

GRADUATE COUNCIL MEMBERSHIP 2017-2018

Samuel Adu-Poku	Art	CCA&C Grad Program Director
Paul Louth	Dana School of Music	CCA&C CGS Committee
Laura Beadling	English	CLASS CGS Committee
Dolores Sisco	American Studies	CLASS Grad Program Director
Gail Saunders-Smith	Teacher Education	BCOE At-large
Lauren Cummins	Teacher Education	BCOE Grad Program Director
Matthew Paylo	Counseling	BCOE CGS Committee
John Hazy	Criminal Justice	BCHHS CGS Committee
Valerie O'Dell	Nursing	BCHHS Graduate Program Director
Virgil Solomon	Mech and Indus Engineering	STEM CGS Committee
Mark Womble	Biological Sciences	STEM Grad Program Director
Patrick J. Bateman	Management	WCBA Grad Program Director
Kendra Fowler	Marketing	WCBA CGS Committee
Matthew Caputo	Materials Science	Student Representative

Graduate Council Chair: Mark Womble
Graduate Council Secretary: Samuel Adu-Poku
Graduate Curriculum Committee Chair: Virgil Solomon
Admission and Appeals Committee: Dolores Sisco
Assistantship Allocation Chair : Paul Louth
Exceptions Chair: Sal Sanders
Grievance Committee Chair: Dolores Sisco
Graduate Assistant Recruitment & Retention Chair: Kendra Fowler
Policy Committee Chair: Matthew Paylo

Graduate Curriculum Committee Chair— Virgil Solomon, Mechanical Engineering

membership: Samuel Adu-Poku, Art
Daniel Ayana, History
M. Kathleen Cripe, Teacher Education
John Hazy, Criminal Justice and Forensic Sciences
Faramarz Mossayebi, Electrical & Computer Engineering
Ying Wang, Marketing
Richard Diamond (student representative)

Exceptions Committee Chair—Sal Sanders
membership: Mark Womble, Biological Sciences (Graduate Council Chair)
Matthew Paylo, Counseling (Graduate Policy Committee Chair)
Virgil Solomon, Mechanical Engineering (Graduate Curriculum Committee Chair)

Admission and Appeals Chair— Dolores Sisco, American Studies
membership: Rebecca Curnalia, Communications
Marsha Huber, Accounting and Finance
Karen Larwin, Educational Leadership
Alina Lazar, Computing and Information Systems

Policy Committee Chair— Matthew Paylo, Counseling
membership: Jonathan Caguiat, Biological Sciences
Kelly Colwell, Respiratory Care
Patricia Hoyson, Nursing
Ou Hu, Economics
G. Jay Kerns, Mathematics
Madeleine Stevens, Student Representative

Graduate Studies Advisory Council:
Carla Spackman, WCBA
Matt Caputo, STEM
Richard Diamond and Elizabeth Zoccole, HHS
Madeleine Stevens and Kelsey Pringle, BCOE
Marissa Lyerly and Max Klauscher, CCA&C
Daniel Belinky and David Wilaj, CLASS

GRADUATE FACULTY MEMBERSHIP

CATEGORY 1 MEMBERS approved 2017-18

Christopher Barzak	Kenneth Learman
Coskun Bayrak	Lillian Lewis
Joy Christiansen Erb	Kenneth Miller
Dragana Crnjak	Bradley Shellito
Donna Deblasio	David Simonelli
Kevin Disotell	Robert Thompson
Diana Fagan	Robert Twoney
Johnathan Farris	Jason Walker
Ou Hu	Eric Wingler
Michael Jerryson	

Graduate Council Policy Changes:

Change to Regionally accredited college or university requirement

Applicants with bachelor degrees, or higher from U.S. colleges or universities that are not regionally accredited, may be accepted with additional materials as determined by the Graduate Admissions Committee, (such as: a standardized test (GMAT, MAT, etc.) and writing sample of at least 1000 words with proper citations, or 9 semester hours of graduate level credit from a regionally accredited college/university). In such cases, the Graduate Admissions Committee will recommend exception, and the Dean of the College of Graduate Studies will make the admission decision.

