



Graduate Council

MEMORANDUM

To: Dr. Jerome Gilbert – President

From: Dr. Tracy Christofero – Chair, Graduate Council ^{TC}

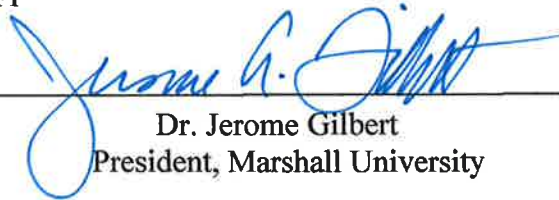
Date: December 6, 2016

Subject: **Approval of Graduate Council Minutes: December 2, 2016**

Attached are the minutes of the recent Graduate Council meeting for your review. Approval of these minutes will also serve as approval of curricular motions, graduate faculty status, etc.

Please advise if you have any comments/concerns/questions.

Minutes approved.



Dr. Jerome Gilbert
President, Marshall University

1-13-17
Date

Note to President's secretary:

Please return the signed original to Tracy Christofero with .pdf copies e-mailed to:

Dr. Tracy Christofero, Chair, Graduate Council, MUGC 328, South Charleston
Dr. David Pittenger, Dean, Graduate College, Old Main, Huntington campus
Dr. Cam Brammer, Secretary, Graduate Council, SH 248, Huntington campus
Dr. Tammy Johnson, Admissions, Old Main 102, Huntington campus
Mr. Tim Melvin, Office of Academic Affairs, Old Main, Huntington campus
Ms. Sandee Lloyd, Graduate Dean's Office, Old Main, Huntington campus
Ms. Crystal Stewart, Information Technology, Drinko 313A, Huntington campus
Ms. Sonja Cantrell, Registrar's Office, Old Main, Huntington campus

MU Graduate Council Meeting Minutes– December 2, 2016 South Charleston campus – Thomas Boardroom

Meeting began at 1:00 p.m.

Members Present: Allen, Anderson, Biros, Brammer, Christofero, De Bruin, Heaton, Howard, Lanham, Larsen, Lawrence, Muellerleile, Sollars, Vauth

Members Absent: Mehta, Ross

Ex-Officio Members Present: Pittenger, Eagle

Ex-Officio Members Absent: Maher, Ormiston

Visitors: Bobbie Nichols, Dennis Anderson

Agenda

Christofero	Announcements
Brammer	Approval of previous meeting Minutes (Attachment 1)
Christofero	Graduate faculty status candidates (Attachment 2)
Brammer	Academic Planning, Standards, & Policies (Attachment 3)
Heaton	Curriculum Committee (Attachment 4)
Anderson	Program Review
Lanham	Credentialing
Christofero	Miscellaneous Business of the Council

Please reserve these meeting dates:

- January 27, 2016 – Huntington – Drinko 349 – **NOTE THE ROOM CHANGE**
- February 24, 2017 – South Charleston – Thomas Boardroom
- March 31, 2017 – Huntington – John Spotts
- April 28, 2017 – South Charleston – Thomas Boardroom

Please remind your college and curriculum committee that beginning next month, requests are due by the first of the month for inclusion on that month's agenda.

Chair Christofero called the meeting to order at 1:00 PM.

The minutes of the October 28, 2016 GC meeting were **APPROVED**

GRADUATE FACULTY STATUS candidates (Attachment 2) APPROVED

ACADEMIC PLANNING, STANDARDS, & POLICY COMMITTEE (Attachment 3) Brammer presented requests. **APPROVED** with minor edits.

CURRICULUM COMMITTEE - See **Attachment 4** for individual course approvals and motion regarding courses presented by COEPD.

PROGRAM REVIEW COMMITTEE - Anderson requested that all Program Reviews be sent to him by Dec. 9, 2016.

CREDENTIALING COMMITTEE - Lanham reported that the committee is evaluating policy AA 20 for revision.

