MARSHALL UNIVERSITY®

Graduate Council

MEMORANDUM

To: President Stephen J. Kopp

From: Tracy Christofero – Chair, Graduate Council *TC*

Date: May 28, 2014

Subject: **Approval of Graduate Council Minutes: May 12, 2014**

Attached are the minutes of the May 12th (rescheduled from April) 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.

_____   6/3/14
Dr. Stephen J. Kopp   Date
President, Marshall University

Note to President's secretary:
    Please return the signed original to Tracy Christofero with .pdf copies e-mailed to:

> Dr. Tracy Christofero, MUGC 328, South Charleston campus
> Dr. David Pittenger, Dean, Graduate College, Old Main, Huntington campus
> Dr. Cam Brammer, Secretary, Graduate Council, SH 248, Huntington campus
> Mr. Tim Melvin, Office of Academic Affairs, Old Main, Huntington campus
> Ms. Jennifer Lauhon, Office of Academic Affairs, Old Main, Huntington campus
> Ms. Crystal Stewart, Information Technology, Drinko 313A, Huntington campus

MU Graduate Council Meeting Minutes
May 12, 2014 (rescheduled from April 25th)
South Charleston campus – Thomas Boardroom

Members Present: Anderson, Brammer, Christofero, Edington, Frank, Heaton,Lankton, Larsen, Lassite,Sollars, Spatig, Swindell, Trzyna, Watts
Members Absent: Karabetsos,(excused),****Krieg (excused)
Ex-Officio Members Present: Dean Eagle, Dean Pittenger (via phone)
Ex-Officio Members Absent: Provost Ormiston, John Maher
Guests: Newly elected members of Council

Christofero convened the meeting at 1:00 P.M.

Agenda

Christofero	Welcome, Introductions, Announcements
Christofero	Approval of previous meeting Minutes (Attachment 1)
Christofero	Report of graduate faculty status candidates (Attachment 2)
Watts	Academic Planning, Standards, & Policies (Attachment 3)
Anderson	Curriculum Committee (Attachment 4)
Swindell	Program Review & Assessment Committee
Edington	Credentialing Committee: Outstanding Graduate Advisors
Pittenger	Catalog Changes; Readers; Workflow; Medical Withdrawal (Attachment 5)
Christofero	Miscellaneous Business of the Council; 2014-2016 Officers

2014/2015 Graduate Council Meetings – Please reserve these dates!
- August 29, 2014 – Huntington – Don Morris E210
- September 26, 2014 – South Charleston – Thomas Boardroom
- October 31, 2014 – Huntington
- November 21, 2014 – South Charleston – Thomas Boardroom
- January 30, 2015 – Huntington
- February 27, 2015 – South Charleston – Thomas Boardroom
- March 27, 2015 – Huntington
- April 24, 2015 – South Charleston – Thomas Boardroom

Minutes of March Graduate Council Meeting (Attachment 1) – Approved

Graduate Faculty Status Candidates (Attachment 2) – Approved
**Graduate Council also approved Dean Kevin Yingling for Doctoral Graduate Faculty

Academic Planning, Standards, & Policies (Attachment 3)

Watts recommended the approval for the following:

Request from the College of Information Technology and Engineering, Department of Engineering. to change from Areas of Emphases to Majors within the degree program the following:

Engineering Management.
Master of Science in Engineering (MSE).
Environmental Engineering.
Transportation and Infrastructure Engineering
Second and Approved

Request from School of Pharmacy to add a course to the Major for Doctor of Pharmacy Program ---Phar 711   **Second and Approved**

Graduate Degree Addition
Master of Science in Computer Science (MSCS) Second and Approved

New course addition proposals for the following have been submitted to the Graduate Council for approval:

> CS 502: Computer Architecture
> CS 504: High Performance Computing
> CS 550: Information Retrieval
> CS 552: Natural Language Processing
> CS 605: Software Specifications
> CS 610: Software Design
> CS 615: Software Testing
> CS 620: Applied Algorithms
> CS 625: AI Principles and Methods
> 650-653 Special Topics
> CS 660: Big Data Systems
> CS 670: Visual Analytics
> 685-688 Independent Study
> CS 681: Thesis
> CS 690: Comprehensive Project

Second and Approved

See Attachment 3 for details.

Curriculum Committee (Attachment 4)
Anderson recommended to approve the following:

COS/CITE
Non-curricular Change
College: COS/CITE
Type of change request: New catalog addition
Department: Biological Sciences
Second and Approved

COB
COURSE CHANGES:
Request: Non-Curricular Change - change to admission requirements
College/School: Business
Degree Programs: HCA , HRM and MBA
Department: Management/Marketing/MIS
Second and Approved

COEPD
College:	COEPD
Department:	Adult & Technical Education
Major or Degree:	Ed.S. Adult Education
Type of Change:	Change: To align the EDS program In ATE with the other EDS programs in the College of Education and Professional Development. This change is brought about as a part of moving the supervision of the ATE program to Leadership Studies and makes use of core courses from other programs within the college. This change Is part of the BOG directive to reduce the number of programs to be more in line with the capacity of the limited number of faculty members in the program while still meeting the need for a post-masters program in ATE.

Second and Approved

Catalog Change:
College: COEPD
Department: Adult & Technical Education
Major or Degree: Ed.S. Adult Education
Second and Approved

College: COEPD
Department: Adult & Technical Education
Degree: Ed.S. Community & Technical College Studies
Type of Change: Deletion
Second and Approved

COHP
New Course Additions:
CD 674, 674L, 675, 675L, 570L, 521L   Department of Communication Disorders
PH 601, 602, 611, 615, 621, 671, 692   Department of Public Health
Second and Approved

Deletions:
CD 571, 672, 673   Department of Communication Disorders
Second and Approved

Course Title and Number Change   Department of Communication Disorders
Course Number and Title: CD 670 - Advanced Clinical Practicum
New Course Number and Title: CD 670 - Advanced Clinical Practicum I
Second and Approved

COLA
NEW COURSE ADDITION:
PSC 532   Department of Political Science
Second and Approved

Deletion of Certificates:
Department of English:
Applied Linguistics
Creative Writing
Medieval Renaissance Studies
Second and Approved

JCESOM
Course Change in Numbering:
BMS 685 to BMS 785   Department of Biomedical Sciences
Second and Approved

Non- Curricular Change and Change to Catalog:
Degree Program: M. S., Ph. D. Department of Biomedical Sciences
Second and Approved

SOP
New Course:
PHAR 711
Second and Approved

See Attachment 4 for details.

Program Review & Assessment Committee: No Report

Credentialing Committee:
Edington reported that all adjunct faculty will belisted in the Red Book beginning Fall 2014. Also announced the Outstanding Graduate Advisors for 2013-2014 for both campuses.

Dean Pittenger (via phone) presented Attachment 5 for approval.
Second and Approved

Miscellaneous Business of the Council –

Christofero reported that there were no other nominations so she will continue as Chair for the 2014-2016 term. Trzyna will continue as Vice-Chair, and Brammer will continue as Secretary.

