of graduate-level course work beyond a master's degree, the majority of which are 500-level and 800-level courses, specifically:

- 24 credits in prescribed, core classroom-based courses
- 21 credits in elective courses
  - 9 credits of track elective courses
  - 12 credits of general (cognate) elective courses
- 15 additional credits
  - 6 credits of Advanced Field Experience
  - 9 credits of Integrative Doctoral Research

Prescribed Courses: 24 credits
PHS 575(3); PHS 576(3); PHS 577(3); PHS 554(3); PHS 555(3); ADTED 550(3); PHS 806(3); and PHS 892(3)

Elective Courses: 21 credits
The remaining credits may be selected from a list of approved courses that is maintained by the graduate program office. Multiple tracks of specialization are available. Please visit www.med.psu.edu/drph to learn more about the approved elective courses and available tracks.

Additional credits: 15 credits
PHS 895B(6), PHS 896A(6), PHS 896B(3)

Dr.P.H. students must meet Penn State doctoral degree requirements as outlined in GCAC-700 Professional Degree Requirements, including qualifying examinations, English competencies, and doctoral committee composition. Dr.P.H. students must also meet additional Dr.P.H.-specific requirements.

Dr.P.H. --Additional Specific Requirements
The Dr.P.H. degree is conferred in recognition of advanced preparation of a high order for work in the profession of education as evidenced by:
1. Satisfactory completion of a prescribed period of study;
2. Ability to apply translational science and implementation research findings in evidence-based public health practice;
3. Successful performance of qualifying and comprehensive examinations, covering public health core areas of study and a field of specialization; and
4. The preparation and acceptance of integrative doctoral research.

Residency requirements—The Doctor of Public Health requires 24 core credits to be taken in residence as a registered student engaged in academic work at the Hershey and Harrisburg campuses.

Additional Course Requirements for Applicants without a Master of Public Health
Applicants must have a graduate (e.g., master's) or advanced professional (e.g., M.D.) degree. Applicants without a Master of Public Health or related degree are required to take core courses to ensure a firm foundation in discipline-specific M.P.H. competency domains. These foundation courses include: PHS 504 (3), PHS 520 (3), PHS 550 (3), PHS 571 (3) and PHS 809(3).

For applicants entering the program without a Master of Public Health, the minimum credits required for the Dr.P.H. degree will include these 15 credits of foundation courses, for a minimum total of 75. Some or all of the foundation courses may be waived based on previous graduate-level course work, in which case the total credits required for the degree may be reduced in an equivalent manner, down to the base minimum of 60 credits. Students must petition the head of the graduate program to obtain a waiver for the foundation courses, and students' transcripts will be reviewed to assess their eligibility for a waiver.

Comprehensive Examination—Upon completing all core and most cognate course work, Dr.P.H. students will take comprehensive exams to ensure they meet Dr.P.H. core and track program competencies. Comprehensive exams will be overseen and evaluated by students' doctoral committee.

Integrative Doctoral Research—Dr.P.H. students will be required to complete two major components for their Dr.P.H. integrative experience: two publishable-quality manuscripts and a doctoral portfolio.

With guidance from their doctoral adviser and doctoral committee, students will develop two manuscripts that comprehensively address, generate, and/or interpret and evaluate knowledge applicable to public health practice. Manuscripts are encouraged to be of an applied nature and must demonstrate students’ abilities to conduct independent research on a contemporary public health issue. Students will demonstrate the application of advanced public health practice skills and knowledge in the design and execution of a scholarly project, the analysis and interpretation of the findings, and the application of the new knowledge to advance public health practice. This work should contribute to the evidence base of public health practice, be of publishable quality, and demonstrate critical thinking and rigorous analytic strategies.

Throughout their doctoral program, students will develop a doctoral portfolio that will document how Dr.P.H. courses, advanced field experience, other experiential learning, and self-knowledge has informed their leadership style and approach to integrating evidence-based research into public health practice. Components of the portfolio may include, but are not limited to, research (e.g., publications, conference presentations), teaching (academic and non-academic, community-based teaching), and field and other service learning experiences. Portfolios will require reflection on in-class and out-of-class experiences and demonstrate students’ broad public health knowledge, specialized knowledge, translation of this knowledge into evidence-based public health practice, and leadership style. Integrative Doctoral Research will demonstrate the following competencies: data and analysis, communication, systems thinking, leadership, critical thinking, and problem solving. Written and oral presentation of this work will be required.

Student Aid
Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

Courses
Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

PUBLIC HEALTH (PH) course list
V. Proposed Graduate Bulletin in Track Changes

Public Health (PH)

Program Home Page

VERNON M. CHINCHILLI, Chair of the Department of Public Health Sciences
College of Medicine, Penn State Milton S. Hershey Medical Center
Hershey, PA 17033
717-531-7178

Degrees Conferred:

M.P.H., Dr.P.H.
Integrated B.S. in Health Policy and Administration and Master of Public Health (M.P.H.)
Joint M.D./M.P.H.
Joint J.D./M.P.H.
Joint Pharm.D./M.P.H.

The Graduate Faculty

The Program

The Master of Public Health (M.P.H.) in Public Health program is a professional degree program that builds knowledge and skills in the areas of systems thinking, evidence-based public health, leadership, program planning and management, public health and health systems, communication, and interprofessional practice. In addition, the M.P.H. in Public Health program advances expertise in community and behavioral health, epidemiology and biostatistics, global health, and health systems organization and policy. The M.P.H. degree leads to careers in a wide variety of fields and settings, including local, state, and federal government agencies; health care settings; health insurance industry; health services networks; nonprofits; and the pharmaceutical industry.

The Doctor of Public Health (Dr.P.H.) in Public Health program is a professional degree program that provides advanced public health education and training to prepare its graduates for evidence-based practice and leadership in the application of translational science and implementation research findings. It allows graduates to pursue career opportunities in the federal, state, and local government, as well as in the non-profit, academic, and private sectors. Educationally it places an emphasis on discovery, teaching, integration, and application with a primary purpose of bridging research and practice to protect and improve the public’s health. The Dr.P.H. builds on Master of Public Health (M.P.H.) competency domains and, as a professional degree, integrates public health practice and project-based learning with local, state, and federal networks to enrich learning in health policy and program development and implementation. Dr.P.H. program of study includes course work, an advanced field experience, and integrative doctoral research and provides an opportunity for further specialization within a specified cognate.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission. Requirements listed here are in addition to general Graduate Council requirements stated in the GENERAL INFORMATION section of the Graduate Bulletin.

M.P.H. Admission Requirements

Admission to the Penn State M.P.H. Program is granted jointly by the M.P.H. Program and the Graduate School at Penn State. For admission to the M.P.H. Program, applicants must submit:

- Completed online Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
• Two letters of recommendation
• Official transcripts from all post-secondary institutions attended
• Official scores from one of the following standardized tests taken within the past five years; Graduate Record Examination (GRE), Medical College Admission Test (MCAT), or Law School Admission Test (LSAT)

Standardized Test Requirement Waiver 1: This requirement is waived for applicants who have an advanced degree beyond the baccalaureate.

Standardized Test Requirement Waiver 2: This requirement may be waived at the discretion of the program for applicants who, prior to submitting the application for admission, have successfully completed (with a grade of B or better in each course):
• At least one 3-credit graduate-level course in biostatistics; AND
• At least one 3-credit graduate-level course in epidemiology; AND
• At least one 3-credit graduate-level course in the social and behavioral sciences or health services administration core areas of public health

Dr.P.H. Admission Requirements
• Completed online Graduate School application with nonrefundable application fee
• Three recommenders to provide letters of academic and professional reference
• Statement of purpose
  o Describe why you want to pursue a Dr.P.H., how you plan to use your education and training, the needs and/or challenges you perceive as important in your field of study, and any personal qualities, characteristics, skills and experiences you believe will enable you to be successful in public health
• Official Graduate Record Examination (GRE) scores taken within the past five years
• Official transcripts from all post-secondary institutions attended
• CV or resume

M.P.H. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.
M.P.H. students must complete a total of 42 credits of graduate level course work, the majority of which are 500 level courses, specifically:
• 24 credits in prescribed courses, including:
  o 18 credits of core classroom-based courses
  o 3 credit practicum experience
  o 3 credit capstone course
• 18 credits in elective courses

The capstone course (PHS 894) provides the students with the knowledge and skills to design, carry out, and present a scholarly public health project based upon competencies gained in previous courses. Topics include defining a scholarly project, selecting a topic and project type, describing the problem, reviewing the literature, identifying project methodology, presenting project results, ethics and scholarly work, writing and critiquing scholarly work, and creating and delivering a poster presentation.

Prescribed Courses: 24 credits

PHS 85091(3), PHS 504(3) or BBH 504(3), PHS 520(3) or STAT 500(3), PHS 5368(3), PHS 550(3) or HPA 540(3) or STAT 507(3), PHS 571(3) or HPA 520(3), PHS 894(3), PHS 895A(3).

Additional Courses: 18 credits

The 18 credits of electives may be selected from a list of approved courses that is maintained by the graduate program office. Multiple tracks of specialization are available. Please visit med.psu.edu/mph to learn more about the approved elective courses and available tracks.
Joint Degree Offering with the Penn State Hershey College of Medicine

Degrees Conferred:
M.D. (Hershey)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and M.D. Program at Penn State Hershey College of Medicine offer a joint degree program leading to the degrees of Doctor of Medicine (M.D.) and Master of Public Health (M.P.H.).

Admission Requirements

Admissions requirements for the M.D./M.P.H. program are the same as those for the M.D. and M.P.H. in Public Health programs. M.D./M.P.H. students will have to meet the admissions requirements of both programs, and each program will make a separate admissions decision. The admission requirements for the M.P.H. degree are listed above. Admissions requirements and applications for admission for the Penn State College of Medicine are available at the M.D. Program section of the Penn State College of Medicine website. Students will first apply and be accepted to the M.D. program at the Penn State College of Medicine. After being accepted to and matriculating at the Penn State M.D. program, M.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. M.D. students may submit an application starting their first semester in the M.D. program up through the fall semester of their third year of medical school.

M.D./M.P.H. students who, for whatever reason, withdraw from the M.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

M.D./M.P.H. Degree Requirements

M.D./M.P.H. degree requirements are the same as that of the standalone M.P.H. degree program. Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the M.D. program are listed on the M.D. Program section of the Penn State College of Medicine website. Degree requirements for the M.P.H. degree are listed above on the Degree Requirements tab.

Double-Counting of Courses

Sixteen credits of M.D. course work may be double-counted toward the M.P.H. degree.

Advising of Students

All students in the M.D./M.P.H. program will have two academic advisers, one in the M.P.H. degree program and one in the M.D. program.

Joint Degree Offering with Penn State Dickinson Law

Degrees Conferred:
J.D. (Dickinson)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and J.D. Program at Penn State Dickinson Law offer a joint degree program leading to the degrees of Juris Doctor (J.D.) and Master of Public Health (M.P.H.).
Admission Requirements

Admissions requirements for the J.D./M.P.H. program are the same as those for the J.D. and M.P.H. in Public Health programs. J.D./M.P.H. students will have to meet the admissions requirements of both programs, and each program will make a separate admissions decision. Admissions requirements and applications for admission for Dickinson Law are listed in the J.D. Admissions section of the Dickinson Law website. The admission requirements for the Master of Public Health are listed above. Students will first apply and be accepted to the J.D. program at the Penn State Dickinson Law. After being accepted to and matriculating at the Penn State Dickinson Law, J.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. J.D. students may submit an application starting their first semester in the J.D. program up through the fourth semesters of law school.