Motion to move to Executive Session, 2nd, **Approved**

Motion to return to regular session, 2nd, **Approved.**

Motion to approve Dean Zatar for Graduate Faculty Status, 2nd, Approved.

The meeting adjourned at 2:35 PM.

Submitted by Brammer 12-6-2016; Review/approved by Christofero 12-6-2016

Attachment 1

MU Graduate Council *PREVIOUS* Meeting Minutes Huntington Campus – John Spotts Room

Members Present: Allen, Anderson, Biros, Brammer, Christofero, De Bruin, Heaton, Howard, Lanham, Larsen, Lassiter, Mehta, Ross, Sollars, Trzyna (for Muellerleile)

Members Absent: Lawrence, Muellerleile, Vauth

Ex-Officio Members Absent: Pittenger, Eagle, Maher, Ormiston

Visitors: Tarter, Agesa , Welch, Landry

Agenda

Christofero	Announcements
Brammer	Approval of previous meeting Minutes (Attachment 1)
Christofero	Graduate faculty status candidates (Attachment 2)
Brammer	Academic Planning, Standards, & Policies (Attachment 3)
Heaton	Curriculum Committee (Attachment 4)
Anderson & Reynolds	Program Review
Lanham	Credentialing
Christofero	Miscellaneous Business of the Council

Please reserve these meeting dates:

- * December 2, 2016 – South Charleston – Thomas Boardroom
- January 27, 2016 – Huntington – TBD
- February 24, 2017 – South Charleston – Thomas Boardroom
- * March 31, 2017 – Huntington – John Spotts
- April 28, 2017 – South Charleston – Thomas Boardroom

* To assure committee members also enjoy their Thanksgiving and Spring breaks, curriculum requests are due three weeks before the posted meeting date rather than the normal two weeks. Please be sure your dean, faculty and college curriculum committee are aware of this.

Please remind your college and curriculum committee that beginning in January, requests are due by the first of the month for inclusion on that month's agenda.

Chair Christofero called the meeting to order at 1:00 PM.

The minutes of the September 30, 2016 GC meeting were **APPROVED**

GRADUATE FACULTY STATUS REQUESTS - APPROVED

ACADEMIC PLANNING, STANDARDS, & POLICY COMMITTEE

Brammer presented the items in Attachment 3. **APPROVED w/ minor edits**

CURRICULUM COMMITTEE

Heaton presented the items in Attachment 4. **APPROVED w/ minor edits**

PROGRAM REVIEW COMMITTEE

Anderson introduced Dr. Reynolds who presented instructions for reviewing programs this year. The schedule is as follows:

- Graduate Council members' reviews due by January Graduate Council meeting
- College revisions due back to Graduate Council by mid-January
- Programs to be sent reports by 12/9/2016 for revisions, if necessary
- Revised reports due back to Council by 12/16/2016
- Programs to send changes to Anderson

Programs under review and Reviewer Assignments:

Programs Under Review and Faculty Assignments			
Program	College	Faculty	Faculty
MS Adult and Technical Education	COEPD	Biros	Brammer
MA in Counseling	COEPD	Debruin	Mehta
MA in Psychology	COLA	Lanham	Larson
Psychology Doctorate (PsyD)	COLA	Sollars	Heaton
EdS in School Psychology	COLA	Howard	Allen
MA in Mathematics	COS	Howard	Allen
MS in Physical and Applied Sciences	COS	Sollars	Heaton
MS in Chemistry	COS	Lanham	Larson
MA in Elementary Education	COEPD	Anderson	Vauth
MA in Early Childhood Education	COEPD	Anderson	Vauth
MA in Secondary Education	COEPD	Anderson	Christofero
Educational Specialist (EdS)	COEPD	Biros	Brammer
MA in English (deferred from 2015-2016)	COLA	Debruin	Mehta

Note: Muellerleile not assigned due to personal emergency

CREDENTIALING COMMITTEE

Lanham reported that the Committee reviewed the credential files of **COLA** and it is **complete**. COE and COS are scheduled for Spring 2017.