Change to Recruiter workflow

Admission applications not approved by the program director within (5) five days, will automatically generate an email to the department chair, and the chair will be permitted to make the admission decision bypassing the program director. This will allow for quicker processing of admission applications.

Clarification of transfer hours for doctoral programs

The language was changed to clarify the requirement of the doctoral programs (addition in bold): Up to 18 semester hours (24 quarter hours) for **doctoral programs or** programs requiring 90 or more semester hours.

Change to Admission calculation

The admission calculation was changed from the combining the grades on all transcripts to using the cumulative GPA earned from the degree-granting institution only. At the request of applicant or program, the cumulative GPA can be calculated with the inclusion of the grades for all courses specified on transcripts from accredited institutions (or equivalent) up to the first bachelor's degree.

Suspension of the submission of the Program Development Plan (PDP)

CCGS has suspended the submission requirement of the PDP for new graduate programs for one year. This will allow new program proposals to move through the approval process in a shorter timeframe.

Change to Graduate Council representation

Historically, Graduate Council representation has consisted of 14 members: 1 program director and 1 College Graduate Studies Committee member from each college, 1 at-large member from BCOE and 1 student member. The at-large member from BCOE was based on the representation of graduate students; this is no longer the case. A motion was approved to eliminate the at-large member and change Graduate Council representation to 13 members: 1 program director and 1 College Graduate Studies Committee member from each college and 1 student member. The change will take effect in September 2018 with the expiration of the at-large member's term.

Admission and Appeals Standing Committee of Graduate Council

This committee reviews and makes decisions on exceptions to the Admissions requirement undergraduate institutions that are regionally accredited. They also review appeals of academic suspension. It was agreed that the committee would **not** hear appeals of admission. The committee would consist of a Graduate Council member, who would also serve as the representative from his/her college, and include a Graduate Faculty member from each college. The committee will serve a two-year term.

Change to Graduate Faculty Function Language

The Graduate Faculty ~~may shall~~ meet at stated times ~~(usually once a year),~~ or upon call of the President, ~~the~~ Dean of ~~the College of~~ Graduate Studies, or chair of Graduate Council. Twenty-five members of the Graduate Faculty shall constitute a quorum. For Graduate Council, a quorum is defined as a majority of Graduate Council members or representation from each college.

The Graduate Faculty shall directly, or through representation by Graduate Council recommend standards for admission to graduate studies, standards and requirements for the various graduate degrees, and rules and procedures to give uniformity to the quality of graduate instruction throughout the University. The Graduate Faculty shall directly, or through representation by Graduate Council ~~It shall~~ make recommendations concerning curricular activities required for graduate degrees and make suggestions to the departments concerning courses for graduate credit. It shall encourage the development and improvement of graduate work and research. Changes to the College of Graduate Studies Academic Policy Book, as summarized in Graduate Record, will be circulated to the Graduate Faculty for review on an annual basis.

Approved syllabi template

Approval of a syllabi template for graduate courses which includes learning outcomes was approved

CURRICULUM COMMITTEE REPORT 2017-18

Admission Changes

2017-17:13 Social Work. Decrease the minimum GPA for program admission from 3.25 to 3.0 on a 4.0 scale. (Change to admission requirements).

2017-17:15 Mathematics. Removal of the GRE requirement for students who have completed at least 9 hours of graduate coursework with an average 3.0 GPA. (Change to admission requirements).

2017-18:16 Economics. Alternate admission requirement for international students from Jilin University of Economics and Finance and National Chiayi University to take up to 9 semester hours of graduate credit as an undergraduate if requirements are met in outlined agreement. (Change to admission requirements).

2017-18:69 Computing and Information Systems. The GRE requirement will be waived for applicants who meet the following criterion: 1) an undergraduate cumulative GPA of 3.5 or higher, OR 2) an undergraduate cumulative GPA

of 3.0 or higher, but less than 3.5 and who have completed Calculus 1&2 earning a grade of B or higher. (Change in Admission Requirements.)

