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

NOTE: Before you submit a request for a new Major or Degree, you must submit an INTENT TO PLAN form. Only after the INTENT TO PLAN goes through the approval process are you ready to submit this request for a new Major or Degree. For detailed information on new programs please see: http://wvhepcdoc.wvnet.edu/resources/133-11.pdf.

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: Health Professions

Dept/Division: SOK- Biomechanics

Contact Person: Suzanne Konz

Phone: 696-2926

Degree Program: Biomechanics

Check action requested: ☐ Addition ☐ Deletion ☒ Change

Effective Term/Year: Fall 20 ☐ Spring 20 17 Summer 20 ☐

Information on the following pages must be completed before signatures are obtained.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head	Date 9/29/16
College Curriculum Chair	Date 10/13/16
College Dean	Date 10/31/16
Graduate Council Chair	Date 11-27-16
Provost/VP Academic Affairs	Date
Presidential Approval	Date
Board of Governors Approval	Date

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)

The MS in Biomechanics needs changing to reflect updated course names and descriptions (HS 615 and HS 635) as well as to add a new required course (HS 535). These changes increase the required course work credit hours from 21 credits to 24. The course names and descriptions were changed to eliminate confusion while providing better content information. The new required course is a MATLAB application and coding class specific to Biomechanics and human performance. Students need to be able to customize software to analyze the data collected. Potential Biomechanics employers require thier employees to be able to perform this skill. Faculty have also developed two new elective courses for students to take (HS 578 and HS 595). The adjustments to the major will make our students more competitive and qualified for employment after graduation.

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)
See attached.

1. ADDITIONAL RESOURCE REQUIREMENTS: If your program requires additional faculty, equipment or specialized materials to ADD or CHANGE this major or degree, attach an estimate of the time and money required to secure these items.
NOTE: Approval of this form does not imply approval for additional resources. Enter NONE if not applicable.

There would be the potential for additional GA or RA at the Ph.D. educational level to assist with Biomechanial lab oversight as well as the training of student use of lab equipment.

2. NON-DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the request and any response received from them. Enter NONE if not applicable.

NONE

For catalog changes as a result of the above actions, please fill in the following pages.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 3

3. *Current* Catalog Description

Insert the *Current* Catalog Description and page number from the latest catalog for entries you would like to change. (May attach separate page if needed)

See Attached.

4. *Edits* to the Current Description

Attach a PDF copy of the current catalog description prepared in MS WORD with strikethroughs to mark proposed deletions and use the highlight function to indicate proposed new text.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 4

5. *New* Catalog Description

Insert a 'clean' copy of your proposed description, i.e., no strikethroughs or highlighting included. This should be what you are proposing for the new description. (May attach separate page if needed)

See Attached.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 5

Please insert in the text box below your change summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Major or Degree:
Type of Change: *(addition, deletion, change)*
Rationale:

HS 535 - Biomechanical Instrumentation with Data Procession in MATLAB (3)
Type of Change: ADDITION - Required
Rationale: Required course that will allow students to develop the skills necessary to manipulate and process biomechanical data by learning MATLAB coding. Students will continue to work on refining data collection skills in conjunction with the coding. Employers are looking for candidates with MATLAB coding skills.

HS 615 - Kinematic Analysis and Application in Biomechanics. (3)
Type of Change: CHANGE - Required
Rationale: The changes in this required course help to differentiate it clearly from HS 635. The name change and improved course description help to clarify that this class will allow students to experience and develop the skills needed to effectively use kinematic research tools.

HS 635 - Kinetic Analysis and Application in Biomechanics. (3)
Type of Change: CHANGE - Required
Rationale: The changes in this required course help to differentiate it clearly from HS 615. The name change and improved course description help to clarify that this class will allow students to experience and develop the skills needed to effectively use kinetic research tools.

HS 578 - Biomechanics: Research Practicum. (3)
Type of Change: Addition - Elective
Rationale: This course will allow the student to work within the lab developing collaborative skills working with all projects occurring with the labs. The student will be responsible for assisting in all aspects of the research process. The student will be responsible for developing, collecting, processing, analyzing, and submitting a project for presentation or publication as part of a study currently being conducted within the lab.

HS 595 - Trends in Biomechanical Analysis II. (3)
Type of Change: Addition - Elective
Rationale: The purpose of this course is to expose the student to the research process as it pertains to the field of biomechanics. This course will allow the student to work within the lab developing an independent project. The student will be responsible for all aspects of the research process. The student will be responsible for developing, collecting, processing, analyzing, and submitting a project for presentation or publication as part of their project.

M.S. - Biomechanics- Change of Degree

Please describe any changes in curriculum

The required credit hour within the MS- Biomechanics increases from 24 hours to 27 hours. The student will have 9 remaining credit hours of electives.

HS 535 - Biomechanical Instrumentation with Data Procession in MATLAB (3)
Type of Change: ADDITION - Required

HS 615 - Kinematic Analysis and Application in Biomechanics. (3)
Type of Change: CHANGE - Required

HS 635 - Kinetic Analysis and Application in Biomechanics. (3)
Type of Change: CHANGE - Required

HS 578 - Biomechanics: Research Practicum. (3)
Type of Change: Addition - Elective

HS 595 - Trends in Biomechanical Analysis II. (3)
Type of Change: Addition - Elective

3. Current Catalog Description

Biomechanics

Program Description
Biomechanics is the study of forces and their effects on living systems. Biomechanics provides advanced knowledge in biomechanics particularly related to performance enhancement and injury prevention. Students focus their academic course work on developing the ability to understand and apply the principles of biomechanics when serving as a movement analyst in competitive and recreational sport situations, as well as in the workplace.