The meeting adjourned at 2:05 PM

Attachment 2

Graduate Faculty Status Requests

Type	Faculty Member	College/ School	Department/Division	Graduate Faculty Level	Term Start	Term Expires
Delete	Bartolovic, Frederick	CAM	Art and Design	Graduate	09/22/2011	09/22/2016
Delete	Bookwalter, Robert	COLA	Communication Studies	Associate	10/31/10	10/31/13
Delete	Donovan, Patrick	COLA	Geography	Graduate	10/07/11	10/07/16
Delete	Lopez, Carlos	COLA	Modern Languages	Graduate	12/01/12	12/01/17
Delete	Maslowski, Robert	COLA	Humanities	Associate	01/09/12	01/09/15
Delete	O'Keefe, Stephen	COLA	Psychology	Graduate	09/30/10	09/30/15
Delete	Rushton, Catherine	SOM	Forensic Science	Associate	10/31/12	10/31/15
Delete	Twietmeyer, Gregg	COHP	SOK	Graduate	03/10/14	03/10/19
Delete	White, Benjamin	COLA	English	Graduate	09/30/10	09/30/15
Edit	Amerikaner, Martin	COLA	Psychology	Graduate	08/22/2016	12/10/2021
Edit	Young, John	COLA	English	Graduate	08/22/2016	12/10/202

Attachment 3 Academic Planning Program/Degree Requests

COLA**APPROVED**

Department: Political Science
Name of Certificate: Non-Profit Management
Credit Hours: 18 hours
Type of Change: Addition

Rationale: Meet the needs of in service professionals in any location. Increase the number of students in classes currently being offered in both the MPA program and the College of Business MBA program. Additionally, a certificate in Non-Profit Management will meet the needs of mid-level administrators for continuing education purposes. This certificate consists of already existing classes, which we hope will lead students into either the MBA or the MPA. In addition, it will be available completely online, with every class offered at least once per academic year depending on enrollment. This certificate will appeal to a greater range of people.

Effective Date: Fall 2017

Department: Geography
Major or Degree: MA and MS

APPROVED

Type of Change: *(addition, deletion, change)*; Changes

Rationale: The changes requested allow for the MA and MS Programs to be in alignment in the number of hours needed. GEO679 and GEO681 will be used for thesis hours and will provide quality control; raise admission standards for MS students; omit language referencing the old GRE scoring system; preference for departmental statistics course; change language about 600 level courses to reflect Graduate college requirements; change the language regarding minimum number of hours that must be GEO, will still allow 2 courses from outside when necessary to avoid delays in student graduation or where appropriate for a student's interests or research; finally change list of courses based on current catalog update.

Effective Date: Fall 2016

Department: Geography

APPROVED

Name of Certificate: Geospatial Information Science Certificate – Advanced

Credit Hours: 12

Type of Change: *(addition, deletion, change)*: see rationale

Rationale: *Adjust the list of choices for the required applications/research methods/internship*: Added a new course from Natural Resources and Recreation Management; deleted a course that hasn't been offered in years.

Adjust the list of GIScience electives: Added new GIS courses from Geography, Natural Resources and Recreation Management, and Physical Science.

Adjust the members of the GIScience Curriculum Committee: Faculty and staff are subject to change.

Add information about the Administrative Home of the program: Directs students, faculty and staff to the director of the program for more information.

Effective Date: Spring 17

Department: Geography

APPROVED

Name of Certificate: Geospatial Information Science Certificate-Basic

Type of Change: *(addition, deletion, change)*: see Rationale

Credit Hours: 12

Rationale: *Delete the requirement that students take courses from at least two departments*: Because of the limited number of departments that offer courses and total number of courses in the program, some students have difficulty enrolling in courses in multiple departments. In addition, in the future, it might be possible for a student to get the certificate using online courses, which might not be available from at least two departments.