Chair Christofero asked to move to Executive Session, **Second and Approved**
Chair Christofero asked to move from Executive Session, **Second and Approved**

Christofero Adjourned the meeting at 2:45 PM

Submitted by Brammer 5/26/14; Reviewed/revised by Christofero 5/28/14

Attachment 2
Graduate Faculty Status Requests

Type	Faculty Member	College/School	Department/Division	Graduate Faculty Level	Term Start	Term Expires
Add	Gallagher, Brian	SOP	Dept. of Pharmacy Practice, Administration, & Research	Graduate	04/09/14	04/09/19
Add	Hao, Jinsong	SOP	Dept. of Pharmaceutical Science, & Research	Doctoral	04/09/14	04/09/19
Add	Kimble, Angel	SOP	Dept. of Pharmacy Practice, Administration, & Research	Graduate	04/09/14	04/09/19
Add	Kimble, Craig	SOP	Dept. of Pharmacy Practice, Administration, & Research	Doctoral	04/09/14	04/09/19
Add	Koc, Hasan	SOP	Pharmaceutical Science & Research	Doctoral	04/09/14	04/09/19
Add	Pewen, William	COHP	Public Health	Graduate	04/23/14	04/23/19
Add	Pierre, Sandrine	SOM	Pharmacology, Physiology & Toxicology	Doctoral	05/01/14	05/01/19
Add	Prunty, Leesa	SOP	Dept. of Pharmacy Practice, Administration, & Research	Graduate	04/09/14	04/09/19
Add	Riley, Brittany	SOP	Pharmacy Practice, Administration, & Research	Graduate	04/09/14	04/09/19
Add	Schloss, John	SOP	Pharmaceutical Science & Research	Doctoral	04/16/14	04/16/19
Add	Sehgal, Inder	SOP	Dept. of Pharmaceutical Science & Research	Graduate	04/09/14	04/09/19
Add	Xie, Zijian	SOM	Pharmacology, Physiology & Toxicology	Doctoral	05/01/14	05/01/19
Add	Zhu, Guo_Zhang	COS	Biology	Graduate	04/08/14	04/08/19
Delete	Bardi, Massimo	COLA	Psychology	Doctoral	12/31/07	12/31/12
Delete	Bean, Kellie	COLA	English	Graduate	09/30/06	09/30/11
Delete	Douglas, Whitney	COLA	English	Graduate	09/30/08	09/30/13
Delete	Frazier, Lisa	SOP	Pharmacy Practice, Administration and Research	Associate	11/30/12	11/30/15
Delete	Green, Christopher	COLA	English	Graduate	09/30/10	09/30/15
Delete	Hadler, Markus	COLA	Sociology/Anthropology	Graduate	09/30/08	09/30/13
Delete	Kimberly, Broedel-Zaugg	SOP	Pharmacy Practice, Administration, and Research	Doctoral	11/30/12	11/30/17

Type	Faculty Member	College/School	Department/Division	Graduate Faculty Level	Term Start	Term Expires
Delete	Krstenansky, John	SOP	Pharmaceutical Sciences and Research	Doctoral	11/30/12	11/30/17
Delete	Pauley, Thomas	COS	Biological Sciences	Graduate	08/07/12	08/07/17
Delete	Sawrey, Robert	COLA	History	Graduate	04/30/09	04/30/14
Delete	Staton, Pamela	SOM	Forensic Science	Graduate	10/01/12	10/01/17
Edit	Archambault, Jeffrey	LCOB	Accounting/Legal Environment	Graduate	03/18/14	03/18/19
Edit	Archambault, Marie	LCOB	Accounting/Legal Environment	Graduate	03/18/14	03/18/19
Edit	Broedel-Zaugg, Kim	CAM	Pharmacy Practice, Admin & Research	Doctoral	11/30/12	11/30/17
Edit	Chiles, Chris	SOM	Forensic Science	Associate	04/14/2014	04/13/2017
Edit	Gruetter, Carl	SOM	Pharmacology, Physiology & Toxicology	Graduate	05/01/14	05/01/16
Edit	Harrison, Hayson	CAM	Art	Graduate	04/01/12	04/01/17
Edit	Jackman, Susan	SOM	Biochemistry & Microbiology	Graduate	04/01/14	03/31/16
Edit	McCumbee, William	SOM	Pharmacology, Physiology & Toxicology	Graduate	05/01/14	05/01/16
Edit	Sheehy, Mike	CAM	Journalism and Mass Communications	Associate	12/12/2012	12/12/2017
Edit	Zhu, Guo-Zhang	SOM	Anatomy & Pathology	Doctoral	04/30/14	04/30/17
Add	Yingling, Kevin	SOP	Dean	Graduate	5/12/14	5/12/19

Attachment 3:
Academic Planning, Standards, & Policies

1. Request from College of Information Technology and Engineering, Department of Engineering.

   Contact Person: Eldon R. Larsen   Phone: 304-746-2047

   Degree Program: Master of Science in Engineering (MSE).

   Effective: Spring 2015.

   Request to change from Areas of Emphases to Majors within the degree program.

   Major: Engineering Management.

   Rationale:

   For decades, the Master of Science in Engineering Degree Program (M.S.E.) has been operating with no majors, just Areas of Emphasis. Although this has worked well in part, it has left many of our students without a "major" that they would also like to have on their diplomas, and we have received feedback that students would rather have a major than an area of emphasis. Additionally, we have received very clear feedback from INTO recruiters of international students that not having majors is a huge block to recruiting more students. Areas of Emphasis go on students' transcripts, but not on their diplomas, and many feel this causes problems not only in recruiting students, but also in helping them to get jobs after graduation. Changing our three Areas of Emphasis to three majors should help the Engineering Division recruit many more students, be more competitive with other universities, help with our marketing efforts, and better fulfill the needs of our future students.

   Our plan, via this application, is to change the Engineering Management Area of Emphasis in the M.S.E. degree program to a major in Engineering Management, within the M.S.E. degree program. Currently the majority of our M.S.E. students are in the Engineering Management Area of Emphasis, and changing this to a major will cause enrollment to grow even more, making this a win/win for our students, the university, and the State of West Virginia.

   Resources: Because all of the courses for the new Engineering Management major are already being taught, and because the advising for the new major will be similar to that of the old area of emphasis, no new resources will be needed in the near term. If the program grows very substantially, we might need new faculty members in the future.

   New Catalog Description:
   ## ENGINEERING, M.S.
   ## Majors:
   ## Engineering Management
   ## Environmental Engineering
   ## Transportation and Infrastructure Engineering.

Program Description
The M.S. in Engineering (M.S.E.) program is an interdisciplinary engineering program designed to meet the specific needs of engineers employed in industry, government, and consulting. The program offers a broad core curriculum with opportunities for concentrated study in three majors: Engineering Management, Environmental Engineering, and Transportation and Infrastructure Engineering.

2. Request from College of Information Technology and Engineering, Department of Engineering.

Contact Person: Eldon R. Larsen   Phone: 304-746-2047

Degree Program: Master of Science in Engineering (MSE).

Effective: Spring 2015.

Request to change from Areas of Emphases to Majors within the degree program.

Major: Environmental Engineering.

Rationale:

For decades, the Master of Science in Engineering Degree Program (M.S.E.) has been operating with no majors, just Areas of Emphasis. Although this has worked well in part, it has left many of our students without a "major" that they would also like to have on their diplomas, and we have received feedback that students would rather have a major than an area of emphasis. Additionally, we have received very clear feedback from INTO recruiters of international students that not having majors is a huge block to recruiting more students. Areas of Emphasis go on students' transcripts, but not on their diplomas, and many feel this causes problems not only in recruiting students, but also in helping them to get jobs after graduation. Changing our three Areas of Emphasis to three majors should help the Engineering Division recruit many more students, be more competitive with other universities, help with our marketing efforts, and better fulfill the needs of our future students.

Our plan, via this application, is to change the Environmental Engineering Area of Emphasis in the M.S.E. degree program to a major in Environmental Engineering, within the M.S.E. degree program. Changing this area of emphasis to a major will cause enrollment to grow, making this a win/win for our students, the university, and the State of West Virginia.

ENGINEERING, M.S.
Majors:
Engineering Management
Environmental Engineering
Transportation and Infrastructure Engineering.

Program Description
The M.S. in Engineering (M.S.E.) program is an interdisciplinary engineering program designed to meet the specific needs of engineers employed in industry, government, and consulting. The program offers a broad core curriculum with opportunities for concentrated study in three majors: Engineering Management, Environmental Engineering, and Transportation and Infrastructure Engineering.

Because all of the courses for the new Environmental Engineering major are already being taught, and because the advising for the new major will be similar to that of the old area of emphasis, no new resources will be needed in the near term. If the program grows very substantially, we might need new faculty members in the future.

3. Request from College of Information Technology and Engineering, Department of Engineering.

Contact Person: Eldon R. Larsen   Phone: 304-746-2047

Degree Program: Master of Science in Engineering (MSE).

Effective: Spring 2015.