J.D./M.P.H. students who, for whatever reason, withdraw from the J.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

J.D./M.P.H. Degree Requirements

Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the J.D. program are listed on the Penn State Dickinson Law website. Degree requirements for the M.P.H. degree are listed in the M.P.H. Degree Requirements section on the Degree Requirements tab.

Double-Counting of Courses

Twelve credits of J.D. coursework may be double-counted toward the M.P.H. degree. In lieu of PHS 895A, J.D./M.P.H. students will complete HICL 997 Medical-Legal Partnership Clinic (3 cr.), which will double-count for both degrees. In addition, up to 9 law school elective credits will be double-counted towards the M.P.H. Up to 9 credits of M.P.H. course work may be applied towards the J.D. degree. The Associate Dean for Academic Affairs at Dickinson Law will approve, in advance of the student’s enrollment in M.P.H. elective courses, which of those courses will double-count towards J.D. degree.

Advising of Students

All students in the J.D./M.P.H. program will have two academic advisors, one in the M.P.H. degree program and one in the J.D. program.

Joint Degree Offering with Taipei Medical University (T.M.U.)

Degrees Conferred:

M.D. (T.M.U.) or Pharm.D. (T.M.U.)
M.P.H. (Hershey)

Joint Degree Program

The M.P.H. in Public Health program and T.M.U. offer a joint degree program leading to the degrees of Doctor of Medicine (M.D.) from T.M.U. and Master of Public Health (M.P.H.) from Penn State and Doctor of Pharmacy (Pharm.D.) from T.M.U. and M.P.H from Penn State.

Admission Requirements

Admissions requirements for this program are the same as those for the T.M.U. M.D., T.M.U. Pharm.D., and M.P.H. in Public Health programs. Students will have to meet the admissions requirements of both programs (T.M.U. and Penn State program), and each program will make a separate admissions decision. Admissions requirements for T.M.U. pharmacy and medical students are listed in the Admissions section of the T.M.U. website. The admission requirements for the Master of Public Health are listed above on the Admission Requirements tab. Students will first apply and be accepted to the M.D. or Pharm.D. program at T.M.U. After being accepted to and matriculating at T.M.U., M.D. and Pharm.D. students will be eligible to submit a Penn State Graduate Application for Admission to the M.P.H. in Public Health. T.M.U. students may submit an application starting their first semester in the medical or pharmacy program up through their fourth year of school.
M.D./M.P.H. and Pharm.D./M.P.H. students who, for whatever reason, withdraw from the M.D. or Pharm.D. program retain the option of remaining in the M.P.H. in Public Health program to earn the graduate degree.

M.D./M.P.H. and Pharm.D./M.P.H. Degree Requirements

Degree requirements for T.M.U. students are the same as that of the standalone M.P.H. degree program including the completion of 42 credits. Students must fulfill all requirements for each degree in order to be awarded that degree, subject to the transfer of credits as outlined below. Degree requirements for the M.P.H. degree are listed in the M.P.H. Degree Requirements section above. For degree requirements for the M.D. or Pharm.D., contact Taipei Medical University.

Transfer of Courses

Sixteen credits of coursework completed at Taipei Medical University may be transferred toward the M.P.H. degree.

Advising of Students

All students in the M.D./M.P.H. and Pharm.D./M.P.H. program will have two advisors, one administrative advisor and one academic advisor in the M.P.H. degree program.

Integrated Undergraduate-Graduate (IUG) Degree Program with the Penn State College of Health and Human Development, Department of Health Policy and Administration

The M.P.H. in Public Health program at Penn State Hershey College of Medicine and the B.S. in Health Policy and Administration at University Park offer an Integrated Undergraduate-Graduate (IUG) degree program leading to the degrees of Bachelor of Science (B.S.) and Master of Public Health (M.P.H.).

Admissions Requirements

Students must apply to and meet the admissions requirements of the Graduate School, as well as the graduate program in which they intend to receive their master's degree. Admission to the IUG and the M.P.H. degree program is granted jointly by the MPH Program and the Graduate School at Penn State. The requirements presented here are in addition to the Graduate School's requirements for admission. To be eligible to apply to the IUG program, applicants must meet the following requirements:

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<tr>
<td></td>
<td>• GPA in HPA major courses: 3.0 or greater</td>
</tr>
<tr>
<td>Education</td>
<td>• Enrollment in the B.S. in HPA degree program</td>
</tr>
<tr>
<td></td>
<td>• Completion of the following courses: HPA 101, HPA 311, STAT 200 or STAT 250</td>
</tr>
</tbody>
</table>

The M.P.H. in Public Health program will continue to monitor the academic performance of the undergraduate students who apply and are admitted to the IUG program. If students fall below the GPA requirements during the undergraduate portion of the IUG plan of study, they may be put on probation or terminated from the IUG program altogether.

IUG application requirements include the following:

- Completed online Penn State Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
- Two letters of recommendation, including one from the student's undergraduate academic adviser that proves the academic adviser has worked with the student to develop a draft IUG plan of study
- Official transcripts from all post-secondary institutions attended
- Preliminary draft plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser as the student advances through the program.

Students apply to the IUG before January 15th of their junior year of the B.S. in HPA degree program. The IUG will officially begin in the fall semester of the student's senior year of the B.S. in HPA degree program.
B.S./M.P.H. Degree Requirements

B.S./M.P.H. degree requirements are the same as that of the standalone M.P.H. degree program. Students must fulfill all degree requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the Bachelor of Science in Health Policy and Administration are listed in the Undergraduate Bulletin. Degree requirements for the Master of Public Health degree are listed on the Degree Requirements tab. Students must sequence their courses so all undergraduate degree requirements are fulfilled before taking courses to count solely towards the graduate degree. If students accepted into the IUG program are unable to complete the M.P.H. degree, they are still eligible to receive their undergraduate degree if all the undergraduate degree requirements have been satisfied.

Double-Counting of Courses

Up to 12 credits of M.P.H. degree course work will double count towards the B.S. in Health Policy and Administration degree requirements. The following courses will double count towards the B.S. and the M.P.H. degree requirements: PHS 504 (3) or BBH 504 (3); PHS 520 (3) or STAT 500 (3); PHS 550 (3) or HPA 540 (3) or STAT 507 (3); and PHS 571 (3) or HPA 520 (3).

Advising of Students

The M.P.H. in Public Health program will assign IUG students with an academic adviser. This adviser is in addition to the one assigned to them as undergraduate students enrolled in the B.S. in HPA degree program. The M.P.H. in Public Health adviser will be a faculty member from the Department of Public Health Sciences at the Penn State College of Medicine in Hershey, PA who is a member of the Graduate Faculty. The academic adviser will be assigned upon entry into the M.P.H. degree program. If advisers are on different campuses than their respective students, they will communicate with their students through a combination of videoconferencing (via Skype or other mechanism), phone, email, and in person meetings.

Dr.P.H. Degree Requirements

Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin.

Dr.P.H. students must complete a minimum of 60 credits of graduate-level course work beyond a master's degree, the majority of which are 500-level and 800-level courses, specifically:

- 24 credits in prescribed, core classroom-based courses
- 21 credits in elective courses
  - 9 credits of track elective courses
  - 12 credits of general (cognate) elective courses
- 15 additional credits
  - 6 credits of Advanced Field Experience
  - 9 credits of Integrative Doctoral Research

Prescribed Courses: 24 credits  
PHS 575(3); PHS 576(3); PHS 577(3); PHS 554(3); PHS 555(3); ADTED 550(3); PHS 806(3); and PHS 892(3)

Elective Courses: 21 credits
The remaining credits may be selected from a list of approved courses that is maintained by the graduate program office. Multiple tracks of specialization are available. Please visit www.med.psu.edu/drph to learn more about the approved elective courses and available tracks.

Additional credits: 15 credits  
PHS 895B(6), PHS 896A(6), PHS 896B(3)

Dr.P.H. students must meet Penn State doctoral degree requirements as outlined in the Graduate Bulletin, including candidacy, SCAC 700 Professional Degree Requirements, including qualifying examinations, English competencies, and doctoral committee composition. Dr.P.H. students must also meet additional Dr.P.H.-specific requirements.

Dr.P.H. --Additional Specific Requirements

The Dr.P.H. degree is conferred in recognition of advanced preparation of a high order for work in the profession of education as evidenced by:
1. Satisfactory completion of a prescribed period of study;
2. Ability to apply translational science and implementation research findings in evidence-based public health practice;
3. Successful performance of candidacy qualifying and comprehensive examinations, covering public health core areas of study and a field of specialization; and
4. The preparation and acceptance of integrative doctoral research.

Residency requirements—The Doctor of Public Health requires 24 core credits to be taken in residence as a registered student engaged in academic work at the Hershey and Harrisburg campuses.

Additional Course Requirements for Applicants without a Master of Public Health
Applicants must have a graduate (e.g., master’s) or advanced professional (e.g., M.D.) degree. Applicants without a Master of Public Health or related degree are required to take core courses to ensure a firm foundation in discipline-specific M.P.H. competency domains. These foundation courses include: PHS 504 (3), PHS 520 (3), PHS 550 (3), and PHS 571 (3), and PHS 809 (3).

For applicants entering the program without a Master of Public Health, the minimum credits required for the Dr.P.H. degree will include these 125 credits of foundation courses, for a minimum total of 752. Some or all of the foundation courses may be waived based on previous graduate-level course work, in which case the total credits required for the degree may be reduced in an equivalent manner, down to the base minimum of 60 credits. Students must petition the head of the graduate program to obtain a waiver for the foundation courses, and students’ transcripts will be reviewed to assess their eligibility for a waiver.

Comprehensive Examination—Upon completing all core and most cognate course work, Dr.P.H. students will take comprehensive exams to ensure they meet Dr.P.H. core and track program competencies. Comprehensive exams will be overseen and evaluated by students’ doctoral committee.

Integrative Doctoral Research—Dr.P.H. students will be required to complete two major components for their Dr.P.H. integrative experience: two publishable-quality manuscripts and a doctoral portfolio.

With guidance from their doctoral adviser and doctoral committee, students will develop two manuscripts that comprehensively address, generate, and/or interpret and evaluate knowledge applicable to public health practice. Manuscripts are encouraged to be of an applied nature and must demonstrate students’ abilities to conduct independent research on a contemporary public health issue. Students will demonstrate the application of advanced public health practice skills and knowledge in the design and execution of a scholarly project, the analysis and interpretation of the findings, and the application of the new knowledge to advance public health practice. This work should contribute to the evidence base of public health practice, be of publishable quality, and demonstrate critical thinking and rigorous analytic strategies.

Throughout their doctoral program, students will develop a doctoral portfolio that will document how Dr.P.H. courses, advanced field experience, other experiential learning, and self-knowledge has informed their leadership style and approach to integrating evidence-based research into public health practice. Components of the portfolio may include, but are not limited to, research (e.g., publications, conference presentations), teaching (academic and non-academic, community-based teaching), and field and other service learning experiences. Portfolios will require reflection on in-class and out-of-class experiences and demonstrate students’ broad public health knowledge, specialized knowledge, translation of this knowledge into evidence-based public health practice, and leadership style. Integrative Doctoral Research will demonstrate the following competencies: data and analysis, communication, systems thinking, leadership, critical thinking, and problem solving. Written and oral presentation of this work will be required.

Student Aid
Graduate assistantships available to students in this program and other forms of student aid are described in the Student Aid section of the Graduate Bulletin. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

Courses
Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

PUBLIC HEALTH (PH) course list
VI. Letters of Support

(1) Vernon Chinchilli, PhD
(2) Christopher Hollenbeak, PhD
(3) Prabhani Kuruppumullage, PhD
(4) Thomas Gould
Carol LaRegina  
Associate Director, Penn State MPH Program  
Department of Public Health Sciences  
Penn State College of Medicine  
90 Hope Drive, Suite 2300  
Hershey, PA 17033-0855

Dear Carol:

The purpose of this letter is to confirm that I support the proposed program change in the Penn State MPH Program to add the Integrated Undergraduate-Graduate program with the Department of Health Policy and Administration.