Adjust the list of GIScience electives: Added new GIS courses from Geography, Natural Resources and Recreation Management, and Physical Science.

Adjust the members of the GIScience Curriculum Committee: Faculty and staff are subject to change.

Add information about the Administrative Home of the program: Directs students, faculty and staff to the director of the program for more information.

Effective Date: Spring 2017

COB

Department: Management

Major or Degree: HCA

Type of Change: Non-curricular change

Rationale: Due to new government policies that do not allow international students who are provisionally admitted to get an I-

20 the LCOB is updating its admission requirements to allow students who need additional foundations courses to be fully admitted to HCA program.

Effective Date: Fall 2016

Department: Management

Major or Degree: HRM

Type of Change: Non-Curricular

Rationale: Due to new government policies that do not allow international students who are provisionally admitted to get an I-

20 the LCOB is updating its admission requirements to allow students who need additional foundations courses to be fully admitted to HRM program.

Effective Date: Fall 2016

Department: Accounting

Major or Degree: MS in Accounting

Type of Change: Non-Curricular

Rationale: Due to new government policies that do not allow international students who are provisionally admitted to get an

i-

20 the LCOB is updating its admission requirements to allow students who need additional foundations courses to be fully admitted to MS in Accounting program.

Effective Date: Fall 2016

Department: Management

Major or Degree: MBA program

Type of Change: Non-curricular

Rationale: Due to new government policies that do not allow international students who are provisionally admitted to get an I-

20 the LCOB is updating its admission requirements to allow students who need additional foundations courses to be fully admitted to the MBA program.

Effective Date: Fall 2016

CITE

Department: The Weisberg Division of Engineering

Major or Degree: MS in Electrical and Computer Engineering (MSEE)

Type of Change: Addition of Program

Rationale: The rationale is based on need for degree in the tristate; employment opportunities for graduates; and financial gain for college and university.

Effective Date: Fall 2017

Attachment 4 Curriculum Requests

College of Education and Professional Development

Course Addition (1)

Department: Leadership Studies
 Course: LS 706 Strategic Planning in a Global Environment
 Description: This course will examine multiple types of organizations within their external context, analyze how planning is conducted as well as implemented across distance and cultures and evaluated.
 Prerequisites: None
 First Term: Spring 2018
 Credit Hours: 3

Course Changes (2)

Change Type: Title, Description, Content
 Department: Leadership Studies
 Old Title: LS 710 Principles of Leadership
 New Title: LS 710 Theories and Principles of Leadership
 Rationale: The changes reflect an expanded content. The proposed change reflects the Leadership Studies goal of broadening the curriculum thereby expanding the market. With the expected increase in enrollment, the change will support the University's overall enrollment initiative, enhance graduate education and promote faculty research and development.
 Old Descrip: This course is a study of the characteristics and behaviors of leaders. Emphasis is on the development of understandings and abilities which will work in different situations.
 New Descrip: This course is a study of the multiple theories and models of leadership and the foundational principles that anchor them. Emphasis is on understanding the qualities of theory in general and of leadership theories in particular, with a specific focus on recognizing the theoretical underpinnings of various leadership choices.

Change Type: Title, Description, Content
 Department: Leadership Studies
 Old Title: LS 756 Current Issues in Higher Education
 New Title: LS 756 Current Issues in Organizational Development
 Rationale: The changes reflect an expanded content. The proposed change reflects the Leadership Studies goal of broadening the curriculum thereby expanding the market. With the expected increase in enrollment, the change will support the University's overall enrollment initiative, enhance graduate education and promote faculty research and development.
 Old Descrip: This course focuses on current and emerging problems of higher education. It deals with both societal and internal factors which impinge on the administration of colleges and universities.
 New Descrip: This course is designed to examine current and emerging issues confronting leaders in multiple types of organizations.