Request to change from Areas of Emphases to Majors within the degree program.

Major: Transportation and Infrastructure Engineering

Rationale:

For decades, the Master of Science in Engineering Degree Program (M.S.E.) has been operating with no majors, just Areas of Emphasis. Although this has worked well in part, it has left many of our students without a "major" that they would also like to have on their diplomas, and we have received feedback that students would rather have a major than an area of emphasis. Additionally, we have received very clear feedback from INTO recruiters of international students that not having majors is a huge block to recruiting more students. Areas of Emphasis go on students' transcripts, but not on their diplomas, and many feel this causes problems not only in recruiting students, but also in helping them to get jobs after graduation. Changing our three Areas of Emphasis to three majors should help the Engineering Division recruit many more students, be more competitive with other universities, help with our marketing efforts, and better fulfill the needs of our future students.

Our plan, via this application, is to change the Transportation and Infrastructure Engineering Area of Emphasis in the M.S.E. degree program to a major in Transportation and Infrastructure Engineering, within the M.S.E. degree program. Changing this to a major will cause enrollment to grow even more, making this a win/win for our students, the university, and the State of West Virginia.

Because all of the courses for the new Transportation and Infrastructure Engineering major are already being taught, and because the advising for the new major will be similar to that of the old area of emphasis, no new resources will be needed in the near term. If the program grows very substantially, we might need new faculty members in the future.

ENGINEERING, M.S.
Majors:
Engineering Management
Environmental Engineering
Transportation and Infrastructure Engineering.

Program Description
The M.S. in Engineering (M.S.E.) program is an interdisciplinary engineering program designed to meet the specific needs of engineers employed in industry, government, and consulting. The program offers a broad

core curriculum with opportunities for concentrated study in three majors: Engineering Management, Environmental Engineering, and Transportation and Infrastructure Engineering.

Academic Planning: Request from School of Pharmacy to add a course to the Major for Doctor of Pharmacy Program.
Effective: Fall 2014

Please describe any changes in curriculum:
List course number, title, credit hours. Note whether each course is required or optional. Enter NONE if no change. (May attach separate page if needed)

PHAR 711
Medication Therapy Management
1

This course is required.
This change in the curriculum will add 1 hour to the Doctor of Pharmacy degree program.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 2

Please provide a rationale for addition, deletion, change: (May attach separate page if needed)

Payors of healthcare services are requiring pharmacists to be nationally certified in providing Medication Therapy Management (MTM) in order to receive reimbursement for MTM services provided to patients. Employers of pharmacists are requiring national MTM certification as a condition of employment. Nationally, most Schools of Pharmacy have adopted, or are planning to adopt, the American Pharmacists' Association's (APhA) national certification program into their curriculum. The Marshall University School of Pharmacy (MUSOP) per the recommendation of the Curriculum Committee, which included student representatives and their unanimous support, and subsequent unanimous approval by the faculty, adopted the inclusion of the national APhA MTM certification program into the MUSOP curriculum. This will add 1 hour to the overall curriculum of the MUSOP Doctor of Pharmacy program.

MUSOP will obtain training materials from APhA. The estimated cost is $100 per student for national certification. No additional faculty, equipment, or specialized materials are required to implement this course.

Graduate Degree Addition
Master of Science in Computer Science (MSCS)
Weisberg Division of Computer Science

Program Description
The Master of Science in Computer Science (MSCS) degree is designed to provide students with the knowledge, skill, and professional practices needed to develop complex software systems. The program also prepares students who desire to pursue further graduate work leading to a Ph.D. degree.

The MSCS degree requires 30 credit hours (CR) of graduate work. At least 18 CR must come from 600-level courses. The 30 CR is comprised of the following components:

6 CR from two required 600-level CS courses: CS 620: Applied Algorithms and CS 660: Big Data Analytics.

12 CR from any 500- or 600-level CS courses.

12 CR from one of the following options:

1. Thesis option. 6 CR from any 600-level CS elective courses and completion of 6 CR of research (CS 681) and a thesis. Students must summarize their thesis work in the form of a formal, written document and deliver an oral presentation. Thesis work is typically conducted over two semesters.

2. Project option. 9 CR from any 600-level CS elective courses and completion of a 3 CR of comprehensive project (CS 690) and a report. The comprehensive project option involves collecting research literature on a topic of interest in consultation with academic advisor, critically examining the literature, and summarizing the research in the form of a formal technical report. This option may also involve developing software systems. Students must deliver an oral presentation of their findings. Student selects a topic for the report in consultation with academic advisor prior to the beginning of the last semester of study. Project work requires effort equivalent to a 3 CR course and is typically completed during the last semester of study.

Plan of Study
Students are required to complete a Plan of Study form in consultation with their academic advisors before the students can begin program of study. This is usually done the week before the first day of classes of first semester.

Core Courses

1. CS 620: Applied Algorithms
2. CS 660: Big Data Systems

500-level Elective Courses

Any of the following courses may be used as 500-level electives:
1. CS 502: Computer Architecture
2. CS 504: High Performance Computing
123. CS 505: Computing for Bioinformatics
4. CS 510: Database Systems
5. CS 540: Digital Image Processing
6. CS 550: Information Retrieval
7. CS 552: Natural Language Processing

600-level Elective Courses

Any of the following courses may be used as 600-level electives:
1. CS 605: Software Specifications
2. CS 610: Software Design
3. CS 615: Software Testing
4. CS 625: AI Principles and Methods
5. CS 630: Machine Learning
6. CS 645: Advanced Topics in Bioinformatics
7. 650-653 Special Topics
8. CS 670: Visual Analytics
9. 685-688 Independent Study
10. CS 690: Comprehensive Project
11. CS 681: Thesis

New Course Proposals Submitted

The following courses already exist in the graduate course catalog:

CS 505: Computing for Bioinformatics
CS 510: Database Systems
CS 540: Digital Image Processing
CS 630: Machine Learning
CS 645: Advanced Topics in Bioinformatics

New course addition proposals for the following have been submitted to the Graduate Council for approval:

CS 502: Computer Architecture
CS 504: High Performance Computing
CS 550: Information Retrieval
CS 552: Natural Language Processing
CS 605: Software Specifications
CS 610: Software Design
CS 615: Software Testing
CS 620: Applied Algorithms
CS 625: AI Principles and Methods
650-653 Special Topics
CS 660: Big Data Systems
CS 670: Visual Analytics
685-688 Independent Study
CS 681: Thesis
CS 690: Comprehensive Project

1. CS 502 Computer Architecture

Department: Weisberg Division of Computer Science
Course Number and Title: CS 502: Computer Architecture

Catalog Description: Design and analyze structure of major hardware components of computers including: ALU, instruction sets, memory hierarchy and caching, parallelism through multicore and many core, GPGPUs, storage systems and interfaces.

Prerequisites: None
First Term Offered: Fall 2014
Credit Hours: 3.0

2. CS 504 High Performance Computing

Department: Weisberg Division of Computer Science
Course Number and Title: CS 504: High Performance Computing

Catalog Description: Learn how to develop highly optimized applications for multi-core processors and clusters using software tools, parallel algorithms, performance profilers, and programming constructs in MPI, OpenMP, MapReduce, CUDA, and OpenCL.