New Graduate Courses 2017-18

2017-17:4 ECON 6992 *Data Analytics -Advanced SAS Programming*. This course is designed to provide students training of advanced SAS programming for data analysis. Main topics include SQL, Macro language, Econometrics-related procedures, working with large data set, etc. Cross-listed: STAT 6912. Prereq.: ECON 6976 or equivalent and either ECON 5861 or STAT 5811.3 s.h. (Add a new 6900 level course)

2017-17:7 BIOL 6967 *Stem Cell Biology*. This course deals with the study of stem cells and their role in biology. Developmental aspects of stem cells and the relevance of stem cells to medicine and applied biology will be discussed. Prereq.: BIOL 5827 or equivalent. 3 s.h. (Add a new 6900 level course)

2017-17:11 STAT 6912 *Advanced SAS Programming for Data Analytics*. This course is designed to provide students with training in advanced SAS programming for data analytics. Main topics include SQL, Macro language, selected SAS statistical analysis procedures, and working with large data sets. Cross-listed with ECON 6992. Prereq.: STAT 6940 or ECON 6976 or equivalent and either STAT 5811 or ECON 5861. 3 s.h. (Add a new 6900 level course)

2017-17:14 Acct 6917 *MAcc Income Tax Preparation*. Students prepare basic and complex tax returns (including small business and rental returns) for taxpayers from the university and community, provide guidance to undergraduate students, and assist in training and administration of the VITA (Volunteer Income Tax Preparation) program, including e-filing returns. Prereq.: Graduate Standing. 3 s.h. (Add a new 6900 level course)

2017-18:21 HHS 6932 *Health Care Administration*. This course focuses on the fundamental philosophy and techniques common to healthcare Administration. Healthcare administration competencies are demonstrated by the student in this course via integrated learning experiences. Major components of this course are as follows: (1) communication and relationship management, (2) professionalism, (3) leadership, (4) knowledge of the healthcare system, and (5) business skills and knowledge, all of which constitute the broad competencies of healthcare administrators. Prerequisite: acceptance to the proposed MSHI Program. 3 s.h. (Add a new 6900 level course).

2017-18:20 HHS 6925 *Integration, Interoperability, and Standards*. This course explores the details of healthcare information technology (HIT) interoperability and standards. The evolution of the use of information technology for healthcare applications is considered, as well as the associated evolution in the need for integrating healthcare information systems across disparate organizations, healthcare disciplines, and technologies. Students will learn the process of HIT integration projects, and how that parallels the development process of interoperability standards. The course presents an in-depth look at standards critical to HIT interoperability- HL7 v2, HL7 v3 RIM, CDA, SNOMED, and FHIR- and at the use of those standards in national regulations and industry-wide efforts such as IHE. Students gain experience in navigating through standards documents and tools. Students will utilize the skills and knowledge gained to design a standards-based interoperability project. 3 s.h. (Add a new 6900 level course).

2017-18:22 SPED 6907 *Guidelines for Teaching Children who are Deafblind with/without Concomitant Disabilities*. This course focuses on understanding and meeting the needs of children with multiple disabilities and/or concomitant conditions in addition to visual impairment in P-12 settings. In particular, this course will emphasize the needs of the child who has combined hearing-vision loss (i.e., deafblindness or dual sensory impairments). The additional concomitant conditions may include autism, traumatic brain injury, intellectual disability, orthopedic impairments, and/or the impact of various syndromes. There is a supervised 30 field experience associated with this course. 4 s.h. (Add a new 6900 level course).

2017-18:23 SPED 6908 *Practicum in Visual Impairment*. This course represents the clinical practice/practicum portion of the EDVI program. Fifty hour of practicum experience will take place in a variety of instructional and age/grade level setting serving children with VI. Prereq.: SPED 6907. 2 s.h. (Add a new 6900 level course).