Motion to have the COEPD and COB faculties have discussion regarding proposed course changes, development and delivery to ensure no conflict occurs. COEPD faculty is to report back to Council for an on-line vote on the above 3 proposals within 2 weeks (Dec. 16), 2nd, Approved.

College of Health Professions

Course Changes (2)

Change Type: Credit Hours **APPROVED**
 Department: Social Work
 Course: SWK 551 Foundations of Field Practicum
 Rationale: Social Work graduate students are often employed and require flexibility to complete field hours. Having a range of hours for field education provides a design that is more accommodating to their schedules.

Description: This is the second of two courses in M.S.W. social work practice in which the purpose continues to be preparation for student for entry professional social work practice. Within this course, students continue to apply principles that guide professional practice with particular emphasis placed on the micro level practice, working with individuals and families. (PR: SWK 501 and 511)

Credit hours: from 3 hours to a range of 1-9 hours

Change Type: Credit Hours

APPROVED

Department: Social Work
 Course: SWK 653 Advanced Field Practicum
 Rationale: Social Work graduate students are often employed and require flexibility to complete field hours. Having a range of hours for field education provides a design that is more accommodating to their schedules.

Description: Provides concentration year second semester agency-based field instruction and classroom seminar for advanced learning and practice opportunities relevant to social work. (Concurrent PR: SWK 633 and SWK 634)

Credit hours: from 3 hours to a range of 1-9 hours

College of Information Technology and Engineering
 Course Additions (22)

ALL 22 APPROVED

Department: Electrical Engineering
 Course: EE 510 Design of Digital Systems
 Description: This course provides fundamental understanding of Digital circuits. Students learn the essentials of digital circuit operation, design and simulate digital circuits using the techniques of practicing electrical and computer engineers.

Prerequisites: None
 First Term: Fall 2017
 Credit Hours: 3

Department: Electrical Engineering
 Course: EE 529 Linear Systems and Control
 Description: This course provides a rigorous introduction to the analysis and control of linear dynamical systems in time domain. The course introduces the fundamentals of linear spaces and linear operator theory.

Prerequisites: None
 First Term: Fall 2017
 Credit Hours: 3

Department: Electrical Engineering
 Course: EE 530 Cyber-Physical Systems
 Description: This course provides an introduction to modeling and analysis of cyber-physical systems. Several models of continuous-time systems and discrete-time systems are introduced.

Prerequisites: None
 First Term: Spring 2018
 Credit Hours: 3

Department: Electrical Engineering
 Course: EE 535 Power System Protection
 Description: This course covers the power system faults and application of relays for power system protection. Symmetrical components as applied fault currents. Introduction to digital filtering, microprocessor, computer simulation for relays.

Prerequisites: None
 First Term: Fall 2017
 Credit Hours: 3

- Department: Electrical Engineering
Course: EE 602 Random Signals and Noise
Description: This course provides an introduction to the fundamentals of random variables, random signals, and simulation of random phenomena.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3
- Department: Electrical Engineering
Course: EE 606 Electrical Engineering Analysis
Description: This course covers Laplace transform for boundary-value problem, applications to control theory, frequency response of ordinary differential equations, linear algebra techniques; eigenvalue analysis of linear systems and in multivariate optimization.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3
- Department: Electrical Engineering
Course: EE 607 Advanced Electrical Engineering Analysis
Description: This course covers complex functions, complex integration, vectors, matrices, functions of matrices, Cayley-Hamilton theorem, state-space modeling, optimization techniques, least squares technique, total least squares, and numerical techniques.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3
- Department: Electrical Engineering
Course: EE 608 Research Methods
Description: Overview of research methods in engineering. Research theory, design, ethics and practice. Research plan and proposal. Experimental, numerical and analytical research. Reviewing literatures, collect and analyze data quantitatively and qualitatively.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3
- Department: Electrical Engineering
Course: EE 611 Digital Integrated Circuits Design
Description: This course covers the CMOS circuits. Design approaches with emphasis placed on structures full custom design, MOS device, critical interconnect and gate characteristics. CMOS logic design from transistor to fabrication.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3
- Department: Electrical Engineering
Course: EE 615 Real-time and Embedded Systems
Description: This course covers the Designing real-time embedded systems from a hardware and software perspective. Communications and signal processing systems. Applications to seismic monitoring, process control, and biomedical systems.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3