Prerequisites: None
First Term Offered: Fall 2014
Credit Hours: 3.0

3. CS 550 Information Retrieval

Department: Weisberg Division of Computer Science
Course Number and Title: CS 550: Information Retrieval

Catalog Description: Study of theory and algorithms for modeling and retrieving text. Text representation, IR models, query operations, retrieval evaluation, information extraction, text classification and clustering, enterprise and Web search, recommender systems.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

4. CS 552 Natural Lang Processing

Department: Weisberg Division of Computer Science
Course Number and Title: CS 552: Natural Language Processing

Catalog Description: Fundamental algorithms and computational models for core tasks in natural language processing: word and sentence tokenization, parsing, information and meaning extraction, spelling correction, text summarization, question answering, and sentiment analysis.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

5. CS 605 Software Specifications

Department: Weisberg Division of Computer Science
Course Number and Title: CS 605: Software Specifications

Catalog Description: Study of software specification and verification technologies that facilitate: semantic reasoning; and verification of development artifacts including functional models, architecture, and source-code implementations.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

6. CS 610 Software Design

Department: Weisberg Division of Computer Science
Course Number and Title: CS 610: Software Design

Catalog Description: Study of approaches to software design that meet availability, manageability, maintainability, performance, reliability, scalability, and securability goals. Emphasis is on object-oriented analysis and design, design patterns and metrics.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

7. CS 615 Software Testing
Department: Weisberg Division of Computer Science
Course Number and Title: CS 615: Software Testing

Catalog Description: Study of methods and tools to design high quality tests during all phases of software development. Topics include test design, test automation, test coverage criteria, and how to test software.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

8. CS 620 Applied Algorithms
Department: Weisberg Division of Computer Science
Course Number and Title: CS 620: Applied Algorithms

Catalog Description: Study of clustering, graph-theoretic, genetic, probabilistic and randomized algorithms and their application to machine learning, data streams, data mining, computer vision, natural language processing, information retrieval, and bioinformatics.

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

9. CS 625 AI Principles and Methods
Department: Weisberg Division of Computer Science
Course Number and Title: CS 625: AI Principles and Methods

Catalog Description:

> Prerequisites: None
> First Term Offered: Fall 2014
> Credit Hours: 3.0

10. CS 650-653 Special Topics
Department: Weisberg Division of Computer Science
Course Number and Title: CS 650 - 653: Special Topics

Catalog Description: Study of emerging and advanced topics in Computer Science. Topics vary with instructor and change from one semester to another.

> Prerequisites: Permission of instructor
> First Term Offered: Fall 2015
> Credit Hours: 1.0 - 4.0

11. CS 660 Big Data Systems
Department: Weisberg Division of Computer Science
Course Number and Title: CS 660: Big Data Systems

Catalog Description: Learn high performance computing architectures and methods for developing and querying databases for Big Data.

> Prerequisites: None
> First Term Offered: Fall 2015
> Credit Hours: 3.0

12. CS 670 Visual Analytics

Department: Weisberg Division of Computer Science
Course Number and Title: CS 670: Visual Analytics

Catalog Description: Study of approaches, algorithms, and tools for Big Data exploration, analysis, and interpretation to enable novel discoveries and innovation. Integrating analytic capabilities of computers and domain knowledge of human analysts.

     Prerequisites: CS 660
     First Term Offered: Spring 2015
     Credit Hours: 3.0

13. CS 681 Thesis

Department: Weisberg Division of Computer Science
Course Number and Title: CS 681: Thesis

Catalog Description: Investigate a research problem of theoretical interest and practical value under mentorship of a computer science faculty.

     Prerequisites: Permission of instructor
     First Term Offered: Fall 2015
     Credit Hours: 1.0 - 6.0

14. CS 685-688 Independent Study

Department: Weisberg Division of Computer Science
Course Number and Title: CS 685 - 688: Independent Study

Catalog Description: Pursue faculty supervised, individualized course of study of a topic which is not currently a part of the Computer Science graduate curriculum.

     Prerequisites: Permission of instructor
     First Term Offered: Fall 2015
     Credit Hours: 1.0 - 4.0

15. CS 690 Comprehensive Project

Department: Weisberg Division of Computer Science
Course Number and Title: CS 690: Comprehensive Project

Catalog Description: Develop expertise in an emerging area of computer science through guided study under faculty mentorship.

     Prerequisites: Permission of instructor
     First Term Offered: Fall 2015
     Credit Hours: 3.0

Attachment 4:
Graduate Curriculum Requests
Committee Members: H. Glenn Anderson Jr. (SOP, Chair), Camilla A. Brammer (COLA), Eric Lassiter (COLA/COEPD), Vincent E. Sollars (SOM)

Non-curricular Change
College: COS/CITE
Type of change request: New catalog addition
Department: Biological Sciences
Degree program: Biological Sciences, M.S., M.A.
Effective date (Fall/Spring/Summer, Year): Summer 2014
Rational: This request is for an addition to the Graduate catalog to provide the details of the recently approved graduate certificate in Bioinformatics. The description includes admission and curriculum guidelines. The description for this certificate will be listed under the Biological Sciences graduate program and under the CITE graduate programs as the certificate is interdisciplinary and includes courses from multiple departments.

Catalog changes:
Additions/Edits to the Graduate Catalog:

Insert the highlighted on page 174 of the graduate catalog:

BIOLOGICAL SCIENCES, M.S., M.A.
      Areas of Emphasis
           Organismal, Evolutionary, and Ecological Biology
           Watershed Resource Science
      Graduate Certificate in Bioinformatics

Insert the highlighted on page 141 of the graduate catalog:

TECHNOLOGY MANAGEMENT, M.S.
      Areas of Emphasis
           Environmental Management
           Information Security
           Information Technology
           Manufacturing Systems
           Pharmacy (see TM Program Coordinator)
           Transportation Systems and Technology
      Graduate Certificate in Information Security
      Graduate Certificate in Bioinformatics

*Insert the following on page 176 (insert before the start of the Chemistry, M.S. program information), **AND** also insert on page 144, immediately following the information for the Graduate Certificate in Information Security. This is an interdisciplinary program and needs to appear in the catalog in both locations:*

GRADUATE CERTIFICATE IN BIOINFORMATICS
The Graduate Certificate in Bioinformatics is designed for students to develop a working understanding of a variety of techniques and methods for analyzing vast amounts of biological data. The source of information may be associated with recent genomic research, but may also include data sets related to other complex biological problems involving topics such as structure modeling, database mining, and visualization of complex biosystems or biomolecules.
      The certificate is designed to complement existing degrees and to suit the needs of students and professionals who want to specialize in the fast-expanding field of Bioinformatics. The certificate curriculum is interdisciplinary and includes courses from the College of Science, the College of Information Technology and Engineering, and the Marshall University School of Medicine. Through completion of the certificate, students will have acquired the necessary skills to analyze and interpret the large data sets using various Bioinformatics tools.
      Students who should apply for the certificate program would be biology, mathematics, chemistry, physics, and medical/biomedical students or Medical Doctors who desire to acquire skills required to understand bioinformatics methods and technology; computer sciences students who wish to understand biological concepts that can be analyzed using their programing

skills; or health care professionals (medical, pharmaceutical, and agricultural industries) who desire to acquire bioinformatics knowledge relevant to their field of expertise. Students will earn the certificate by completing 15 credit hours (CH) including 9 CH from 3 core courses, 3 CH from first elective course, and another 3 CH from a second elective.

Admission Requirements

1. Both senior-level undergraduate students with an overall GPA of at least 2.75 and graduate students may enroll in the certificate program.

2. Both undergraduate and graduate students must satisfy the following prerequisite requirement: Successful completion (grade C or better) of MTH 140 or MTH 229, and one of MTH 225, MTH 326, or MTH 345.

Curriculum

Course No	Course Description	Credit Hrs.
Required courses:		
CS 505	Computing for Bioinformatics	3
BSC 550	Molecular Biology	3
CS 645	Advanced Topics in Bioinformatics	3
Elective I (choose one from the following):		
BSC 453	Microbial Genetics	3
CS 510	Database Systems	3
Elective II (choose one from the following):		
BMS 617	Statistical Techniques for Biomedical Sciences	3
MTH 518	Biostatistics	3
CS 540	Digital Image Processing	3
CS 630	Machine Learning	3
	Total Certificate requirements	15

COB
COURSE CHANGES:
(1)

Request:	Non-Curricular Change - change to admission requirements
College/School:	Business
Degree Program:	HCA
Department:	Management/Marketing/MIS
Rationale:	

We are eliminating the GMAT/GRE requirements and looking more at resume, letter of recommendation, and a statement of purpose. Students can still submit score for consideration, but they would not be required.