2017-18:36 BIOL 6919 *Microbiome Gut Brain Axis*. This course covers the gut microbial communities and their interactions with the enteric and central nervous systems of humans and other animal hosts. Through its interactions with the nervous system, the gut microbiome influences the emotional and cognitive centers of the brain, which in turn may affect mental health, response to stress, and other nervous system disorders. This course explores these topics based on the scientific literature, discussions, and presentations.. Prereq.: BIOL 6909 or permission of instructor. 3 s.h. (Add a new 6900 level course).

2017-18:51 FIN 6912 *Financial Statement Analysis*. Financial numbers can provide great insight to help guide and inform decisions. Participants will learn to use concepts and techniques of financial analysis to analyze reports and mini-cases of real companies to determine their financial health. Major topics include the analysis of the income statement, cash flow statement, balance sheet, and detailed examination of various financial ratios and their significance. Prereq.: FIN 6902 Graduate standing. 2 s.h. (Add a new 6900 level course).

2017-18:54 MBA 6911 *Integrated Business Solutions*. Become a successful manager, or executive, requires one to be adept at: identify/define a business problem, generating appropriate solutions, evaluating solutions, and selecting an appropriate solution, given their understanding of the problem and the dynamics of a business and the environment in which It operates. In this course you will learn concepts and techniques that will provide a strong foundation and developing these Prereq.: Graduate standing. Admitted to the MBA program. 2 s.h.. (Add a new 6900 level course).

2017-18:64 FNUT 6901 *Advanced Nutrition Assessment*. Advanced techniques for screening and assessment of nutritional status of individuals and groups, including computational analysis of dietary intake analysis, anthropometric measures and nutrition-focused physical assessment, biochemical measures and assessment of Pharmacotherapy in context of nutritional status. Prereq.:FNUT 2652, FNT 6759, FNUT 3761 or program director approval. 3 s.h. (Add a new 6900 level course).

2017-18:65 CSIS 6975 *Ethics, Legal Issues, Privacy and Information Security*. A comprehensive study of the principles and practices of computer system security, information security management, privacy, ethics, legal issues, and compliance. This course covers the foundations for the policy, law, regulatory, and ethical accountability frameworks that information security managers work within. 3 s.h. (Add a new 6900 level course.)

2017-18:72 MATH 6901 *Mathematics Workshop*. Intensive study and activity in a topic related to mathematics, its applications, or the teaching of mathematics. May be repeated. Grading is S/U. 1-6 s.h. (Add a new 6900 level course).

Changes in Graduate and Swing Courses 2017-18

2017-17:2 NURS 7038 *Adult-Gero Acute Care I Practicum*. Application of concepts, theories, and research from NURS 7037 in the acute care settings. Taken concurrently with NURS 7037. Prereq.: NURS 6902, NURS 6903 (or concurrent), NURS 6904. 4-5 s.h. (Change in course hours from 4 s.h. to 4-5 s.h.).

2017-17:5 SCWK 7008 *Social Work and the DSM*. This course examines social work in mental health and chemical dependency with an emphasis on the DSM and ICD. Application of assessment is through a bio-psycho-social-spiritual perspective with a focus on current practices. 3 s.h. (Change to existing course. Elimination of co-requisite SCWK 7009)

2017-18:18 CHEM 6977 *Teaching Practicum in Chemistry for the Allied Health Chemistry Lab*. Teaching strategies in CHEM 1510: Chemistry for the Allied Health Sciences laboratory. Students will meet with the course

instructor and must demonstrate proficiency in the material to be presented in CHEM 1510. S/U grading. May be repeated for a total of six semester hours for CHEM 6976, CHEM 6977, CHEM 6978, and CHEM 6979. Prereq. or concurrent: CHEM 6975. 2 s.h. (Change in course title and description).