I believe that the development of the Integrated Undergraduate-Graduate program, between the Department of Public Health Sciences at the Hershey campus and the Department of Health Policy and Administration at the University Park campus, will provide a valuable opportunity for undergraduate students to pursue graduate training in public health. As noted in the program change proposal, the demand for public health workers in Pennsylvania and in the nation continues to grow. Our public health graduate programs at Penn State, although relatively young compared to other academic institutions, already are becoming well-recognized and well-respected for our students who have graduated and have become part of the public health workforce. The Integrated Undergraduate-Graduate program will enhance that recognition and respect.

In summary, the addition of the Integrated Undergraduate-Graduate program to the current Penn State MPH Program has my full support.

Sincerely,

Vernon M. Chinchilli

Vernon M. Chinchilli, PhD
July 31, 2018

Carol L. Begin
Associate Director, Penn State MPH Program
Department of Public Health Sciences
Penn State College of Medicine
90 Hope Drive, Suite 2300
Hershey, PA 17033-0855

Dear Carol:

I’m writing in support of the Integrated Undergraduate-Graduate program between the Department of Health Policy and Administration at University Park and the Department of Public Health Sciences (PHS) in Hershey.

The Master of Public Health (MPh) degree our graduates can obtain through this program will empower them to become effective change agents that shape health and healthcare for the foreseeable future. Public health policies and programs play an integral role in the health of the overall population. Gaining an interdisciplinary degree such as an MPh helps graduates become leaders in areas such as health care, business, consulting, and public service.

Our faculty worked closely with PHS to develop this program and feel there is a need for a joint degree since the demand for a trained public health workforce continues to grow. We provide our full support for the program and look forward to having our students enroll in this joint degree.

Sincerely,

Chris S. Hollenbeak, PhD
Professor and Department Head

Gf/mb
From: Carol LaRegina
Sent: Wednesday, August 1, 2018 1:11 PM
To: Prabhani Kuruppuumullage <prabhanik@gmail.com>
Subject: RE: HPA IUG with Master of Public Health

Sounds great. Thank you!

Carol

From: Prabhani Kuruppuumullage [mailto:prabhanik@gmail.com]
Sent: Wednesday, August 1, 2018 1:10 PM
To: Carol LaRegina <claregin@phs.psu.edu>
Cc: Aleksandra (Sasa) Slavkovic <sasa@stat.psu.edu>; KELLY MORAN <kim21@psu.edu>; David Hunter <dhunter@stat.psu.edu>
Subject: Re: HPA IUG with Master of Public Health

Hi again
That make sense. Thank you for clarifying.
As long as the number of requests you anticipate is limited, yes we are still willing to accommodate those students without waiting for the 7-day policy. If the number of requests gets larger, as you have mentioned, we might have to revisit and reevaluate the strategy.
Does that sound good?
Many thanks
Prabhani

On Wed, Aug 1, 2018 at 12:30 PM, Carol LaRegina <claregin@phs.psu.edu> wrote:

Prabhani – Thank you for your detailed and timely response. We don’t anticipate there being a large number of students needing to take the STAT courses. IUG students may need to take WC STAT 500 if it they have a schedule conflict with the other STAT 500 course. IUG students could potentially take STAT 507 in their eighth semester since it can be a substitution for PHS 550 Principles of Epidemiology and HPA 540 Epidemiological Applications in Health Services Research. However, I would expect the number of students that would take STAT 507 (WC or in person) to be even fewer than those taking STAT 500. It would only occur if HPA 540 and PHS 550 do not fit into their schedule.

Previously when we had MPH students that wanted to take a World Campus STATS course, we would email Dr. Hunter and make the request to have the student[s] enrolled in the WC course at that time, and not have to wait till one week before classes start. Are you still willing to allow our students to be registered at the time of our request? We don’t anticipate a large number of students, especially in the first few years of the program. If we find our IUG enrollment significantly increasing, we can discuss how we would need to proceed at that time.

I believe that I’ve responded to your questions and concerns. If you have any further questions, please feel free to let me know. Thanks for your assistance!

Carol
From: Prabhasi Kuruppuumlilage [mailto:prabhanik@gmail.com]  
Sent: Wednesday, August 1, 2018 11:22 AM  
To: Carol LaRegina <claregin@phs.psu.edu>  
Cc: Aleksandra (Sesa) Slavkovic <sesa@stat.psu.edu>; KELLY MORAN <kim21@psu.edu>; David Hunter <dhunter@stat.psu.edu>  
Subject: Re: HP A IUG with Master of Public Health  

Hi Carol  

I took a look at the proposal and I support the idea of students taking STAT 500 in their semester 7, specially because they would be taking be STAT200 or STAT250 in their third semester.  

However, I would like to bring it your attention that the standard policy has been thus far is that, WC will give enrollment priority to the students in WC, and other students will only be able to enroll in these classes only one week before the classes start. If the number of WC requests you anticipate is small, then I don’t see a problem. However, if you anticipate a large number of students requesting WC STAT500 enrollments from your program, then we might have to further discuss about the situation, specially because the proposal clearly says that the students can take STAT500 UP or WC.  

Having said that, your students will be taking STAT300 in their 7th semester and at that point will be registered UP students. So they would have no problem in enrolling STAT500 UP. Is my understanding correct?  

Regarding STAT507, the proposal is not clear at what point you expect the students to take STAT507. But I imagine you are referring to later in the program and hence they will be registered at Hershey campus. And you are referring to STAT507 WC. Again as long the expected number of enrollments is not high, we should be able to accommodate these students.  

Please let me know  

Many thanks  

Prabhasi  

On Tue, Jul 31, 2018 at 9:55 AM, Carol LaRegina <claregin@phs.psu.edu> wrote:  

Dr. Kuruppuumlilage - I am writing today to request your support of a program proposal to add an integrated undergraduate-graduate (IUG) degree program: Bachelor of Science (BS) in Health Policy and Administration/Master of Public Health (MPH). We've developed a similar agreement with Biobehavioral Health. The IUG plan we've designed in the attached proposal is modeled after the many IUGs that are already in place at Penn State.  

Your support at this time is particularly important since STAT 500 and STAT 507 are pre-approved substitutions for two core MPH courses (PHS 520 Principles of Biostatistics and PHS 550 Principles of Epidemiology). Since these IUG students will be taking some MPH courses in their fourth year while they still reside in University Park, we expect that they will seek enrollment in STAT 500 instead of PHS
520. There may be a limited number of students that also need to take STAT 507. It is important to note that the IUG admissions process will be highly selective.

Please review the proposal at your earliest convenience and let me know if you have any questions. When you are ready to indicate your support of the proposal and establishment of the IUG, please simply send me an email of support. A formal letter of support is not required. We respectfully request that you review and email be sent no later than August 15th so that we can meet the next submission deadline for Graduate Council Curricular Review.

Thank you, in advance, for your time and input.

Carol

Carol LaRegina, MS, CPH
[Pronouns: she/her/hers]
Associate Director, MPH Program
Penn State University
Department of Public Health Sciences
College of Medicine – A210
Hershey, PA
717-531-4294
http://med.psu.edu/public-health-programs

PUBLIC HEALTH PROGRAM
From: Gould, Thomas J [mailto:tug70@psu.edu]
Sent: Monday, August 13, 2018 10:55 AM
To: Carol LaRegina
Cc: Cavigelli, Sonia; Angelo; Jennifer Graham
Subject: RE: HPA IUG with Master of Public Health

Dear Carol,

After consultation with the BBH Professor-in-Charge of the Graduate Curriculum, Dr. Jennifer Graham-Engelhard, and with the BBH Professor-in-Charge of the Undergraduate Curriculum, Dr. Sonia Cavigelli; I support the integrated undergraduate-graduate degree program: Bachelor of Science in Health Policy and Administration/Master of Public Health.

Sincerely,

Tom

Thomas J. Gould, Ph.D.
Jean Phillips Shibley Professor of Biobehavioral Health
Department Head
Department of Biobehavioral Health
219 Biobehavioral Health Bldg
The Pennsylvania State University
University Park, PA 16802
814-863-7256

From: Carol LaRegina <claregin@phs.psu.edu>
Sent: Tuesday, July 31, 2018 4:47 PM
To: Gould, Thomas J <tug70@psu.edu>
Subject: HPA IUG with Master of Public Health

Dr. Gould - I am writing today to request your support of a program proposal to add an integrated undergraduate-graduate (IUG) degree program: Bachelor of Science (BS) in Health Policy and Administration/Master of Public Health (MPH). We've developed a similar agreement with Biobehavioral Health. The IUG plan we've designed in the attached proposal is modeled after the many IUGs that are already in place at Penn State.

Your support at this time is particularly important since BBH 504 is a pre-approved substitution for a core MPH course (PHS 504 Behavioral Health Intervention Strategies). Since these IUG students will be taking some MPH courses in their fourth year while they still reside in University Park, we expect that they will seek enrollment in BBH 504 instead of PHS 504. It is important to note that the IUG admissions process will be highly selective.

Please review the proposal at your earliest convenience and let me know if you have any questions. When you are ready to indicate your support of the proposal and establishment of the IUG, please simply send me an email of support. A formal letter of support is not required. We respectfully request that your review and email be sent no later than August 15th so that we can meet the next submission deadline for Graduate Council Curricular Review.

Thank you, in advance, for your time and input.

Carol
VII. Student Handbook

Student Handbook

Integrated Undergraduate-Graduate (IUG) Degree Program

Bachelor of Science (B.S.) in Health Policy and Administration & Master of Public Health (M.P.H.) in Public Health

2019-20 Academic Year
Hello Students!

On behalf of the Bachelor of Science in Health Policy and Administration and the Master of Public Health programs, we are pleased to present this student handbook for the new Bachelor of Science/Master of Public Health integrated undergraduate-graduate (IUG) degree program. This handbook will provide you with detailed information on the new IUG, including eligibility criteria, admissions processes, degree requirements, and program contacts.

We encourage you to use this handbook as a starting point. If you have any questions about the IUG, please contact your academic adviser in Health Policy and Administration and/or email the Master of Public Health team at PennStatePublicHealth@phs.psu.edu.

We look forward to hearing from you!

Wenke Hwang, PhD
Director, Penn State Master of Public Health Program

Mark Sciegaj, PhD, MPH
Professor-in-Charge, Bachelor of Science in Health Policy and Administration

The IUG program is offered in partnership between the Department of Health Policy and Administration at Penn State’s University Park campus and the Department of Public Health Sciences at Penn State’s College of Medicine campus in Hershey.
Please note: This IUG student handbook is a supplement to the Bachelor of Science (B.S.) in Health Policy and Administration (HPA) student handbook and the Master of Public Health (M.P.H.) student handbook. For comprehensive information about the B.S. in HPA, please consult your undergraduate student handbook. All students will receive the M.P.H. student handbook upon acceptance into the IUG program.
## Important Contacts

<table>
<thead>
<tr>
<th>Name/Role</th>
<th>Contact with questions about...</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carol LaRegina, MS, CPH</strong></td>
<td>• General IUG program inquiries</td>
<td>717-531-4294, <a href="mailto:claregin@phs.psu.edu">claregin@phs.psu.edu</a></td>
</tr>
<tr>
<td>Associate Director, Penn State MPH Program Instructor, Public Health Sciences</td>
<td>• MPH program planning</td>
<td></td>
</tr>
<tr>
<td><strong>Shannon Bowman-Tuininga</strong></td>
<td>• IUG admissions process</td>
<td>717-531-0003, x281150</td>
</tr>
<tr>
<td>Admissions Coordinator, Penn State MPH Program</td>
<td></td>
<td><a href="mailto:sbowman@phs.psu.edu">sbowman@phs.psu.edu</a></td>
</tr>
<tr>
<td><strong>Mark Sciegaj PhD, MPH</strong></td>
<td>• HPA Individualized program planning</td>
<td>814-863-2861, <a href="mailto:Mxs838@psu.edu">Mxs838@psu.edu</a></td>
</tr>
<tr>
<td>Professor-in-Charge, Bachelor of Science in Health Policy and Administration</td>
<td>• General IUG program inquiries</td>
<td></td>
</tr>
</tbody>
</table>
Purpose

The Bachelor of Science (B.S.) in Health Policy and Administration (HPA)/Master of Public Health (M.P.H.) IUG is designed to (1) better address the public health workforce shortage by expediting the pace at which highly qualified, well-prepared students in public health can enter the public health workforce; and (2) establish a cohesive and coordinated pipeline with an undergraduate major that closely aligns with public health.