Changes to Catalog Description: -

Admission Requirements
Full Admission
Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www.marshall.edu/graduate/admissions/how-to-apply-for-admission.*
Applicants must either have:
1. An undergraduate degree in business from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate

coursework OR have a doctoral degree from a regionally accredited institution; and completed all of the required Business Foundations courses or their equivalents within seven years of application.

Provisional Admission
Applicants who's undergraduate GPA is below a 3.0 from a regionally accredited institution and/or are lacking any Foundation requirements may be admitted provisionally until all foundations requirements are completed. Applicants with a GPA below a 3.0 can include letters of recommendation, statement of purpose, resume, or any other material that could help make your case to the Admissions Committee. While provisionally admitted, the applicant must maintain a G.P.A. of 3.0 or higher in the required foundations courses. Once all required foundations courses are completed with a 3.0 or higher average, the applicant will be eligible for full admission. Failure to complete the required Foundations courses and/or to maintain a 3.0 or higher while provisionally admitted will lead to academic probation or dismissal from the program. Required Business Foundation courses are determined by the M.B.A. Director or the GSM Academic Advisor.

Note: Applicants may be asked to submit additional material if needed before an admission decision is made. Generally, more students apply to the M.B.A. program than are accepted each year; therefore, the selection process is competitive.

Comments: Contact McInerney (304-696-2675).

(2)
Type of change request: Non-Curricular Change - change to admission
Department: Management/Marketing/MIS
Degree program: HRM
Effective date: Fall 2014

Admission Requirements
Full Admission
Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www.marshall.edu/graduate/admissions/how-to-apply-for-admission.*
Applicants must either have:
1. An undergraduate degree in business from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate coursework OR have a doctoral degree from a regionally accredited institution; and completed all of the required Business Foundations courses or their equivalents within seven years of application.

Provisional Admission
Applicants who's undergraduate GPA is below a 3.0 from a regionally accredited institution and/or are lacking any Foundation requirements may be admitted provisionally until all foundations requirements are completed. Applicants with a GPA below a 3.0 can include letters of recommendation, statement of purpose, resume, or any other material that could help make your case to the Admissions Committee. While provisionally admitted, the applicant must maintain a G.P.A. of 3.0 or higher in the required foundations courses. Once all required foundations courses are completed with a 3.0 or higher average, the applicant will be eligible for full admission. Failure to complete the required Foundations courses and/or to maintain a 3.0 or higher while provisionally admitted will lead to academic probation or dismissal from the program. Required Business Foundation courses are determined by the M.B.A. Director or the GSM Academic Advisor.

Note: Applicants may be asked to submit additional material if needed before an admission decision is made. Generally, more students apply to the M.B.A. program than are accepted each year; therefore, the selection process is competitive.

(3)

Type of change request:	Admissions
Department:	Management/Marketing/MIS
Degree program:	MBA
Effective date:	Fall 2014
Description:	

MBA
Admission Requirements
Full Admission
Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website: *www.marshall.edu/graduate/admissions/how-to-apply-for-admission.*
Applicants must either have:
1. An undergraduate degree in business from a regionally accredited institution with an undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate coursework OR have a doctoral degree from a regionally accredited institution; and completed all of the required Business Foundations courses or their equivalents within seven years of application.

Provisional Admission
Applicants who's undergraduate GPA is below a 3.0 from a regionally accredited institution and/or are lacking any Foundation requirements may be admitted provisionally until all foundations requirements are completed. Applicants with a GPA below a 3.0 can include letters of recommendation, statement of purpose, resume, or any other material that could help make your case to the Admissions Committee. While provisionally admitted, the applicant must maintain a G.P.A. of 3.0 or higher in the required foundations courses. Once all required foundations courses are completed with a 3.0 or higher average, the applicant will be eligible for full admission. Failure to complete the required Foundations courses and/or to maintain a 3.0 or higher while provisionally admitted will lead to academic probation or dismissal from the program. Required Business Foundation courses are determined by the M.B.A. Director or the GSM Academic Advisor.

Note: Applicants may be asked to submit additional material if needed before an admission decision is made. Generally, more students apply to the M.B.A. program than are accepted each year; therefore, the selection process is competitive.

(4)

Type of change request:	Admissions
Department:	Management/Marketing/MIS
Degree program: MBA	
Effective date: Fall 2014	
Justification:	Removing calculus as a requirement for the MBA program. We no longer require it on the undergraduate level and it is not used in MBA courses.
Description 1:	Below is from **Page 89** of Graduate Handbook

Admission Requirements
Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website:
www.marshall.edu/graduate/admissions/how-to-apply-for-admission.

A student admitted to the Business Foundations program may not take a 600-level course without the approval of the GSM Academic Advisor.

All required Business Foundations courses or their equivalents must have been completed within seven years of application:

Courses	Undergraduate Equivalents
Survey of Accounting Accounting 510	Principles of Accounting 6 Hours
Economic Analysis Economics 501	Principles of Economics (Micro/Macro) 6 Hours
Finance Finance 510	Principles of Finance 3 Hours
Statistics/~~Calculus~~ Management 500	Business Statistics 3 Hours
	~~Introductory Calculus~~ ~~3 Hours~~
Marketing & Management Marketing 511	Principles of Management 3 Hours
Principles of Marketing	3 Hours
Computer literacy	Computer literacy

Description 2:   From Pg 90 of the Graduate Handbook:

Graduate Certificate in Management Foundations

This certificate is designed for students with non-business undergraduate degrees. It is envisioned as a generalist overview of graduate business topics. Students desiring a fully developed master's degree in business should enroll in the MBA program. The Graduate Certificate in Management Foundations will help students to improve their depth of knowledge, remain competitive in the job market, learn new skills, advance their careers, or pursue personal enrichment.

Admission

A prospective certificate-only student should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate in Management Foundations.

Requirements
The Graduate Certificate in Management Foundations requires 18 graduate credit hours. Students must complete the series of courses with a minimum 3.0 GPA and cannot have more than two grades of **C** :

A student pursuing a certificate must complete the following courses:
Accounting 510: Survey of Accounting
Economics 501: Economic Analysis
Marketing 511: Marketing and Management

~~Management 500: Statistics/ Calculus~~
Finance 510: Finance
Elective: HRM 600, HCA 600, MGT 620, ACC 613, MGT 601, LE 691, ECN 630, MIS 678, or other course selected with advisor's approval

COEPD

NEW COURSE ADDITIONS:

COURSE CHANGES:

(5)

College:	COEPD
Department:	Adult & Technical Education
Major or Degree:	Ed.S. Adult Education
Type of Change:	Change
Rationale:	To align the EDS program In ATE with the other EDS programs in the College of Education and Professional Development. This change is brought about as a part of moving the supervision of the ATE program to Leadership Studies and makes use of core courses from other programs within the college. This change Is part of the BOG directive to reduce the number of programs to be more in line with the capacity of the limited number of faculty members in the program while still meeting the need for a post-masters program in ATE.
Contact:	Mike Cunningham, 304-746-1912

(6)

Catalog Change:

College:	COEPD
Department:	Adult & Technical Education
Major or Degree:	Ed.S. Adult Education
Contact:	Mike Cunningham, 304-746-1912

ADMISSION REQUIREMENTS: Applicants must have a master's degree in an appropriate field. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at
www.marshall.edu/graduate/admlsslonsreguirements.asp

GRADUATION REQUIREMENTS: Students must apply for graduation by the published deadline in the semester they expect to graduate. All coursework included as part of a Plan of Study must not be more than seven years old at the time of graduation.

Student	Date	Advisor	Date
DR. MICHAEL L. CUNNINGHAM, Program Director	Date	DR. TERESA EAGLE, Dean	Date

Ed.S. with Area of Emphasis in Adult and Technical Education

Program Description

The program is designed to permit specialization in the field of Adult and Technical Education. Upon admission, the department will assign an advisor who will work with the student in developing an approved program. The program is considered approved when an agreement is signed by the student, advisor and one other member of the ATE program.

Admission Requirements, M.S.