2017-18:17 BIOL 5858 *Computational Bioinformatics*. Project-based learning course with a focus on concepts and practices in algorithm development and tool implementation for genomic and proteomic data analysis, data mining, and data visualization. Three hours of combined lecture and lab per week. Prereq.: BIOL 4800 or permission of instructor 3 s.h. (Change in course number, prerequisite, description and course hours).

2017-18:19 CHEM 6979 *Teaching Practicum in Chemistry in Modern Living Lab*. Teaching strategies in the Chemistry in Modern Living Laboratory. Students will meet with the course coordinator and must demonstrate proficiency in the material to be presented in CHEM 1500L. S/U Grading. May be repeated for a total of six semester hours for CHEM 6976, CHEM 6977, CHEM 6978, and CHEM 6979. Prereq. or concurrent: CHEM 6975 1 s.h. (Change in course hours).

2017-18:25 NURS 7037 *Adult Gerontology Acute Care 1*. Competencies (knowledge, skills and professional behaviors) required to provide comprehensive and holistic care to a culturally diverse, acutely ill population (young adult-frail elderly) is emphasized. Clinical manifestations of and patient response to particular patient care problems (e.g. cardiovascular, neurological etc.) with emphasis on physical assessment findings for determining a differential diagnosis and planning of patient care needs, health promotion and health maintenance. Taken concurrently with NURS 7038. Prereq.: NURS 6902, NURS 6903 (or concurrent), NURS 6904. 3 s.h. (Change to course description).

2017-18:26 NURS 7038 *Adult Gerontology Acute Care 1 Practicum*. Practicum experience in an acute care facility aligned with and taken concurrently with NURS 7039, Acute Care 1. Emphasis is placed on the APRN-patient/family relationship collaborating with the health care team and health information technology. Prereq.: NURS 6902, NURS 6903 (or concurrent), NURS 6904. 4-5 s.h. (Change to course description).

2017-18:27 NURS 7039 *Adult Gerontology Acute Care 2*. Competencies (knowledge, advanced skills and professional behaviors) required to provide comprehensive and holistic care to a culturally diverse, acutely ill adult population (young adult- frail elderly) is emphasized. Clinical manifestations of and patient response to particular patient care problems (e.g. integumentary, infectious disease) with emphasis on physical assessment findings for determining differential diagnosis and planning of patient care needs, health promotion and health maintenance. Taken concurrently with NURS 7040. Prereq.: NURS 6902, NURS 6903, NURS 6904, NURS 7017 and NURS 7038. 3 s.h. (Change to course description).

2017-18:28 NURS 7040 *Adult Gerontology Acute Care 2 Practicum*. Practicum in an acute care facility aligned to and taken concurrently with NURS 7040 Acute Care 2. Emphasis is placed on quality improvement and patient safety initiatives, interdisciplinary professional collaboration and functioning within the health system. Prereq.: NURS 6902, NURS 6903 (or concurrent), NURS 6904. 4-6 s.h. (Change to course description).

2017-18:29 NURS 7041 *Adult Gerontology Acute Care 3*. Focus on the integration of the role components delivered by the adult-gerontology nurse practitioner. Clinical manifestations of and patient response to particular patient care problems (i.e., endocrine ,gastrointestinal, multisystem, trauma) with emphasis on physical assessment findings for determining a differential diagnosis and panning of patient care needs, health promotion and health maintenance. Emphasis on utilizing diagnostic reasoning, therapeutic interventions, pharmacological therapeutics, interdisciplinary treatment plans, consultation, referral, transitional care and research findings in the management and evaluation of culturally diverse acutely ill adult-gerontology patients. Taken concurrently with NURS 7042. Prereq.: NURS 6902, NURS 6903, NURS 6904, NURS 7017, NURS 7038 and NURS 7040. 3 s.h. (Change to course description).