Address the public health workforce shortage. This IUG will expedite the pace at which highly qualified, well-prepared students can enter the public health workforce. The public health profession currently faces a workforce shortage, in part, due to the large proportion of public health professionals who are aging into retirement. Previous reports have estimated that by 2012, approximately one-quarter of the existing public health workforce will have retired (Rosenstock, 2008). Further, the Public Health Workforce Interests and Needs Survey of 2014 found that approximately one-quarter of state public health employees “...are considering leaving their job within the next year” (Liss-Levinson, 2015). Recommendations on expediting the recruitment of new talent into the public health workforce include mechanisms that allow individuals to pursue formal public health training opportunities at a reduced cost and in a shorter length of time than what might typically be required (Hilliard, 2012). The IUG is one model that meets this recommendation.

Establish a cohesive and coordinated pipeline. B.S. in HPA students receive substantial undergraduate training in public health, including in the foundational public health areas of statistics, epidemiology, health promotion and disease prevention, and the determinants of health. B.S. in HPA students are, thus, well-prepared for advanced study in public health, and many pursue M.P.H. degree programs following graduation. The B.S./M.P.H. IUG degree program creates a cohesive and coordinated pipeline by establishing a structured, formalized pathway through which a subset of highly qualified, well-prepared B.S. in HPA students pursue the M.P.H. in Public Health degree.

References:


Double-Counting of Courses

One benefit of the IUG is that students may complete both degrees in a shorter timeframe than if they were to complete each degree separately. The Graduate School at Penn State allows IUG students to double count a maximum of 12 graduate credits towards the undergraduate and graduate degree program requirements. The M.P.H. capstone course cannot be double counted. At least half of the double counted courses must be at the 500 or 800 level.

The B.S./M.P.H. IUG allows for the following 12 credits of M.P.H. course work to double count towards B.S. and M.P.H. degree program requirements:

- PHS 520: Principles of Biostatistics (3 credits) or STAT 500: Applied Statistics (3 credits)
- PHS 504: Behavioral Health Intervention Strategies (3 credits) or BBH 504: Behavioral Health Intervention Strategies (3 credits)
- PHS 550: Principles of Epidemiology (3 credits) or HPA 540: Epidemiological Application in Health Services Research (3 credits) or STAT 507: Epidemiologic Research Methods (3 credits)
- PHS 571: Health Systems Organization and Delivery (3 credits) or HPA 520: Introduction to Health Systems Organizations and Delivery (3 credits)

These double counted courses will fulfill the following B.S. in HPA degree program requirements:

<table>
<thead>
<tr>
<th>Double Counted Course</th>
<th>Will Fulfill</th>
<th>B.S. in HPA Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHS 504 or BBH 504</td>
<td></td>
<td>3 of 15 credits of HPA electives</td>
</tr>
<tr>
<td>PHS 520 or STAT 500</td>
<td></td>
<td>3 of 12 credits of university-wide offerings</td>
</tr>
<tr>
<td>PHS 550 or HPA 540 or STAT 507</td>
<td></td>
<td>BB H 440^2</td>
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<tr>
<td>PHS 571 or HPA 520</td>
<td></td>
<td>3 of 9 credits of Human and Developmental Sciences</td>
</tr>
</tbody>
</table>

A Note about Location
The PHS-designated courses can be completed in Hershey, but the STAT-, BBH-, and HPA-designated courses can be completed at the University Park campus; the STAT-designated courses also can be completed online via World Campus.
Admissions

A. Time of Admission to the Program

Students must apply to the IUG before January 15th of their junior year of the B.S. in HPA degree program. The IUG will officially begin in the fall semester of the student’s senior year of the B.S. in HPA degree program. This is in accordance with the Graduate Council’s policy on IUG programs (available at http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs), which states “Students shall be admitted to an IUG program no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of expected conferral of the undergraduate degree, as specified in the proposed IUG plan of study.”

B. Eligibility Requirements

Admission to the IUG is dependent on admission to the Graduate School at Penn State and the M.P.H. degree program. Students must meet the admission requirements of the Graduate School, which are available at http://www.gradschool.psu.edu/prospective-students/how-to-apply/new-applicants/requirements-for-graduate-admission/. The requirements presented below are in addition to the Graduate School’s requirements for admission.

To be eligible to apply to the IUG program, applicants must meet the following minimum requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>• Cumulative GPA: 3.25 or greater</td>
</tr>
<tr>
<td></td>
<td>• GPA in HPA major courses: 3.0 or greater</td>
</tr>
<tr>
<td>Education</td>
<td>• Enrollment in the B.S. in HPA degree program</td>
</tr>
<tr>
<td></td>
<td>• Completion of the following courses: HPA 101, HPA 311, STAT 200 or STAT 250</td>
</tr>
</tbody>
</table>

The M.P.H. in Public Health program will continue to monitor the academic performance of undergraduate students who apply and are admitted to the IUG program. If students fall below the GPA minimum requirements during the undergraduate portion of the IUG plan of study, they may be put on probation or terminated from the IUG program altogether.

IUG students who are unable to complete the M.P.H. portion of the IUG will still be eligible to earn the B.S. in HPA. Students will be advised to fulfill basic undergraduate requirements first so that if, for some reason, they cannot continue in the integrated program they will be able to receive their undergraduate degree without a significant loss of time.
C. Application Requirements

IUG application requirements include the following:

- Completed online Penn State Graduate School application with nonrefundable application fee
- Resume or curriculum vitae
- Statement of purpose
- Two letters of recommendation, including one from the student’s undergraduate academic adviser that demonstrates the academic adviser has worked with the student to develop a draft IUG plan of study
- Official transcripts from all post-secondary institutions attended
- Preliminary draft IUG plan of study

D. Application Process

IUG program utilizes the Penn State Graduate Application System. Students must submit an MPH application in the Penn State Graduate Application System to be considered for admission to the B.S./M.P.H. IUG program.

Application deadline: January 15 of each calendar year.

To submit an application, please follow these steps:

1. Go to www.gradschool.psu.edu/apply/.
2. Select “Log in with Existing Account.”
3. Enter your Penn State access account user ID.
4. Select “Fall 2019” as the semester of admission.
5. Complete all pages of the application.
6. Submit the application by January 15th.
7. Pay the $65 nonrefundable application fee.

Please note: On page 1 of the application, you must check the box next to “I am applying to an Integrated Undergraduate/Graduate (IUG) program....” Also, the M.P.H. degree program is based at the Penn State College of Medicine/Hershey Medical Center campus in Hershey, PA. On page 1 of the application, when selecting the campus of admission, please select “Hershey Medical Center.” Select “Public Health” as the major and “Master of Public Health (MPH)” as the degree.


Sample Plan of Study

A sample plan of study is presented below. This sample plan is based on the Recommended Academic Plan for undergraduate students in Health Policy and Administration at University Park. Double counted courses are presented in bold on the next page. This plan represents the minimum time required to complete the IUG. It may not reflect the individual experiences of all IUG students. Individualized plans of study will be created for each student who enrolls in the IUG program.

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Details</strong></td>
<td><strong>Course Details</strong></td>
</tr>
<tr>
<td>HPA 101 Introduction to Health Services Organization</td>
<td>HPA 210 Health Care Payment</td>
</tr>
<tr>
<td>Bi SC 004 (GN) Human Body: Form and Function or BIOL 141 (GN) Introduction to Physiology or BBH 101 (GHA) Introduction to Biobehavioral Health</td>
<td>PL SC 001 (GS) Introduction to American National Government</td>
</tr>
<tr>
<td>ECON 102 (GS) Introductory Microeconomic Analysis and Policy</td>
<td>CAS 100 (GWS) Effective Speech</td>
</tr>
<tr>
<td>ENGL 015 or 030 (GWS) Composition/Honors Comp.</td>
<td>Humanities (GH)</td>
</tr>
<tr>
<td>Arts (GA)</td>
<td>Supporting Course</td>
</tr>
<tr>
<td>PSU First-Year Seminar</td>
<td>Supporting Course</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
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<tr>
<th>Semester 3</th>
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</thead>
<tbody>
<tr>
<td><strong>Course Details</strong></td>
<td><strong>Course Details</strong></td>
</tr>
<tr>
<td>HPA 211 Financial Decision in Health Care Organizations</td>
<td>Or HPA 311 Population Health and Healthcare</td>
</tr>
<tr>
<td>HPA 301W Health Services Policy Issues</td>
<td>HPA 332 Health Systems Management</td>
</tr>
<tr>
<td>STAT 200 (GQ) Elementary Statistics or STAT 250 (GQ) Introduction to Biostatistics</td>
<td>CMPSC 101 (GQ) Introduction to C++ Programming or CMPSC 203 (GQ) Introduction to Spreadsheets and Databases</td>
</tr>
<tr>
<td>Humanities (GH)</td>
<td>Natural Sciences (GN)</td>
</tr>
<tr>
<td>Supporting Course</td>
<td>Supporting Course</td>
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<td><strong>Total Credits</strong></td>
<td><strong>Total Credits</strong></td>
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<tr>
<td>Semester 5</td>
<td>Course Details</td>
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<tr>
<td></td>
<td>HPA 310 Health Care and Medical Needs</td>
</tr>
<tr>
<td></td>
<td>Arts (GA)</td>
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<td>Supporting Course</td>
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<td>Total Credits</td>
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<tr>
<td>Summer</td>
<td>Course Details</td>
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<tr>
<td></td>
<td>HPA 395 Field Experience in Health Policy and Administration</td>
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<td>Total Credits</td>
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<tr>
<td>Semester 7</td>
<td>Course Details</td>
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<tr>
<td></td>
<td>HPA 400-level Course</td>
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<tr>
<td></td>
<td>ENGL 202A (GWS) Effective Writing: Writing in the Social Sciences</td>
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<tr>
<td></td>
<td>PHS 571 Health Systems Organization and Delivery or HPA 520 Introduction to Health Systems Organizations and Delivery</td>
</tr>
<tr>
<td></td>
<td>PHS 520 Principles of Biostatistics or STAT 500 Applied Statistics</td>
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<tr>
<td></td>
<td>400 Level Supporting Course</td>
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<td>Total Credits</td>
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Begin M.P.H. Degree Program in Hershey:

<table>
<thead>
<tr>
<th>Semester 9</th>
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<th>Semester 10</th>
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<tr>
<td><strong>Course Details</strong></td>
<td></td>
<td><strong>Course Details</strong></td>
<td></td>
</tr>
<tr>
<td>PHS 501: Principles of Public Health</td>
<td>3</td>
<td>PHS 895A: Master of Public Health Internship</td>
<td>3</td>
</tr>
<tr>
<td>PHS 538: Mixed Methods Research</td>
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<td></td>
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<tr>
<td><strong>Track and Elective Courses</strong></td>
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<td><strong>Track and Elective Courses</strong></td>
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<th>Semester 11</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td><strong>Course Details</strong></td>
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</tr>
<tr>
<td>PHS 894: Capstone Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>
IUG Sequence Overview

A sample overview of the IUG sequence by year and semester is presented below. The M.P.H. courses listed in year 4 will double count for both the undergraduate and the graduate degrees. This sample overview represents the minimum time required to complete the IUG. It may not reflect the individual experiences of all IUG students. Individualized plans of study will be created for each student who enrolls in the IUG program.