Applicants must have a master's degree from a regionally accredited institution and work experience that provides an applicable background for the program. Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsrequirements.asp.*

Program Requirements

All programs must be completed in seven years from admittance and conform to the following standards:

1. Completion of a minimum of 36 33 hours of planned, approved graduate study with a 3.25 GPA, including the following:

Core eCoursework 21 15

(NOTE: credit will not be approved for courses used in a master's program)

Minor field (approved area of specialization)..6

Adult and Technical Education Coursework..15

Research Component (ATE 677 or equivalent course by approval 679).....................3

Applied Research (Thesis, 6 hours) 6

TOTAL HOURS..3633

2. A Plan of Study will be sent to the student at the time of admission. Changes in required courses and the choice of any elective courses must be approved, and signed off by the advisor on the office copy of the Plan of Study. The Plan of Study is a student's "blueprint" for completing graduation requirements.

3. Completion of a comprehensive oral examination covering the coursework and thesis. The examination will be administered by three full-time ATE faculty members selected by the student.

COURSE NUMBER	Course Name	Credit Hours	Course Availability	Semester Taken	Grade
	Required ATE Courses				
ATE 618	Literature of Adult & Continuing Education	3	Summer		
ATE 689	Grant Writing	3	All		
ATE 701	Community & Technical College	3	Fall		
ATE 703	Applied Research in Career & Technical Center Teaching	3	Summer		
ATE 723	Perspectives & Strategies for Workforce Education	3	Summer		
	Required Core Courses				
LS 703	Research Design	3	Fall		
EDF 625	Qualitative Research in Education	3	Fall		
CIEC 700	Technology and Education	3	Fall		
EDF 711	Survey Research in Education	3	Summer		
CI 677 or HUM 604	Writing for Publication Expository Writing	3	Spring		
	Capstone Course				
ATE 679	Problem Report	3	Spring		
	TOTAL	33			

(7)

College:	COEPD
Department:	Adult & Technical Education
Degree:	Ed.S. Community & Technical College Studies
Type of Change:	Deletion
Rationale:	The EdS in Community College offered by the ATE program is intended for the same students as a program housed in the Leadership Studies Program; the EDS in Community College Administration. Since both of these programs are administratively housed within the LS/ATE program within COEPD , this arrangement is not an efficient model or wise use of scarce faculty resources. In another action request the remaining EdS in the ATE program is being revised to use a common core from the COEPD EdS program. These two actions will make the ATE program much more efficient and easier to communicate to prospective students.
Contact:	Mike Cunningham, 304-746-1912

(8)

COURSE DESCRIPTION CHANGE

Department: Special Education

Course Number and Title: CISP 606 Reading Strategies for Exceptional Students

Rationale: To more closely align course description with course content.

Course Description (old)

This course examines the purposes, findings and recommendations from the National Reading Panel (NRP) (2001) report. This report is the basis for the reform of instruction currently being carried out throughout the United States and is related to the "No Child Left Behind" legislation. In addition to examining this content of the NRP report, candidates will engage students with assessment and instructional strategies identified as having facilitative effects.

Course Description (new)

This course examines research-based strategies in reading instruction for students with high incidence disabilities. This includes application of appropriate techniques in assessment, materials, and instructional strategies for adapted reading lessons.

Catalog Description:

This course examines research-based strategies in reading instruction for students with high incidence disabilities. This includes application of appropriate techniques in assessment, materials, and instructional strategies for adapted reading lessons.

COHP

NEW COURSE ADDITIONS:

(9)

College/School:	COHP
Department:	Communication Disorders
Course:	CD 670L Clinical Issues in Health Care
Catalog Description:	This seminar will present principles and concepts related to providing clinical services in speech-language pathology in a variety of health care settings, including but not limited to acute care, long term care, home health, rehabilitation and outpatient settings.
Credit hours:	1
Prerequisites:	CD 571L
Effective date:	Fall 2014

(10)

College/School:	COHP
Department:	Public Health
Course:	PH 601 Introduction to Public Health
Catalog Description:	An introduction to public health, including its foundation and history, principles and characteristics of the discipline, professional roles, and individual career development and planning.
Credit hours:	1
Prerequisites:	None
Effective date:	Fall 2014

(11)

College/School:	COHP
Department:	Public Health
Course:	PH 602 Public Health Biology
Catalog Description:	Reviews biological bases of public health issues, including principles of disease development, including genetics, oncogenesis, and immunology. May be waived for those holding appropriate degrees in biologic or clinical sciences.
Credit hours:	2
Prerequisites:	None
Effective date:	Fall 2014

(12)

College/School:	COHP
Department:	Public Health
Course:	PH 611 Epidemiology
Catalog Description:	An introduction to basic concepts of including risk, study design, and analysis. Students apply these techniques to examine outbreaks, and evaluate preventives, diagnostics and treatments.
Credit hours:	3
Prerequisites:	None
Effective date:	Fall 2014

(13)

College/School:	COHP
Department:	Public Health
Course:	PH 615 Methods in Health Systems Research
Catalog Description:	An introduction to research in public health. Students examine prerequisites to successful study, as well as issues including funding, protocol design, data management, analysis, collaboration, and publication.
Credit hours:	3
Prerequisites:	PH 611 and 612 concurrently
Effective date:	Fall 2014

(14)

College/School:	COHP
Department:	Public Health
Course:	PH 621 Statistical Methods I
Catalog Description:	Introduction to statistical principles and methods. Includes descriptive and inferential statistics. Students will gain experience in the use of SPSS software, and in the interpretation and communication of statistical tests.
Credit hours:	3
Prerequisites:	None
Effective date:	Fall 2014

(15)

College/School:	COHP
Department:	Public Health
Course:	PH 671 Community Health
Catalog Description:	Students learn how to facilitate programs and capacity building to enable communities to identify and address health issues. Students gain training in surveying and interviewing, and in health impact assessment.
Credit hours:	3
Prerequisites:	None
Effective date:	Fall 2014

()
Department: Public Health
Course Number and Title: PH 692 - Seminar
Catalog Description: Introduction to health science literature review and
                                     critique, as well as presentation of research and
                                     practicum reports.
Prerequisites: None
First Term Offered: Fall 2014
Credit Hours: 1

(16)
Request: Graduate Course Addition
College/School: COHP
Department: CD
New Course Number and Title: CD 570L - Intro. Clinical Principles
New Catalog Description:

This lab/seminar corresponds with CD570 and will present the basic clinical principles and procedures including but not limited to professional communication, documentation, evidence-based practice, HIPAA compliance and safety issues within the MUSHC.

Prerequisites: None
Credit Hours: 1
Rationale:

The following chart has been created to provide both the college curriculum committee and the Graduate Council a schematic of the current curriculum and the proposed curriculum. It should be noted that we are not proposing to change the current practice but merely the numbering of the clinical courses our students are required to take in order to meeting the minimum of 400 clinical contact hours.

Current Clinical courses sequence Course number and Title		Proposed Clinical Course sequence Course Number and Title		Credit hours currently	Credit hours Proposed
Fall 1	CD 570 (3h) Clinical Practicum	Fall 1	CD 570 - (3h) Clinical Practicum I (previously approved by GC) CoReg. 570L (1h) Introduction to Clinical Procedures (ADDITION)	3	4
Spring 1	CD 571 (3h) Clinical Practicum	Spring 1	CD 571 (3h) Clinical Practicum II (previously approved by GC) CoReg: CD571L (1h) Clinical Principles of Assessment (ADDITION)	3	4
Fall 2	CD 670 (3h) Advanced Clinical Practicum Co Req: CD 671 (3h) Advanced Clinical Practicum (DELETION)	Fall 2	CD 670 (3h) Advanced Clinical Practicum 1 (CHANGE) Co Req: CD670L (2h) Clinical Issues in Health Care (ADDITION)	6	5
Spring 2	CD 672 (3h) Clinical Practicum in the Schools (DELETION) Co Req: CD 673 (3h) Clinical Practicum in the Schools (DELETION)	Spring 2	CD 674 (3h) Clinical Practicum in the Schools (ADDITION) Co Req: 674L (2h) Considerations in the Public School Setting (ADDITION)	6	5
Summer 2	CD 670 (3h) Advanced Clinical Practicum Co Req: CD 671 (3h) Advanced Clinical Practicum (DELETION)	Summer 2	CD 675 (3h) Advanced Clinical Practicum II (ADDITION) Co Req: 675L (3h) Professional Considerations (ADDITION)	6	6
				Both total 24 hours of clinical courses.	