2017-18:30 NURS 7042 *Adult Gerontology Acute Care 3 Practicum*. Practicum designed to integrate the independent practice competencies. Emphasis is on preventing illness, promoting health and an optimal functional level. Stabilizing the ill client and minimizing complications through an interdisciplinary approach and transitional care. Possible clinical areas: acute care facilities, disease management clinics (diabetes, heart failure, pain management, dialysis), outpatient facilities (oncology, cardiac rehabilitation, short term rehabilitation, drug and alcohol centers), parish nursing, hospice and palliative care facilities. Taken concurrently with NURS 7041. Prereq.: NURS 6902, NURS 6903 (or concurrent), NURS 6904. 4-6 s.h. (Change to course description).

2017-18:31 SCWK 7002 *Trauma-Informed Practices in Social Work*. Students will learn about trauma in a way that is relevant to clinical work through a bio-psycho-social-spiritual lens. The Trauma-Informed Practices in Social Work course will assist students in developing beginning trauma competency in clinical social work practice by introducing students to the core concepts (general theory and foundational knowledge), informing evidence-based assessment and treatment for trauma-informed care. Strength-based and empowerment practices will be highlighted along with a focus on the identification of protective and promotive factors that foster resiliency and post-traumatic growth. Prereq.: SCWK 6905 3 s.h. (Change to course title and course description).

2017-18:33 STAT 5800, 5806, 6904, 6945, 6988. Remove the Prerequisite of MATH 4843. (Change Prerequisite).

2017-18:34 STAT 6943 *Mathematical Statistics 1*. Random variables, their distributions and densities. Families and exponential families of distribution. Independence, joint distributions, conditional probability and expectation. Convergence and limit theorems. Credit will not be given for both STAT 4843 and STAT 6943. Prereq.: MATH 3751/5851 or permission of graduate coordinator. 3 s.h. (Change in course description).

2017-18:35 STAT 6944 *Mathematical Statistics 2*. A study of theories and properties of statistical hypothesis testing and estimation, including maximum likelihood method, likelihood ratio tests, sufficiency, and related topics. Credit will not be given for both STAT 4844 and STAT 6944. Prereq.: STAT 4843 or STAT 6943; or permission of graduate coordinator. 3 s.h. (Change in prerequisite and course description).

2017-18:50 FIN 6902 *Financial Accounting and Finance for Decision Making*. Participants will be able to utilize foundational concepts of accounting and finance so they are able to use financial statements to determine the condition of a business. Further, participants will learn how to utilize key financial ratios, which capture key elements of a firm's performance, to be better positioned to make more informed decisions. Prereq.: Graduate standing. 2 s.h. (Change in course hours).

2017-18:52 MGT 6926 *Business Analytics*. Application of computer-based, mathematical modeling techniques to support managerial decision making, with emphasis on problem formation, sensitivity analysis, and other aspects of model interpretation. Prereq.: Graduate Standing. 2 s.h. (Change in course title).

2017-18:53 MGT 6975 *Strategic Management*. With an emphasis on problems of executive management, decision making, and administrative action, participants will develop strategic thinking capabilities through an examination of the design, implementation, and evaluation of business strategy and policy. Prereq.: FIN 6923, MGT 6930, MGT 6944, MKTG 6944. Must be taken concurrently with MGT 6976. Minimum 3.0 GPA. Admitted to the MBA program. 2 s.h. (Change in prerequisite).

2017-18:55 MBA 6931 *Professional Communication*. Effective communication is a critical component for success in the workplace. Participants will learn to design effective messages, both written and oral, for a variety of business audiences and environments. Additionally, participants will be able to manage other issues relevant to business communication, such as reputation management, employee communication and crisis management. Prereq.: Graduate standing. 1-2 s.h. (Change in course title and hours).

2017-18:56 MBA 6933 *Business Ethics & Social Responsibility*. Today, businesses must operate in increasingly complex environments, requiring their leaders to make decisions with considerations other than just "the bottom line." Participants will be able to better understand their personal and social responsibilities as business managers. In addition, participants will be equipped to not only recognize ethical issues, but to react to them by applying ethical decision-making models. Prereq.: Graduate standing. 2 s.h. (Change in course hours).