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>IUG Course work by Semester</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>1</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
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<tr>
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<td>M.P.H.</td>
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<tr>
<td>2</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
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<td>M.P.H.</td>
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<tr>
<td>3</td>
<td>B.S. in HPA</td>
<td>Standard B.S. in HPA curriculum</td>
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<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>B.S. in HPA</td>
<td>PHS 520: Principles of Biostatistics (3) or STAT 500: Applied Statistics (3) or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHS 571: Health Systems Organization and Delivery (3) or HPA 520: Introduction to Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Systems Organizations and Delivery (3) or PHS 504: Behavioral Health Intervention Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3) or BBH 504: Behavioral Health Intervention Strategies (3) or PHS 550: Principles of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Epidemiology (3) or HPA 540 Epidemiological Applications in Health Services Research (3)</td>
</tr>
<tr>
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<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>B.S. in HPA</td>
<td>PHS 809: Principles of Public Health (3) or PHS 538: Mixed Methods Research (3) or Track</td>
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<td></td>
<td></td>
<td>and Elective Courses (9)</td>
</tr>
<tr>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHS 895A: Master of Public Health Internship (3) or PHS 894: Capstone Experience (3)</td>
</tr>
</tbody>
</table>
Individualized IUG Plan of Study

In accordance with the Graduate Council’s policy on IUG programs (available at http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs), each prospective IUG applicant must prepare an individualized plan of study prior to being admitted to the IUG program. Students who are interested in pursuing the IUG should contact their respective undergraduate academic adviser in the Department of Health Policy and Administration to begin creating a plan. The plan should include the entire time period of the IUG program, through the completion of all graduate school requirements.

IUG applicants must submit a preliminary draft of the plan with the Graduate School application for admission. Prior to being admitted to the IUG, the M.P.H. in Public Health program will work with all accepted IUG applicants and their academic advisers to finalize the plan of study. The plan will be reviewed each semester with the student’s undergraduate and graduate advisers.

In the development of the plan, in accordance with the Graduate Council’s policy on IUG programs, B.S. in HPA students in the IUG program will “...be advised to fulfill basic undergraduate requirements first so that if, for some reason, they cannot continue in the integrated program they will be able to receive their undergraduate degree without a significant loss of time.” Please see http://www.gradschool.psu.edu/faculty-and-staff/faculty/iugs for more information.


**Advising**

The M.P.H. in Public Health program will assign IUG students with an academic adviser. This adviser is in addition to the one assigned to them as undergraduate students enrolled in the B.S. in HPA degree program. The M.P.H. in Public Health adviser will be a faculty member from the Department of Public Health Sciences at the Penn State College of Medicine in Hershey, PA who is a member of the Graduate Faculty. The academic adviser will be assigned upon entry into the M.P.H. degree program. If advisers are on different campuses than their respective students, they will communicate with their students through a combination of videoconferencing (via Skype or other mechanism), phone, email, and in person meetings.
MPH Learning Objectives

Demonstrate meaningful scholarship through competencies that include evidence-based approaches to public health, public health & health care systems, planning and management to promote health, policy in public health, leadership, communication, interprofessional practice and systems thinking. (Penn State Goal 1, 2)

Apply effective communication skills (oral and written) to diverse audiences and with an understanding of the importance of cultural competence. (Penn State Goal 3)

Apply knowledge and skills learned in the classroom to real-world public health issues. (Penn State Goal 4, 5)

Synthesize and integrate knowledge acquired in coursework and other learning experiences and apply it to analyzing and addressing a public health practice or research challenge. (Penn State Goal 1, 2, 3)

Penn State Scholarly and Professional Goals for All Graduate Degree Students

1) Demonstrate appropriate breadth and depth of disciplinary knowledge, and comprehension of the major issues of their discipline;
2) Use disciplinary methods and techniques to apply knowledge, and – if appropriate to the degree – create new knowledge or achieve advanced creative accomplishment.
3) Communicate the major issues of their discipline effectively;
4) Demonstrate analytical and critical thinking within their discipline, and, where appropriate, across disciplines; and
5) Know and conduct themselves in accordance with the highest ethical standards, values, and, where these are defined, the best practices of their discipline.
Graduate Council
Program, Option, or Minor Proposal Form

Submit 1 original, signed Graduate Council proposal form and 2 hardcopies of the graduate program proposal document, with a copy of the signed proposal form attached to each proposal copy, to the Curriculum Coordinator, University Faculty Senate, 101 Kern Graduate Building, University Park. The proposals will be transmitted to the Office of the Dean of the Graduate School for entry into the Graduate Council curricular review process; for more information about the process, see the Overview of the Graduate Council Curricular Review Process.

The Program Proposal Procedures provide guidance for the development of a graduate program proposal. If you have questions regarding the preparation of a graduate program proposal or how to complete this Graduate Council proposal form, contact the Office of the Dean of the Graduate School.

College/School: College of Liberal Arts
Department or Instructional Area: Department of Women's, Gender, and Sexuality Studies

New Graduate Program, Option, or Minor: □ Add

Designation of new graduate program:
Classification of Instructional Programs (CIP) Code:
Designation of new graduate option:
Designation of new graduate minor:

Indicate effective semester:
☐ First semester following approval
☐ Second semester following approval

Penn State Graduate School
JAN 25 2018

Office of the Vice Provost and
Dean of the Graduate School

Existing Graduate Program Option, or Minor: □ Change ☑ Drop

Current designation of graduate program: Dual-title Ph.D. in Women's Studies
Current designation of graduate option:
Current designation of graduate minor:

New designation of existing graduate program (if changing): Dual-title Ph.D. in Women's, Gender, and Sexuality Studies
New designation of existing graduate option (if changing):
New designation of existing graduate minor (if changing):

Brief description of the change (if not noted above): We proposed changing the title of our degree program; as well as new requirements (please see memo)

Indicate effective semester:
☐ First semester following approval
☐ Second semester following approval

Submitted by Graduate Program Head
Melissa Wright
Printed name
Signature
Date: 1/24/2018

Noted by College/School Representative to Graduate Council Subcommittee on New and Revised Programs and Courses
Michael Travis Putnam
Printed name
Signature
Date: 1/24/18

Approved by College/School Dean/Chancellor (or Designee):
D. Scott Barnett
Printed name
Signature
Date: 1/25/18
<table>
<thead>
<tr>
<th>Role</th>
<th>Printed name</th>
<th>Signature</th>
<th>Date</th>
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<td>On Behalf of David Babb</td>
<td>Vanderkriett</td>
<td></td>
<td>10/9/2018</td>
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<td>Committee on New and Revised Programs and</td>
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<tr>
<td>Courses</td>
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<tr>
<td>On Behalf of C. Andrew Cole</td>
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<td></td>
<td>10/9/2018</td>
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<td>Noted by Dean of the Graduate School</td>
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<td>10/9/2018</td>
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<tr>
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</tr>
</tbody>
</table>
January 14, 2018

To: Joint Curriculum Committee, Penn State

From: Department of Women's, Gender, and Sexuality Studies
Melissa Wright, Department Head
Lise Nelson, Director of Graduate Studies

RE: Program degree changes to the dual-title Ph.D. in Women's Studies

We are taking the opportunity to propose revisions to our degree program at the same time we have been asked to submit our graduate bulletin language for re-approval to the Joint Curriculum Committee. The revisions to our dual-title Ph.D. program center on the following points:

1. We propose changing our degree name from a dual-title Ph.D. in Women's Studies to a dual-title Ph.D. in Women's, Gender, and Sexuality Studies.
2. We propose shifting our core theory courses, although the total number of 'core theory' credits remains the same (9 credits). See details below.
3. We propose requiring that three of nine elective credits for the dual-title Ph.D. have a course abbreviation outside of the student's major program.
4. We are adding language strongly encouraging that one of the two WGSS-affiliated committee members on the doctoral committee have a tenure home in a program outside of the student's major program.
5. We are dropping the portfolio requirement for the candidacy exam.

A more detailed explanation of these proposed changes is provided in the following pages. We arrived at these revisions to our program after reflection and evaluation instigated by the program learning outcomes and assessment process, as well as in relation to new faculty lines and expanded areas of expertise across our teaching and research program. The Department of Women's, Gender, and Sexuality Studies at Penn State is a premier national program in the field, and our dual-title Ph.D. model is at the heart of our excellent placement rates. Our faculty agree that these proposed changes to our graduate program increase its rigor, better align our mentoring with our educational objectives, and improve our graduate student training.

Detailed explanation / rationale for these five changes:

1. In 2015, we implemented a departmental name change from Women' Studies to the Department of Women's, Gender, and Sexuality Studies. This shift reflects the breadth of faculty expertise and curriculum that have emerged over the last decade or longer in our department. Moreover, the degree name reflects changes visible across the field domestically and internationally, where most comparator institutions have departments and graduate degrees in women's / gender / sexuality / feminist studies (some combination of those terms) rather than “women’s studies.”
2. We are shifting our core theory requirements and options, without expanding the total core theory credits required for our graduate students (we currently have nine credits of core theory required). Previously, we required students to take as core courses WMNST 501, 502 and 507. We are dropping the WMNST 501 course requirement, "Feminist Teaching and Research Across the Disciplines," which filled a critical role in our curriculum when it was first designed, but which has since lost its relevance for our needs given the expansive course offerings in WGSS and our partner programs. This table compares old and new / proposed core theory requirements:

<table>
<thead>
<tr>
<th>Current core theory requirements (9 credits)</th>
<th>Proposed core theory requirements (9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMNST 507: Feminist Theory (3)</td>
<td>WMNST 507: Feminist Theory (3)</td>
</tr>
<tr>
<td>WMNST 502: Global Perspectives on Feminisms (3)</td>
<td>WMNST 502: Global Perspectives on Feminism (3)</td>
</tr>
<tr>
<td>WMNST 501: Feminist Teaching and Research Across the Disciplines (3)</td>
<td>WMNST 509 or WMNST 508</td>
</tr>
<tr>
<td></td>
<td>509: Feminist Pedagogies (3)</td>
</tr>
<tr>
<td></td>
<td>508 Feminist Methodologies (3)</td>
</tr>
</tbody>
</table>

These new core theory seminars (509 and 508) provide students important pedagogical and methodological options that were not highlighted in our previous requirements. WMNST 508 has already been approved by the JCC, and WMNST 509 has been submitted for curriculum review. We recognize that the changes proposed in this document will be held until WMNST 509 receives approval. These new core seminars reflect our recently-articulated program learning outcomes, which called for more attention to pedagogy and methods, and they provide students more flexibility for meeting core theory requirements. Each of these four core seminars is offered once per year.