Comments: Contact Pam Holland (304-696-2985).

(17)
Request: Graduate Course Addition
College/School: COHP
Department: CD
New Course Number and Title: CD 571L - Clin Prin of Assessment
New Catalog Description:

> This lab/seminar corresponds with CD571 and will present the basic clinical principles and procedures related to the evaluation process of individuals with communication and swallowing disorders.

Prerequisites: CD570L
Credit Hours: 1
Rationale: See Rationale included for CD 570L
Comments: Contact Pam Holland (304-696-2985).

(18)

Request:	Graduate Course Addition
College/School:	COHP
Department:	CD
New Course Number and Title:	CD 670L - Clinical Issues in Health Care
New Catalog Description:	

This seminar will present principles ~~and concepts related to providing~~ *related to* clinical services in speech-language pathology in a variety of health care settings, ~~including but not limited to acute care, long term care, home health, rehabilitation and outpatient settings.~~ *H*

730

Prerequisites:	CD571L
Credit Hours:	1
Rationale:	See Rationale included for CD 570L
Comments:	Contact Pam Holland (304-696-2985).

(19)

Request:	Graduate Course Addition
College/School:	COHP
Department:	CD
New Course Number and Title:	CD 674 - Clinical Practicum in the Schools
New Catalog Description:	

This course is a supervised clinical practicum with school-aged children; fulfills student teaching requirements for West Virginia Certification as a Speech Language Pathologist. (PR: Permission of instructor)

Prerequisites:	CD571
Credit Hours:	1
Rationale:	See Rationale included for CD 570L
Comments:	Contact Pam Holland (304-696-2985).

(20)

Request:	Graduate Course Addition
College/School:	COHP
Department:	CD
New Course Number and Title:	CD 674L - Considerations in Public School
New Catalog Description:	

This lab/seminar will present special considerations related to providing services in speech-language pathology in the public school setting.

Prerequisites: CD571 L
Credit Hours: 1
Rationale: See Rationale included for CD 570L
Comments: Contact Pam Holland (304-696-2985).

(21)
Request: Graduate Course Addition
College/School: COHP
Department: CD
New Course Number and Title: CD 675 - Advanced Clinical Practicum II
New Catalog Description:

This is the graduate clinical capstone experience which includes a supervised clinical practicum in the MUSHC and affiliated education, rehabilitation and medical settings. (PR: CD 670: Advanced Clinical Practicum I)

Prerequisites: CD 674
Credit Hours: 1
Rationale: See Rationale included for CD 570L
Comments: Contact Pam Holland (304-696-2985).

(22)
Request: Graduate Course Addition
College/School: COHP
Department: CD
New Course Number and Title: CD 675L - Professional Considerations
New Catalog Description:

This lab corresponds with CD 675, the graduate clinical capstone and will provide a forum for students to solidify knowledge and skills for professional practice. (co-requisite to CD 675: Advanced Clinical Practicum II)

Prerequisites: CD 674
Credit Hours: 1
Rationale: See Rationale included for CD 570L
Comments: Contact Pam Holland (304-696-2985).

COURSE DELETIONS:
(23)

Request:	Graduate Course Deletion
College/School:	COHP
Department:	CD
Course Number and Title:	CD 671 - Advanced Clinical Practicum
Rationale:	

> Clinical Practicum course and labs are being revised and re-ordered for increased transparency of the sequence and co-requisites.

Comments: Contact Pam Holland (304-696-2985).

(24)

Request:	Graduate Course Deletion
College/School:	COHP
Department:	CD
Course Number and Title:	CD 673 - Practicum in Schools
Rationale:	

> Clinical Practicum course and labs are being revised and re-ordered for increased transparency of the sequence and co-requisites.

Comments:	Contact Pam Holland (304-696-2985).
0	
Department:	Communication Disorders
Course Number and Title:	CD 672 Clinical Practicum in the Schools
Rationale for deletion:	Clinical Practicum course and labs are being revised and re-ordered for increased transparency of the sequence and co-requisites.
Final Term Offered:	Spring 2014
Courses added:	CD 674L- Considerations in Public Schools

COURSE CHANGES:
(25)

Request:	Graduate Course Change
College/School:	COHP
Department:	CD
Old Course Number and Title:	CD 670 - Advanced Clinical Practicum
New Course Number and Title:	CD 670 - Advanced Clinical Practicum I
Rationale:	

> This change is being made to clearly delineate the sequence of clinical practicum courses in year two.

Old/New Catalog Description:

From	Supervised clinical practicum in the Marshall University Speech and Hearing Center and in affiliated educational, rehabilitation and medical settings. (CD 670 may be repeated but only a total of six hours may be applied to a master's degree in accordance with the American Speech-Language-Hearing Association's standard regarding application of practicum credits to master's degree programs) (PR: CD 570 or permission of instructor)
To	Supervised clinical practicum in the Marshall University Speech and Hearing Center and in affiliated educational, rehabilitation and medical settings with corresponding professional responsibilities. (PR: CD 571 or permission of instructor)

Rationale:

The change in the description includes the 1) Change of CD 571 as a prerequisite and 2) removal of the following statement: (CD 670 may be repeated but only a total of six hours may be applied to a master's degree in accordance with the American Speech- Language-Hearing Association's standard regarding application of practicum credits to master's degree programs). This is no longer accurate based on the course number changes proposed.

Comments: Contact Pam Holland (304-696-2985).

COLA
NEW COURSE ADDITIONS:

(26)

Department:	Political Science
Course Number and Title:	PSC 532 - Principles of Nonprofit Management
Catalog Description:	This course examines the principles and applied practices of nonprofit administration including theories of nonprofit formation, fundraising appeals, executive leadership, marketing, budgeting, and strategic management.
Prerequisites:	N/A
First Term Offered:	Spring 2015
Credit Hours:	3.0

DELECTION OF CERTIFICATE:
(27)

Department:	English
Name of Certificate:	Applied Linguistics
Credit Hours:	15
Type of Change:	deletion
Rationale:	After careful consideration of the Applied Linguistics Certificate, English Department faculty voted to delete the certificate because the Applied Linguistics Certificate requirements overlap with the English MA with an area of emphasis in TESOL requirements and we do not have a separate assessment plan for the Applied Linguistics Certificate.

(28)

Department:	English
Name of Certificate:	Creative Writing
Credit Hours:	15
Type of Change:	deletion
Rationale:	After careful consideration of the Creative Writing

Certificate, English Department faculty voted to delete the certificate because the Creative Writing Certificate requirements overlap with the English MA requirements and we do not have a separate assessment plan for the Creative Writing Certificate.

(29)

Department:	English
Name of Certificate:	Medieval and Renaissance Studies
Credit Hours:	15
Type of Change:	deletion
Rationale:	After careful consideration of the Medieval and Renaissance Studies Certificate, English Department faculty voted to delete the certificate because the Medieval and Renaissance Certificate requirements overlap with the English MA requirements and we do not have a separate assessment plan for the Medieval and Renaissance Studies Certificate.

JCESOM

NEW COURSE ADDITIONS:

COURSE CHANGES:

(30)

Department:	Biomedical Sciences
Current Course Number/Title:	BMS 685/Introduction to Research
New Course Number:	BMS 785
Rationale:	This course is taken by MD-PhD students while they are in medical school. To receive financial aid, they must be registered for courses that are numbered 700 or above. MS and PhD students will also take the same course.
Catalog Description:	Introduction to Research. 1-6 hrs. I, II, S. CR/NC Directed research activities requiring a completed prospectus for an advanced research project, a written report, or a research thesis. A minimum of three (3) hours required for all M.S. candidates. (PR: Consent of instructor)
Credit Hours:	1-6 (Every student takes it for 3 hours.)