2017-18:57 MBA 6977 *Comprehensive Business Analysis*. To demonstrate a mastery of core business concepts learned throughout the MBA, participants will utilize knowledge and capabilities gained throughout the program to analyze, synthesize and present recommendations in the areas of: managing, decision making, leadership, and strategic thinking. Prereq.: MGT 6975 (or concurrent) 1-2 s.h. (Change in course title, prerequisite, description and hours).

2017-18:66 CSCI 5835 *Artificial Intelligence*. Study of the theory and applications of intelligent systems. Topics may include general problem-solving techniques, knowledge representation and expert systems, vision and perception, and natural language processing. AI systems and languages. Prereq.: CSIS 3700 or CSIS 3701. 3 s.h. (Change to prerequisite).

2017-18:67 CSIS 5837 *Artificial Intelligence in Game Design*. Artificial intelligence techniques for designing and programming intelligent non-player characters for a variety of different types of game genres. Finite and fuzzy state machines, terrain analysis and path planning, board games, language understanding, and learning. Prereq.: CSIS 3700 or CSIS 3701 or CSIS 3726 or CSCI 6901. 3 s.h. (Change to prerequisite).

2017-18:68 CSIS 5857 *Encoding and Encryption*. Securing computer and information systems through encoding and/or encryption. Private and public cryptographic methods, digital certificates and signatures, cryptovisible techniques, key management, and database security issues. Prereq.: CSIS 2605 or CSIS 2610: MATH 1513 or MATH 1552 or Math Placement Test of 4 or 40 or higher; and at least 3 s.h. of upper-division department courses. 3 s.h. (Change to prerequisite).

2017-18:58 CJFS 6995 *Criminal Justice Practicum*. Supervised experience in an applied criminal justice setting. Permit required. Prereq.: Majority of core and track courses completed and the recommendation of student's committee and approval by graduate director. 3-6 s.h. (Change in course title)

Deleted Graduate Courses 2017-18

None

Undergraduate Courses Approved for Swing Credit 2017-18

2017-17:8 CEEN 5836 *Environmental Water Chemistry*. Fundamental principles and calculations of major chemical reactions and equilibria that occur in aquatic environments, and water/wastewater treatment processes. 3 s.h. (Add a swing new 5800 level course)

2017-17:9 STAT 5811 *SAS Programming for Data Analytics*. An introduction to SAS programming for data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making. Cross-listed with ECON 5861. Prereq.: STAT 3717 or STAT 3743 or STAT 2601 or ECON 3790 or equivalent. 3.s.h. (Add a swing new 5800 level course)

2017-17:12 ECON 5861 *SAS Programming and Data Analytics*. An introduction to SAS programming and data analytics. Topics include using SAS for data processing, manipulation, visualization, reporting, and statistical analysis. The objective is for students to develop statistical computing skills for problem solving and decision making Cross-listed with STAT 5811. Prereq.: STAT 3717 or STAT 3743 or 2601 or ECON 3790 or equivalent. 3 s.h. (Add a swing new 5800 level course)

2017-18:32 AHLT 5831 *Industrial Hygiene*. Basic concepts of industrial hygiene including anticipation, recognition, and evaluation of environmental and safety hazards as they pertain to the workplace. Prereq.: AHLT 3708, AHLT 4808, or permission of instructor. 3 s.h. (Add a new swing level course).

2017-18:38 CEEN 5869 *Design of Air Pollution Control Systems*. Engineering analysis, procedures, and techniques for the selection, applications, and operation of air pollution control methods in various operational situations. 3 s.h. (Add a new swing level course).

2017-18:42 EMCE 5801 *Early Childhood Generalist-Science*. By exploring science teaching practices and technologies for grades 4-5, the candidates will review teaching methods of science, master the content stated in the Ohio Academic Learning Standards, find and design science programs and lessons, incorporate the national and state standards in teaching science, and strengthen the assessment methods for the science classroom instruction 2 s.h. (Add a new swing level course).