3. In addition to the nine credits of core seminars, the dual-title Ph.D. requires nine additional elective graduate credits, approved by the WGSS Grad director. We propose that going forward three of these nine credits must have a course abbreviation outside of the students major program (if they are dual-title students in History and WGSS they could not have all their electives be History courses). The rationale behind this requirement is that the course offerings in WGSS have expanded dramatically in the last five to eight years, and we want to bolster our students' interdisciplinary training. This one course does not have to have a WMNST course abbreviation, it could be in any department with a seminar approved by the WGSS DGS as fulfilling an elective requirement in our dual-title program. There are a range of possibilities every semester—we regularly approve courses for our degree program offered through History, Geography, Psychology, English, Comparative Literature, African American studies, Bioethics, Rural Sociology, etc. We do not anticipate that this change will create hardships on students, as the vast majority currently are already taking a range of elective credits outside of their major program. This chart summarizes these proposed changes:
<table>
<thead>
<tr>
<th>Current ‘elective’ requirements (9 credits)</th>
<th>Proposed ‘elective’ (9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine additional credits of Women’s Studies course work (at least 6 of these should be at the 500 level)</td>
<td>An additional nine credits of elective graduate coursework will be completed with prior approval from the Director of Graduate Studies in WGSS. No more than three credits counting toward elective coursework can be completed at the 400-level, and at least three credits will be taken in a department other than the student’s major degree program.</td>
</tr>
</tbody>
</table>

4. Regarding doctoral committee composition for the dual-title PhD: We are adding language that “strongly encourages” having one of the two WGSS grad faculty members of the committee be from a department other than the student’s major program. The rationale here is similar to the requirement outlined in #3 above, to encourage interdisciplinarity, but we shifted away from language making this a “rule” to “strongly encourage” in order to maintain student flexibility in committee composition. So the upshot is that each dual-title Ph.D. student must still have two members of their committee be members of the WGSS grad faculty—a list that includes core faculty and all affiliates—and this new language in the bulletin simply encourages that one of these two members have a tenure home in a department outside of the student’s major program. |

<table>
<thead>
<tr>
<th>Current committee requirements</th>
<th>Proposed language for committee composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a dual-title Ph.D., 2 out of 4 members of the committee will be Women’s Studies-affiliated faculty members. [Please note that one WGSS committee member must serve as chair or co-chair of the committee, per graduate school rules. That is not spelled out in our current bulletin but is implicit as it is a grad school rule]</td>
<td><strong>DOCTORAL COMMITTEE COMPOSITION:</strong> All candidates for the Dual-title Ph.D. in Women’s, Gender, and Sexuality Studies must have at least two members of the graduate faculty of Women’s, Gender, and Sexuality Studies on their advising committee. One of these members must serve as chair or co-chair of the doctoral committee, as reflected in Graduate School requirements for all dual-title Ph.D. programs. In addition, we strongly encourage that at least one of these WGSS-affiliated members have their tenure home outside of the student’s partner discipline.</td>
</tr>
</tbody>
</table>

5. We are dropping the portfolio requirement for candidacy as listed in our current graduate bulletin. We have found the implementation of this requirement to be impractical and often at odds with student timelines, especially given the diverse nature of the candidacy process in our partner programs.

In closing, we do have extensive, but more minor, revisions to our graduate bulletin language; thus the “tracked changes” document is very red. These additions mostly reflect the omissions of the language used in our original degree proposal, language that did not include important information that today is standard in bulletin copy. For example, we added a great deal of information to the “student aid” section, and we spell out the admissions process for new versus current graduate students in more detail. These reflect ongoing practices, rather than representing changes to our degree program or requirements.
Degrees Conferred

Students can earn a dual-title Master’s degree (M.A./M.S.) or a dual-title Ph.D. in Women’s, Gender, and Sexuality Studies. All dual-title degrees must be paired and completed simultaneously with a graduate degree in one of our partner programs: Art Education, Comparative Literature, Curriculum and Instruction, English, French, Geography, History, Philosophy, Political Science, Psychology, and Rural Sociology. For students outside of these eleven degree programs, we offer a graduate minor in Women’s, Gender, and Sexuality Studies.

The Graduate Faculty

Women’s, Gender, and Sexuality Studies-affiliated faculty include individuals with budgeted appointments in Women’s Studies, the Department of Women’s, Gender, and Sexuality Studies (WGSS), and individuals those with courtesy joint appointments.

The Dual-title Program

Our dual-title master’s and Ph.D. degrees provide students conceptual, methodological and pedagogical training in the field of Women’s, Gender, and Sexuality Studies. Our graduate program embraces intersectional and transnational feminist approaches to knowledge production, pedagogy, and community engagement. Faculty and graduate students in WGSS use interdisciplinary frameworks to research questions that span the arts, humanities, and the social sciences. Because this degree is combined with a master’s or Ph.D. from one of our partner...
departments, students are well-prepared to produce cutting-edge, interdisciplinary scholarship; to teach across both disciplines; and to excel in a career in either field.

Dual-title degrees grounded both in Women's Studies and a given discipline will acknowledge and foster scholarly work across disciplines. A dual-title degree program will increase the intellectual rigor and breadth of graduate work through immersion of candidates in Women's Studies and their discipline. The dual title degree will also provide a context in which students can learn to synthesize knowledge within and across disciplinary boundaries. In addition, a dual-title degree program provides students with an opportunity for increased work within a pedagogical framework that also encourages an interdisciplinary approach to teaching.

The primary advantages of dual-title degrees include the intellectual and academic advantages of interdisciplinary, strengthening the reputation of individual programs/departments through innovative degree programs, increased recruitment of quality graduate students, and improved placement of doctoral graduates.

The dual-title degree programs do not duplicate other degree programs in the University.

Admission Requirements

Students will be considered for admission to the master's or Ph.D. dual-title programs by graduate study in Women's Studies by an the WGSS graduate admissions committee of Women's Studies affiliated faculty. The Women's Studies program will follow the timetable and admission requirements of the cooperating department. Applicants can apply to the dual-title program when they first apply for graduate study at Penn State, and those applications will be considered on the timetable of the partner department (after the partner program has admitted a student into their degree program they must forward the application to the dual-title admissions committee for consideration). This group of applicants can apply with the same application materials as provided to the partner program and Graduate School, although it is critical that their statement of purpose discusses how their research and professional goals reflect an interest in interdisciplinary feminist research. Also, to be considered for admission into a dual-title program in Women's, Gender, and Sexuality Studies these students should have a junior/senior cumulative average of at least 3.00 (on a 4.00 scale) and appropriate course work in Women's, Gender, and Sexuality Studies or related fields.

Current Penn State graduate students, who are already pursuing a graduate degree in one of our partner programs but have not yet taken their candidacy exams, can also apply for admission into the dual-title Ph.D. degree in Women’s, Gender, and Sexuality Studies. The deadlines for current graduate students to be considered for admission are October 15th or February 15th each academic year. These internal applicants will provide additional material beyond their original application for graduate study at Penn State; they will include Penn State graduate transcripts, a statement of purpose that addresses the ways in which their research and professional goals...
reflect an interest in interdisciplinary and feminist research, and a letter of recommendation from a member of the WGSS graduate faculty.

Doctoral students must be admitted into the dual-title degree program in Women's, Gender, and Sexuality Studies prior to taking the candidacy examination in their primary graduate program. After candidacy exams are complete, a Penn State graduate student cannot be considered for admission into the dual-title Ph.D. program.

Applicants should have a junior/senior cumulative average of at least 3.00 (on a 4.00 scale) and appropriate course background should be considered for study. It is required that prospective students seeking admission to a dual-title degree program write a statement of purpose that addresses the ways in which their research and professional goals will reflect an interest in interdisciplinary and feminist research.

**Dual-title Master’s Degree Requirements**

To qualify for a dual-title degree, students must satisfy the requirements of the primary graduate program in which they are enrolled. In addition, they must satisfy the degree requirements for the dual-title in Women’s, Gender, and Sexuality Studies listed below. Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin. Students must also successfully complete degree requirements in their partner program to earn a dual-title degree in Women’s, Gender, and Sexuality Studies.

**CREDIT AND COURSE REQUIREMENTS:** Candidates for the dual-title M.A./M.S. degree must complete twelve credits of graduate coursework and write a thesis or scholarly paper that centrally engages the field of women’s, gender, and sexuality studies. Nine of these credits will include core theory courses: WMNST 507 Feminist Theory (3 credits), WMNST 502 Global Perspectives on Feminism (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). An additional three credits of graduate coursework will be completed with prior consultation and approval of the Director of Graduate Studies in WGSS.

**COMMITTEE COMPOSITION:** Candidates for dual-title M.A./M.S. degree in Women’s, Gender, and Sexuality Studies must have at least one member of the WGSS graduate faculty on their master’s advising committee.

**Dual-title Doctoral Degree Requirements**

To qualify for a dual-title degree, students must satisfy the requirements of the primary graduate program in which they are enrolled. In addition, they must satisfy the degree requirements for the dual-title in Women’s, Gender, and Sexuality Studies listed below.
Requirements listed here are in addition to requirements stated in the DEGREE REQUIREMENTS section of the Graduate Bulletin. Students must also successfully complete Ph.D. degree requirements in their partner program to earn a dual-title Ph.D. in Women's, Gender, and Sexuality Studies.

CREDIT AND COURSE REQUIREMENTS: The dual-title Ph.D. requires eighteen credits of graduate coursework and a dissertation that centrally engages the field of Women's, Gender, and Sexuality Studies. Nine of these credits will include core theory courses: WMNST 507 Feminist Theory (3 credits), WMNST 502 Global Perspectives on Feminism (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). An additional nine credits of elective graduate coursework will be completed with prior approval from the Director of Graduate Studies in WGSS. No more than three credits counting toward elective coursework can be completed at the 400-level, and at least one of the elective courses will be taken in a department other than the student's major degree program.

CANDIDACY: The candidacy examination committee for the dual-title Ph.D. degree must include two Graduate Faculty members from the Women's, Gender, and Sexuality Studies program. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role. There will be a single candidacy examination, containing elements of both the primary graduate degree program and Women's, Gender, and Sexuality Studies. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy examination may be delayed one semester beyond the normal period allowable.

DOCTORAL COMMITTEE COMPOSITION: In addition to the general Graduate Council requirements for doctoral committees, all candidates for the Dual-title Ph.D. in Women's, Gender, and Sexuality Studies must have at least two members of the Graduate Faculty of Women's, Gender, and Sexuality Studies on their advising committee. One of these members must serve as chair or co-chair of the doctoral committee, as reflected in Graduate School Council requirements for all dual-title Ph.D. programs. In addition, we strongly encourage that at least one of these WGSS-affiliated members have their tenure home outside of the student's partner discipline.

COMPREHENSIVE EXAMS: Dual-title Ph.D. students take a combined comprehensive exam that integrates questions from both disciplines. The Women's Studies/Women's, Gender, and Sexuality Studies-affiliated faculty members on the student's doctoral committee are responsible for administering a comprehensive examination in Women's Studies that constitutes a the portion of the student's comprehensive exam. The women's studies portion of the exam will focus on the following areas designed to evaluate the following areas: feminist theory, feminist methodology, global feminism, and feminist studies in the student's partner discipline.

DOCTORAL DISSERTATION AND DEFENSE: A dissertation on a women's, gender, and sexuality studies topic is required of students in the dual-title degree program. The women's, gender, and...
sexuality studies-related topic of the dissertation will be approved by the student's committee. Upon researching, writing, and completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense). The dissertation must be accepted by the doctoral committee, the head of both graduate programs, and the Graduate School.

FORMAL MEETINGS: Once appointed, students must include their WGSS-affiliated advisers in all formal meetings required by their partner program, such as annual evaluation meetings, candidacy exams, proposal defense, etc. The nature and timing of these meetings vary according to the partner discipline’s graduate requirements and program practices.