Department: Electrical Engineering
Course: EE 618 Data and Communication Networks
Description: This course introduces the underlying concepts behind networking using the Internet and its protocols as examples.
Prerequisites: None
First Term: Fall 2018
Credit Hours: 3

Department: Electrical Engineering
Course: EE 624 Wireless Communication
Description: This course introduces fundamental technologies for wireless communication.
Prerequisites: None
First Term: Fall 2018
Credit Hours: 3

Department: Electrical Engineering
Course: EE 630 Robust Control
Description: Linear systems, norms for signals and systems, stability and performance, uncertainty and robustness, parameterization of stabilizing controllers, algebraic Riccati equations, H_2 control, and H_∞ control.
Prerequisites: None
First Term: Fall 2018
Credit Hours: 3

Department: Electrical Engineering
Course: EE 631 Optimal Control
Description: This course introduces the theory of Optimal Control. It covers evaluation methods for control signals that satisfy some physical constraints and minimize and maximize some performance measures.
Prerequisites: None
First Term: Fall 2018
Credit Hours: 3

Department: Electrical Engineering
Course: EE 636 Power System Operations and Controls
Description: This course covers modern power systems, operational, control problems, solution techniques. State estimation, contingency analysis, load-frequency control and automatic generation control, load flow analysis and external equivalents for steady-state operations.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3

Department: Electrical Engineering
Course: EE 638 Nonlinear Systems and Control
Description: The course provides a rigorous introduction to the analysis and control of nonlinear dynamical systems in time domain.
Prerequisites: None
First Term: Fall 2018
Credit Hours: 3

Department: Electrical Engineering
Course: EE 639 Distributed Power Generation Systems-Renewable Resources
Description: This course covers fundamentals of energy and sustainability; power efficiency; hydro, wind, solar, fuel systems; Converters and controllers for integration of renewable energy sources; Smart grid, hybrid generation systems.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3

Department: Electrical Engineering
Courses: EE 650-653 Special Topics
Description: Subject matter to be selected from topics of current interest
Prerequisites: As specified by instructor and approved by Divisions' Chair
First Term: Fall 2018
Credit Hours: 1-4

Department: Electrical Engineering
Course: EE 685-688 Independent Study
Description: Independent study in which a student meets regularly with a faculty member to discuss assignments.
Prerequisites: As specified by instructor and approved by Divisions' Chair
First Term: Fall 2017
Credit Hours: 1-4

Department: Electrical Engineering
Course: EE 698 Design Project
Description: The course introduces the principles of product design; specifications, evaluation of design alternatives, technical reports and oral presentations. Intellectual property, industry standards and conventions, engineering economics, reliability, safety, engineering ethics.
Prerequisites: None
First Term: Fall 2017
Credit Hours: 3

Department: Electrical Engineering
Course: EE 699 Master's Thesis
Description: This represents the course designation for a Master's Degree Research Thesis. Successful completion of a Thesis fulfills the research requirement for the M.S. degree in Electrical Engineering.
Prerequisites: EE 604, and advisor approval
First Term: Fall 2017
Credit Hours: 1-6

Department: Mechanical Engineering
Course: ME 699 Master Thesis
Description: This course covers the communication problems encountered in researching and writing a thesis; the scientific writing of a research paper, the speaking and presenting skills, and the organization skills.
Prerequisites: None
First Term: Spring 2017
Credit Hours: 1-6