2017-18:43 EMCE 5802 *Early Childhood Generalist-Math*. By exploring math teaching practices and technologies for grades 4-5, the candidates will review instruction and assessment methods of mathematics, and master the content stated in the Ohio 2017 Learning Standards for Mathematics, and the Common Core Standards for Mathematics. 2 s.h. (Add a new swing level course).

2017-18:44 EMCE 5803 *Early Childhood Generalist-Language Arts*. Candidates will learn language arts content and teaching methods, design integrated lessons, incorporate state and national standards, and utilize assessment methods for grades 4-5. 2 s.h. (Add a new swing level course).

2017-18:45 EMCE 5804 *Early Childhood Generalist-The Arts, Health and Fitness*. Knowledge and application of the Arts, Health, and Fitness related to teaching practice for grades 4-5. Candidates will review content and methods of teaching the Arts, Health, and Fitness content as stated in the Ohio Academic Content Standards. Instruction on pedagogical strategies to include these content areas in the 4-5 curriculum. 1 s.h. (Add a new swing level course).

2017-18:46 EMCE 5805 *Early Childhood Generalist-Social Studies*. Candidates will learn social studies content, teaching methods, design integrated lessons, incorporate state and national standards, and utilize assessment methods for grades 4-5. 2 s.h. (Add a new swing level course).

2017-18:48 CEEN 5880 *Advanced Hydraulics*. Application of hydraulic principles for one dimensional river modeling; understanding the fundamental processes of open channel hydraulics; application of HEC-RAS/HEC-GeoRAS models for river system modeling. Prereq.: C or better in CEEN 3717, or graduate standing. 3 s.h. (Add a new swing level course).

2017-18:62 HAHS 5875: *Interprofessional Education for Health Professions*. This course promotes interprofessional collaborative learning through professional training. The core objectives are to promote values/ethics, roles/responsibilities, interprofessional community, and teamwork. This course capitalizes on cultivating collaborative experience for students to provide patient centered healthcare. The students will engage in directed readings and an interprofessional teamwork project through real cases provided by the Midlothian Free Health Clinic. The course entails the participation in a half-day workshop one Friday during the semester. Prereq.: Junior status in HAHS, Graduate student in a Health and Human Services or permission of instructor. 3.0 s.h. (Add a swing course).

New Graduate Programs 2017-18

2017-18:24 Program Action. PhD in Health Science. Full Proposal

Program Changes—Graduate Programs 2017-18

2017-17:6 Master of Public Health. Increase in online program options. The ability to offer 50% or more of the program online. (Change in program delivery).

2017-18:39 Teacher Education. Change of required courses from: EMCE 5811, 5812 and 5854 to courses: EMCE 5801, 5802, 5803, 5804, 5805. Number of required hours remains the same.

2017-18:49 MBA. Change in degree requirements.

2017-18:59 Physical Therapy. Dropping PHYT 8930 from required courses.

2017-18:60 Physical Therapy. Dropping PHYT 8932 from required courses.

2017-18:61 . Physical Therapy. Replacing PHYT 8930 and 8932 with HAHS 5875.

2017-18:63 Human Ecology. New Nutrition track to the MPH program

2017-18:70 Respiratory Care 4+1 Option.

2017-18:71. Economics. Change of hours of FIN 6902 from 1 s.h to 2 s.h. Removal of FIN 6939 and 6953 as required courses. Addition of FIN 6912 as a required course. (Change in degree requirements.)

Graduate Credit Dropped from a Swing Course 2017-18

2017-17:10 STAT 5812 *Statistical Analysis System Data and Analytics*. (Drop graduate credit from a swing course.)

2017-18:40 EMCE 5811 *Early Childhood Generalist: Math and Science*. (Drop graduate credit from a swing course).

2017-18:41 EMCE 5854 *Middle School Theory and Practice*. (Drop graduate credit from a swing course).

2017-18:47 EMCE 5812 *Integrated Language Arts and Social Studies for 4th and 5th grades*. (Drop graduate credit from a swing course).