The dual-title degree will have requirements above those for the graduate minor, which currently requires 9 credit hours for the M.A./M.S. and 15 credit hours for the Ph.D. The requirements for the dual-title degree include increased course work, additional components to the comprehensive exams at the doctoral level, and the completion of women's studies related theses at both the master's and doctoral level. Degree requirements for dual-title degrees in Political Science, French, History, English, Education, Geography, Curriculum and Instruction, and Philosophy will be added to the Women's Studies Graduate Handbook.

9 required credits (WMNST 501, WMNST 502, WMNST 507)
3 additional credits of Women's Studies course work
Thesis on a Women's Studies-related topic, or another 3 additional credits of Women's Studies course work and a master's essay will be approved by the student's committee

Ph.D. Degree

9 required credits (WMNST 501, WMNST 502, WMNST 507)
9 additional credits of Women’s Studies course work (at least 6 of these should be at the 500 level)
Comprehensive examination in Women’s Studies and the disciplinary field
Dissertation on a Women's Studies-related topic will be approved by the student’s committee

Foreign Language and English Competency Requirements

The student will fulfill the language requirement specified by the cooperating department through which the student is admitted to the dual-title degree program.

Candidacy

In order to be admitted to doctoral candidacy in the dual-title degree program, students must meet the Ph.D. candidacy requirements specified by the cooperating department. In addition, the student will be required to present a portfolio of work in Women's Studies to their committee. Such a portfolio would include a statement of the student’s interdisciplinary research interests, a program plan, and samples of writing that indicate the student’s work in Women's Studies.
Committee Composition

For a dual-title M.A./M.S., the recommended student's committee will include at least one Women's Studies-affiliated faculty member.

For a dual-title Ph.D., 2 out of 4 members of the committee will be Women's Studies-affiliated faculty members.

Women's Studies Women's, Gender, and Sexuality Studies Minor

Requirements listed here are in addition to requirements stated in the Graduate Minors section of the Graduate Bulletin.

An interdisciplinary dual-degree graduate minor in Women's, Gender, and Sexuality Studies is available, administered by the Women's Studies program. Each student's major and minor is planned by the student and the Women's Studies graduate adviser in consultation with the student's graduate adviser in his or her major field. A student seeking a minor does not have to pass through an admissions process, and a minor can be completed by any student who is simultaneously completing any graduate degree at Penn State.

Master's Minor Requirements

MASTER'S MINOR REQUIREMENTS: To earn a Master's-level dual-title degree, graduate minor students are required to take 9 nine credits of course work in Women's, Gender, and Sexuality Studies. Six of these credits include: WMNST 501 Feminist Perspectives on Research and Teaching (3 credits); WMNST 502 Global Perspectives on Feminism (3 credits); and WMNST 507 Feminist Theory (3 credits). The additional three credits must be chosen in consultation with and pre-approval from the Director of Graduate Studies in WGSS. Students also must complete 3 additional credits in Women's Studies, chosen in consultation with the Women's Studies graduate adviser.

Doctoral Minor Requirements

DOCTORAL MINOR REQUIREMENTS: To earn a Doctoral-level dual-title degree, graduate minor in Women's, Gender, and Sexuality Studies students are required to take complete 15 credits of graduate course work in Women's Studies. Nine of these credits must include core theory: WMNST 501 Feminist Perspectives on Research and Teaching (2 credits); WMNST 502 Global Perspectives on Feminism (3 credits); and WMNST 507 Feminist Theory (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). Students also must complete 6 six additional credits of Women's Studies course work (at least 3 three of which should be at the 500 level), chosen in consultation these courses must be approved by with the Director of Graduate Studies of WGSS, Women's Studies graduate adviser.

Official requests to add the minor to a doctoral candidate's academic record must be submitted to Graduate Enrollment Services prior to establishment of the doctoral committee and prior to scheduling the comprehensive examination. At least one Graduate Faculty member from the minor field must serve on the candidate's doctoral committee.
9 credits required credits of Women's Studies courses for master's level
15 credits required credits of Women's Studies courses for doctoral level

The above credits are in addition to the requirements for the student's major. Six credits consist of required courses in feminist theory (3) and feminist methodology (3). The remaining credits may include a combination of WMNST 400- and 500-level courses, as well as special topics courses (numbered 497 and 597) and independent/individual studies (496 and 596).

Prescribed courses (6 credits): WMNST 507 Feminist Theory; WMNST 501 Feminist Perspectives on Research and Teaching

Additional courses (a minimum of 3 credits at the 500 level)

**Student Aid**

Graduate assistantships available to students in this program and other forms of student aid are described in the [STUDENT AID](#) section of the [Graduate Bulletin](#).

Dual-degree students in Women’s, Gender, and Sexuality Studies receive most of their funding through their partner discipline. The Women’s, Gender, and Sexuality Studies Department offers a limited number of one-year teaching assistantships that dual-degree students can apply for in January for the following academic year. These assistantships provide a mechanism of funding and critical professional experience for students training for positions in the field of women’s, gender, and sexuality studies. Students on graduate assistantships must adhere to the course load limits set forth in the [Graduate Bulletin](#).

The Department of Women’s, Gender, and Sexuality Studies provides several awards to dual-title students to support their research efforts and recognize their accomplishments in teaching and research. These include: the Sara Woods Outstanding Graduate Student Award, the Sara Woods Outstanding Student Teaching Award, and the Laura Richardson Whitaker Memorial Graduate Award.
Women’s, Gender, and Sexuality Studies (WMNST)

Women’s, Gender, and Sexuality Studies Department [hyperlink to homepage]

MELISSA WRIGHT, **Head (mww11@psu.edu)**
ALICIA DECKER, **Director, Graduate Studies (acd207@psu.edu)**

Program email: [WGSSgradprogram@psu.edu](mailto:WGSSgradprogram@psu.edu)

**Degrees Conferred**

Students can earn a dual-title Master’s degree (M.A./ M.S.) or a dual-title Ph.D. in Women’s, Gender, and Sexuality Studies. All dual-title degrees must be paired and completed simultaneously with a graduate degree in one of our partner programs: Art Education, Comparative Literature, Curriculum and Instruction, English, French, Geography, History, Philosophy, Political Science, Psychology, and Rural Sociology. For students outside of these eleven degree programs, we offer a graduate minor in Women’s, Gender, and Sexuality Studies.

**The Graduate Faculty**

Women’s, Gender, and Sexuality Studies- faculty include individuals with budgeted appointments in the Department of Women’s, Gender, and Sexuality Studies (WGSS), and those with courtesy joint appointments.

**The Dual-title Program**

Our dual-title master’s and Ph.D. degrees provide students conceptual, methodological and pedagogical training in the field of Women’s, Gender, and Sexuality Studies. Our graduate program embraces intersectional and transnational feminist approaches to knowledge production, pedagogy, and community engagement. Faculty and graduate students in WGSS use interdisciplinary frameworks to research questions that span the arts, humanities, and the social sciences. Because this degree is combined with a master’s or Ph.D. from one of our partner departments, students are well-prepared to produce cutting-edge, interdisciplinary scholarship; to teach across both disciplines; and to excel in a career in either field.
Admission Requirements

Students will be considered for admission to the master’s or Ph.D. dual-title programs by the WGSS graduate admissions committee. Applicants can apply to the dual-title program when they first apply for graduate study at Penn State, and those applications will be considered on the timetable of the partner department (after the partner program has admitted a student into their degree program they must forward the application to the dual-title admissions committee for consideration). This group of applicants can apply with the same application materials as provided to the partner program and Graduate School, although it is critical that their statement of purpose discusses how their research and professional goals reflect an interest in interdisciplinary feminist research. Also, to be considered for admission into a dual-title program in Women’s, Gender, and Sexuality Studies these students should have a junior/senior cumulative average of at least 3.00 (on a 4.00 scale) and appropriate course work in Women’s, Gender, and Sexuality Studies or related fields.

Current Penn State graduate students, who are already pursuing a graduate degree in one of our partner programs but have not yet taken their candidacy exams, can also apply for admission into the dual-title Ph.D. degree in Women’s, Gender, and Sexuality Studies. The deadlines for current graduate students to be considered for admission are October 15th or February 15th each academic year. These internal applicants will provide additional material beyond their original application for graduate study at Penn State; they will include Penn State graduate transcripts, a statement of purpose that addresses the ways in which their research and professional goals reflect an interest in interdisciplinary and feminist research, and a letter of recommendation from a member of the WGSS graduate faculty.

Doctoral students must be admitted into the dual-title degree program in Women’s, Gender, and Sexuality Studies prior to taking the candidacy examination in their primary graduate program.

Dual-title Master’s Degree Requirements

To qualify for a dual-title degree, students must satisfy the requirements of the primary graduate program in which they are enrolled. In addition, they must satisfy the degree requirements for the dual-title in Women’s, Gender, and Sexuality Studies listed below.

CREDIT AND COURSE REQUIREMENTS: Candidates for the dual-title M.A./M.S. degree must complete twelve credits of graduate coursework and write a thesis or scholarly paper that centrally engages the field of women’s, gender, and sexuality studies. Nine of these credits will include core theory courses: WMNST 507 Feminist Theory (3 credits), WMNST 502 Global Perspectives on Feminism (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). An additional three credits of graduate coursework will be completed with prior consultation and approval of the Director of Graduate Studies in WGSS.
COMMITTEE COMPOSITION: Candidates for dual-title M.A./M.S. degree in Women’s, Gender, and Sexuality Studies must have at least one member of the WGSS graduate faculty on their master’s advising committee.

**Dual-title Doctoral Degree Requirements**

To qualify for a dual-title degree, students must satisfy the requirements of the primary graduate program in which they are enrolled. In addition, they must satisfy the degree requirements for the dual-title in Women’s, Gender, and Sexuality Studies listed below.

CREDIT AND COURSE REQUIREMENTS: The dual-title Ph.D. requires eighteen credits of graduate coursework and a dissertation that centrally engages the field of Women’s, Gender, and Sexuality Studies. Nine of these credits will include core theory courses: WMNST 507 Feminist Theory (3 credits), WMNST 502 Global Perspectives on Feminism (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). An additional nine credits of elective graduate coursework will be completed with prior approval from the Director of Graduate Studies in WGSS. No more than three credits counting toward elective coursework can be completed at the 400-level, and at least one of the elective courses will be taken in a department other than the student’s major degree program.

CANDIDACY: The candidacy examination committee for the dual-title Ph.D. degree must include two Graduate Faculty member from the Women’s, Gender, and Sexuality Studies program. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single candidacy examination, containing elements of both the primary graduate degree program and Women’s, Gender, and Sexuality Studies. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the candidacy examination may be delayed one semester beyond the normal period allowable.

DOCTORAL COMMITTEE COMPOSITION: In addition to the general Graduate Council requirements for doctoral committees, all candidates for the Dual-title Ph.D. in Women’s, Gender, and Sexuality Studies must have at least two members of the Graduate Faculty of Women’s, Gender, and Sexuality Studies on their advising committee. One of these members must serve as chair or co-chair of the doctoral committee, as reflected in Graduate Council requirements for all dual-title Ph.D. programs. In addition, we strongly encourage that at least one of these WGSS-affiliated members have their tenure home outside of the student’s partner discipline.

COMPREHENSIVE EXAMS: Dual-title Ph.D. students take a combined comprehensive exam that integrates questions from both disciplines. The Women’s, Gender, and Sexuality Studies-affiliated faculty members on the student’s doctoral committee are responsible for administering
the portion of the student's comprehensive exam designed to evaluate the following areas: feminist theory, feminist methodology, global feminism, and feminist studies in the student's partner discipline.

DOCTORAL DISSERTATION AND DEFENSE: A dissertation on a women's, gender, and sexuality studies topic is required of students in the dual-title degree program. The women's, gender, and sexuality studies-related topic of the dissertation will be approved by the student's committee. Upon researching, writing, and completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense). The dissertation must be accepted by the doctoral committee, the head of both graduate programs, and the Graduate School.