NONCURRICULAR CHAGES

(31)

Type of change request:	Non-curricular change to catalog
Department:	Biomedical Sciences
Degree program:	M.S., Ph.D.
Effective Date:	Fall 2014
Summary of Change Request:	

School of Medicine

Dr. Joseph Shapiro, Dean
http://musom.marshall.edu

BIOMEDICAL SCIENCES, M.S., Ph.D.

Areas of Emphasis

Cancer Biology
Cardiovascular Disease, Obesity, and Diabetes
Infectious and Immunological Diseases
Medical Sciences (M.S. only)
Neuroscience and Developmental Biology
Toxicology and Environmental Health Sciences

Program Description

The basic science departments of the Joan C. Edwards School of Medicine offer an interdisciplinary program leading to the Master of Science and Doctor of Philosophy degrees in Biomedical Sciences. The primary aim of the Biomedical Sciences (BMS) ~~program~~ Program is to produce graduate students who are broadly based in the biomedical sciences with ~~definite~~ defined interests and special in-depth training in one of the following areas of emphasis: cancer biology; cardiovascular disease, obesity, and diabetes; infectious and immunological diseases; neuroscience and developmental biology; and toxicology and environmental health sciences. These areas are designed to be flexible and research-oriented in order to develop the interests, capabilities and potential of all students pursuing careers in academic or industrial biomedical sciences.

In addition, the BMS ~~program~~ Program offers a non-thesis Master of Science degree in ~~a~~ the medical sciences area of emphasis to improve the science foundation of students seeking admission into doctoral programs in ~~medicine~~ the health professions. This area of emphasis is also for students wishing to pursue non-research careers in the health professions or in the biotechnology and pharmaceutical industries.

Admission into this program does not guarantee admission into medical school. Students in this area of emphasis are required to pay ~~a~~ the Health Professions Fee each semester while enrolled in the program. Because of the nature of the curriculum, applicants to the medical sciences area of emphasis will only be considered for admission for the Fall semester.

The Biomedical Sciences Doctor of Philosophy Degree program accepts a very limited number of students to study concurrently with the Doctor of Medicine degree.

Admission Requirements

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissions/how-to-apply-for-admission*.

Applicants must also meet the admissions requirements of the Graduate Studies Committee of Marshall University's Joan C. Edwards School of Medicine. Interested persons should contact the Biomedical Sciences Graduate Program, Byrd Biotechnology Science Center, Marshall University School of Medicine, One John Marshall Drive, Huntington, WV 25755 or via the Internet at *www.marshall.edu/bms/future-students/application-information*.

Minimum Requirements for Admission into Master of Science or Doctor of Philosophy Program

All applicants must have baccalaureate degrees ~~in one of the sciences~~, with one year of general biology, physics, general chemistry, and organic chemistry, all with associated laboratories. Although biochemistry, cell biology, calculus and physical chemistry are not requirements for admission, they may be required for certain areas of emphasis and are highly recommended.

- Graduate Record Examination (GRE) General Test scores (scores may not be more than ~~three (3)~~ five (5) years old at the application deadline for the Ph.D. program or at the start of the semester when matriculating for the M.S. program) or MCAT scores (~~Medical Sciences~~ medical sciences area of emphasis only, minimum of 22 total)
- Three letters of recommendation from references familiar with the applicant's relevant academic/professional performance
- ~~a personal~~ A written statement describing educational and career goals~~.~~

Ph.D. Applications

The completed application, application fee, official transcripts and official GRE ~~or MCAT~~ scores should be received in the Graduate Admissions Office by January 15th ~~for summer or fall applications~~ in order for the application to be considered by the program.

Letters of recommendation and personal statements should be received in the BMS Office by January 15th ~~for summer or fall applications~~ in order for the application to be considered complete and for an admission decision to be rendered.

Applications completed very soon after the above stated deadlines may be considered at the discretion of the BMS Graduate Studies committee.

New Ph.D. students will matriculate in July (Summer III term).

M.S. Applications

The completed application, application fee, official transcripts, three letters of recommendation, written statement, and official GRE or MCAT scores (MCAT scores accepted for medical sciences area of emphasis only) should be received in the Graduate Admissions Office by June 1st for ~~summer or~~ fall applications in order for the application to be considered by the Program.

Duration of Degree Programs

Students generally complete the requirements for the Master of Science degree within two to three years. Those who pursue the doctoral degree usually complete the requirements within five to six years. Students who possess ~~a~~ an M.S. degree in ~~Biomedical Sciences~~ biomedical sciences or the equivalent when admitted into the doctoral degree program generally require three to four years to complete the Doctor of Philosophy degree.

BIOMEDICAL SCIENCES, M.S.

All students are required to meet the general requirements of the Graduate College for receipt of a master's degree. A minimum of ~~thirty-six~~ 36 credit hours is required for a non-thesis degree, while a minimum of ~~thirty-two~~ 32 credit hours is required for the thesis degree. No more than six hours of thesis (BMS 681) may be credited toward the ~~thirty-two~~ 32-hour requirement. Each student will specialize in one of the six areas of emphasis as defined in the program overview. All students are required to successfully complete Foundations of Biomedical Sciences (BMS 600, 7 hrs.), Statistics/Biostatistics (BMS 617, MTH 518, BSC 517~~,~~ PSY 517, EDF 517 or equivalent, 3 or 4 hrs.), Responsible Conduct of Research (Research students only, BMS 644, 1 hr.), Biomedical Sciences Communication Skills (Research students only, BMS 660/661, 1 hr. each), Introduction to Research (BMS 685, minimum of 3 hrs.), and Seminar (BMS 680, minimum of 4 hrs.). In addition, the student must successfully complete other courses required by his/her area of emphasis and advisory committee, and pass a written and/or oral comprehensive examination.

SOP

NEW COURSE ADDITIONS:

(32)

Department:	SOP
Course Number and Title:	PHAR 711 Medication Therapy Management
Catalog Description:	The student will learn to resolve medication-related problems to reduce costs and improve outcomes.
Prerequisites:	P3 standing
First Term Offered:	Fall 2014
Credit Hours:	1
Contact:	Glenn Anderson – 62305

Attachment 5:
ATTACHMENT 5 ADDENDUM (4/30/2014)

Dear Dr. Christofero,

In a previous note regarding the issuance of tuition waivers to students and staff, I focused primarily on the concern that one member of the Graduate Council was not aware of the benefit and its administration. Although my note offered a cursory history – as relayed by former deans – a more detailed account of benefit is warranted. Please consider the following.

As Dr. Deutsch relayed to me, the granting of tuition waivers was regulated by State Code. That regulation no longer exists. Beginning in the 2008-2009 academic year, the University implemented a number of changes to the waiver process. These include:

1. The budgeted waiver amount for Marshall employees was established with the 2009-10 expenditure of approximately $170,000, although the actual utilization does not reach that level.
2. The practice of providing a special fee waiver preference for employees of other higher education institutions ceased after 2009-10 and those waiver amounts were reallocated to fund the initial cost of the employee dependent tuition assistance benefit (about $98,000). These employees of other institutions are still considered for waivers provided to the general graduate student population.
3. The amount used for "merit" waivers for the general graduate student population was approximately $518,000 in 2007-08, and the budget for subsequent years has been reduced by 15% to 20% of the previous year's budget each year to $174,640 for the current year.
4. The Huntington and South Charleston campuses had separate budgets for waivers. Those budgets were combined in 2011-12, and managed centrally by the Graduate College.
5. The selection criteria were modified to ensure that the same students were not always receiving the waivers and benefitting from a significantly-reduced cost of education to the exclusion of other graduate students. Students can no longer receive the waivers in consecutive semesters.

I hope that these points will provide the members of the Graduate Council a more robust review of this student and employee benefit.

With regards,

David J. Pittenger, Ph.D.
Interim Associate Vice President for Outreach and Continuing Studies
Interim Dean of the Graduate College
Marshall University
113 Old Main
One John Marshall Drive, Huntington, WV 25755