FORMAL MEETINGS: Once appointed, students must include their WGSS-affiliated advisers in all formal meetings required by their partner program, such as annual evaluation meetings, candidacy exams, proposal defense, etc. The nature and timing of these meetings vary according to the partner discipline’s graduate requirements and program practices.

Women's, Gender, and Sexuality Studies Minor
Requirements listed here are in addition to requirements stated in the Graduate Minors section of the Graduate Bulletin.

An interdisciplinary graduate minor in Women’s, Gender, and Sexuality Studies is available. A student seeking a minor does not have to pass through an admissions process, and a minor can be completed by any student who is simultaneously completing any graduate degree at Penn State.

MASTER’S MINOR REQUIREMENTS: To earn a master’s-level graduate minor students are required to take nine credits of coursework in Women's, Gender, and Sexuality Studies. Six of these credits include WMNST 502 Global Perspectives on Feminism (3 credits); and WMNST 507 Feminist Theory (3 credits). The additional three credits must be chosen in consultation with and pre-approval from the Director of Graduate Studies in WGSS.

DOCTORAL MINOR REQUIREMENTS: To earn a doctoral-level minor in Women’s, Gender, and Sexuality Studies students are required to complete 15 credits of graduate course work. Nine of these credits must include core theory: WMNST 502 Global Perspectives on Feminism (3 credits), WMNST 507 Feminist Theory (3 credits), and either WMNST 509 Feminist Pedagogies (3 credits) or WMNST 508 Feminist Methodologies (3 credits). Students also must complete six additional credits of Women's Studies course work (at least three of which must be at the 500 level), these courses must be approved by the Director of Graduate Studies of WGSS.

Official requests to add the minor to a doctoral candidate’s academic record must be submitted to Graduate Enrollment Services prior to establishment of the doctoral committee and prior to
scheduling the comprehensive examination. At least one Graduate Faculty member from the minor field must serve on the candidate’s doctoral committee.

**Student Aid**

Graduate assistantships available to students in this program and other forms of student aid are described in the [STUDENT AID](#) section of the Graduate Bulletin.

Dual-degree students in Women’s, Gender, and Sexuality Studies receive most of their funding through their partner discipline. The Women’s, Gender, and Sexuality Studies Department offers a limited number of one-year teaching assistantships that dual-degree students can apply for in January for the following academic year. These assistantships provide a mechanism of funding and critical professional experience for students training for positions in the field of women’s, gender, and sexuality studies. Students on graduate assistantships must adhere to the course load limits set forth in the Graduate Bulletin.

The Department of Women’s, Gender, and Sexuality Studies provides several awards to dual-title students to support their research efforts and recognize their accomplishments in teaching and research. These include: the Sara Woods Outstanding Graduate Student Award, the Sara Woods Outstanding Student Teaching Award, and the Laura Richardson Whitaker Memorial Graduate Award.
Re: dual-title proposal quick but important question

Graeme Leslie Sullivan

Dear Dr. Nelson,

Thank you for sharing the details of the proposed changes to the Women's Studies dual-title Ph.D. As noted, the modifications to the degree include the change to the name of the degree, the core course changes, and the affiliated committee status, are all matters that can be readily accommodated by our dual title Ph.D. in Art Education and Women's, Gender and Sexuality Studies. Thank you for the notification.

Regards,

Graeme

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Graeme Sullivan, Director
Penn State School of Visual Arts
210 Patterson Bld
University Park, PA 16802
gls27@psu.edu
814 865 0445
www.sova.psu.edu.
from: Charlotte Diane Eubanks <cde13@psu.edu>

to: Lise Nelson <lknelson@psu.edu>

cc: Bob Edwards <rre1@psu.edu>

date: Wed, Jan 24, 2018 at 10:32 AM

Charlotte Diane Eubanks

The Department of Comparative Literature has reviewed the revised proposal for the dual-title PhD with Women's, Gender, and Sexuality Studies. The revisions create no substantive changes or obstacles to the proposal. The Department strongly supports the proposal.

Sincerely yours,

Robert R. Edwards, Head

From: "Bob Edwards" <rre1@psu.edu>
To: "Charlotte Eubanks" <cde13@psu.edu>
Sent: Wednesday, January 24, 2018 9:52:57 AM
Subject: Re: consultation dual-title (response needed)

Hi Charlotte,

Could you please pass this message along to Lise?

Thanks,
Bob

The Department of Comparative Literature has reviewed the revised proposal for the dual-title PhD with Women's, Gender, and Sexuality Studies. The revisions create no substantive changes or obstacles to the proposal. The Department strongly supports the proposal.

Sincerely yours,

Robert R. Edwards, Head
January 23, 2018

Prof. Lise Nelson  
Department of Women’s, Gender, and Sexuality Studies  
122-A Willard Building

Dear Lise:

Thank you for sharing, in your Dec. 21 correspondence, the details concerning the proposed changes to the Graduate Program in Women’s Studies, and for soliciting our input, given that the program is a dual-title degree program in which we participate.

My sincere apologies for the delay in replying. I’ve reviewed the proposal carefully, and consulted with C&I faculty who have participated in (and benefited from) the current dual-title program. We are very happy to support the proposed changes. The change in title, core and course requirement changes, and new language related to the composition of doctoral committees all seem very sensible.

Thank you for your patience and for providing the leadership for these changes.

Sincerely,

[Signature]

Dr. William Carlsen  
Director of Graduate Studies  
Curriculum and Instruction

Cc: Gail Boldt, Jeanine Staples, Jacqueline Reid-Walsh, Bonnie Richardson, Rose Mary Zbiek
from: Mark Morrison <mxm61@psu.edu>
to: Lise Nelson <lknelson@psu.edu>
date: Mon, Jan 22, 2018 at 11:54 AM
subject: English support for revisions to dual-title PhD Women's Studies
mailed-by: psu.edu

English support for revisions to dual-title PhD Women's Studies

Mark Morrison

to Lise

Dear Professor Nelson,

I have reviewed the five proposed revisions to the dual-title PhD in Women's Studies and discussed them with the DGS of the English graduate program. I fully support all of them. While updating the name of the dual-title PhD is necessary given the change of name of the department, the rationale for the change of the department's name is equally compelling for the visibility and clarity of the dual-title degree when students from English or any other department with this dual-title degree go on the job market. The other changes are thoughtful improvements to the interdisciplinary education provided by the program and to the smooth and timely progress toward the degree for students in the program. These revisions will serve students in English well, as they will serve students in the dual-title from other departments.

Sincerely,

Mark Morrison

Mark Morrison
Professor and Head of English
404 Burrowes Building
Penn State University
University Park, PA 16802-6200

Tel: (814) 863-2626
RE: Proposal to shift degree name and some requirements for dual-title Ph.D. in Women's STudies

BENEDICTE MARIE-CHRISTINE MONICAT

Dear Colleague,

This is to let you know that I have reviewed the proposed changes to the dual-title PhD in Women’s Studies and am in complete agreement with them for several reasons. Beyond the name correction (#1), all changes contribute to a more rigorous and coherent training (#2), strengthen the interdisciplinarity of dual degree students (#3 and #4), and streamline requirements (#5).

I do not doubt that these changes will further improve graduate training and placement.

Best,

Bénédicte Monicat

Acting Head, Department of French and Francophone Studies
Geography

from: Cynthia Brewer <cbrewer@psu.edu>
to: Lise Nelson <knelson@psu.edu>
cc: Melissa Wright <mww11@psu.edu>, Brian King <bkh2@psu.edu>, Jess Perks <jdw213@psu.edu>
date: Tue, Jan 23, 2018 at 4:01 PM

Cynthia Brewer

Jan 23 (2 days ago)

to Lise, Melissa, Brian, Jess

Hello Dr. Lise Nelson, Director of Graduate Studies, WGSS

The Department of Geography supports the program changes proposed for the dual-title degree in “Women’s Studies,” changing the degree name to “Women’s, Gender, and Sexuality Studies” for consistency with the department’s earlier name change. The new theory courses required are consistent with Geography graduate program emphases, and the requirement to take elective credits outside Geography is acceptable. I have reviewed the proposal document and support the changes to the dual degree program in which Geographers participate.

Cynthia Brewer
Head of Department of Geography
Approval of Program Changes

Dear Lise,

I have read the proposed changes to the dual-title PhD program in Women’s Studies. I agree with all five changes, namely, the change of the name of the program, the shifting of course theory courses, the enhanced interdisciplinary qualities addressed in items three and four, and the dropping of the portfolio requirement for the candidacy exam.

Gregory Smits
Director of Graduate Studies
Department of History
from: AMY R ALLEN <ara17@psu.edu>
to: Lise Nelson <lknelson@psu.edu>
cc: Leonard Richard Lawlor <lul19@psu.edu>
date: Tue, Jan 16, 2018 at 1:51 PM
subject: Re: Proposed changes to the dual-title Ph.D. in Women's Studies

Re: Proposed changes to the dual-title Ph.D. in Women's Studies

AMY R ALLEN

Jan 16 (9 days ago)
to Lise, Leonard

Dear Lise,

Thanks for bringing this to my attention. I've looked over the proposed changes and also discussed them over email with Len. We don't foresee any negative impacts of these changes on Philosophy students who are enrolled in the dual title. We agree that the revisions will improve the training of our dual title students and we are happy to support them.

Thanks, and best wishes,
Amy
POLITICAL SCIENCE

from: LEE ANN BANASZAK <lab14@psu.edu> to: Lise Nelson <lknelson@psu.edu>
cc: GLENN HUNTER PALMER <gop2@psu.edu>
date: Tue, Jan 23, 2018 at 2:27 PM

Re: Proposed degree name change, and revised degree requirements, dual-title Ph.D. Women's Studies

LEE ANN BANASZAK

2:27 PM (14 minutes ago)

Hi Lise,

This is just a short email to let you know that I have reviewed the proposed changes. The Department of Political Science unconditionally supports all of the proposed changes in the dual-PhD program. The changes largely bring the program up to date (ie. with the name change) or align the curriculum more with the goals of the PhD. Please let me know if you need any additional information.

Best,

Lee Ann

Lee Ann Banaszak
Professor and Head
Department of Political Science
The Pennsylvania State University
319 Pond Laboratory
University Park, PA 16802

E-mail: lab14@psu.edu
Tel.: 814/865-6573
Fax: 814/863-8979
from: MELVIN MICHAEL MARK <m5m@psu.edu>
to: Lise Nelson <lknelson@psu.edu>
cc: Alicia Grandey <aag6@psu.edu>
date: Thu, Jan 18, 2018 at 5:36 PM
subject: RE: proposed revisions for the dual-title in Women's Studies

MELVIN MICHAEL MARK 5:36 PM (17 hours ago)

to Lise, Alicia

Dear Lise,

On behalf of the Department of Psychology, I am pleased to endorse the proposed changes to the dual-title Ph.D. program in Women’s Studies. As you know, the Department of Psychology has long been a partner in the dual-title program, and my colleagues and I support all of the proposed changes.

Please let me know if you need anything else in support of the proposed revision.

And thanks for the opportunity to review the proposal.

mel

Melvin M. Mark,
Professor and Head of Psychology
Dear Lise,
I have reviewed the proposed changes for the dual-title, and our faculty also had a chance to comment on it. I have received no concerns, and I do not have any either. I believe the proposed changes would make the program stronger. I particularly like the encouragement for doctoral candidates to include faculty members outside their home disciplines in the committees.
I wish you the best for the future of the program, and I am looking forward to more connections between our respective students and faculty.
Laszlo

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