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.
Prospective students wishing to enter Biomechanics at MU must meet all MU admission criteria for the graduate level and be fully admitted to the MU graduate program. In addition to the MU graduate college admission criteria, all students must apply to the College of Health Professions Biomechanics program. Completion of the undergraduate degree at MU does not guarantee admission to the M.S. program; however, preference will be given to Marshall alumni if all things are equal.

Additional admission requirements exist for the M.S. in Biomechanics program (see below).
Students may enter the program in three ways: 1} at the completion of a bachelor's degree, 2) transfer from another accredited university or school of higher learning, or, 3} after the junior year of a B.S. degree program with permission of the dean of the College of Health Professions (MU students only). Criteria for admission will match the MU standards for admission to graduate programs. Specifically, a student who desires admission as a degree-seeking graduate student must have an overall undergraduate

Grade Point Average (GPA) of at least 2.75 on a 4.0 scale and must submit GRE scores and three letters of reference. To continue in the M.S. in Biomechanics program, students are required to maintain a 3.0 GPA in all coursework.

Program Requirements

The M.S in Biomechanics will consist of at least 36 post-baccalaureate credit hours that will be taken in a prescribed sequence to be developed by the student's graduate committee advisor. Students without a background in biomechanics will be advised to take additional foundation biomechanical courses. The Master of Science program consists of the following coursework:

Required

- EDF 517 Statistical Methods
- ESS 670 Research in Physical Education
- HS 610 Advanced Biomechanics
- HS 615 Mechanical Analysis
- HS 635 Research Methods for Biomechanics
- HS 650 Gait
- HS 681 Thesis or HS 660, Internship

Electives (12 hours)

These are only suggested courses. Some course may require permission from the instructor prior to enrollment. All pre-requisites must be met.

- ESS 578 Exercise Metabolism
- ESS 601 Advanced Exercise Testing
- ESS 621 Exercise Physiology I
- ESS 636 Structural Kinesiology
- ESS 642 Devising and Implementing Training and Conditioning Programs
- ESS 651 Mechanical Analysis of Motor Skills
- ESS 670 Research in Kinesiology
- HP 605 Medical Vocabularies and Classification Systems
- ESS 644 Cardiovascular Exercise Physiology
- ESS 645 Respiratory Exercise Physiology
- ACB 620 Gross Anatomy/Embryology
- BMS 600 Foundations of Biomedical Science
- BMS 628 Neuroscience I
- BMS 629 Neuroscience II
- BMS 630 Neuroscience
- BMS 632 Neuroscience Research Techniques
- DTS 670 Advanced Medical Nutrition Therapy I
- EDF 616 Advanced Studies in Human Development
- EDF 617 Multiple Regression
- MTH 518 Biostatistics
- MPNA 724 Evidence-Based Research Methods I
- MPNA 725 Evidence-Based Research Methods II
- MPNA 726 Statistical Methods for Research
- SFT 560 Fundamentals of Ergonomics
- SFT 610 Concepts in Occupational Safety and Health
- SFT 630 Research in Occupational Safety and Health
- SFT 645 Safety Engineering and Equipment Design
- SFT 660 Human Factors in Accident Prevention

Thesis or Comprehensive Examination
The thesis project is a collaborative academic effort between the student and the faculty of the School of Kinesiology. The student can receive up to 6 credit hours toward his or her 36 credit hour degree requirement. The thesis project and oral defense of the student's thesis project must occur prior to the completion of the student's final semester in the program. The thesis project needs to reflect an effort that is at least equivalent to the 6 credit hours and is to be completed over 2 or more semesters.

As an alternative to a thesis project, a student can chose to take a written/oral comprehensive examination. The comprehensive examination will consist of responses to written and verbal questions that are prepared by select faculty members of the School of Kinesiology.

HEALTH SCIENCE (HS)
610 Advanced Biomechanics. 3 hrs.
An advanced investigation into Newtonian mechanics and their application their uses in human movement analysis.

615 Mechanical Analysis of Activity. 3 hrs.
An investigation into the instrumentation used in biomechanical research and the effective use of it in biomechanical research. (PR: HS 610 Advanced Biomechanics or equivalent, Fundamental Physics and Linear Algebra)

635 Research Methods in Biomechanics. 3 hrs.
This course is designed to provide an understanding of technology use in biomechanics, effective methods development, and analysis of collected data. (PR: HS 615 or equivalent, Fundamental Physics and Linear Algebra)

4. EDITS to the Current Catalog Description

Biomechanics

Program Description
Biomechanics is the study of forces and their effects on living systems. Biomechanics provides advanced knowledge in biomechanics particularly related to performance enhancement and injury prevention. Students focus their academic course work on developing the ability to understand and apply the principles of biomechanics when serving as a movement analyst in competitive and recreational sport situations, as well as in the workplace.

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.
Prospective students wishing to enter Biomechanics at MU must meet all MU admission criteria for the graduate level and be fully admitted to the MU graduate program. In addition to the MU graduate college admission criteria, all students must apply to the College of Health Professions Biomechanics program. Completion of the undergraduate degree at MU does not guarantee admission to the M.S. program; however, preference will be given to Marshall alumni if all things are equal.

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Students may enter the program in three ways: 1) at the completion of a bachelor's degree, 2) transfer from another accredited university or school of higher learning, or, 3) after the junior year of a B.S.

degree program with permission of the dean of the College of Health Professions (MU students only). Criteria for admission will match the MU standards for admission to graduate programs. Specifically, a student who desires admission as a degree-seeking graduate student must have an overall undergraduate Grade Point Average (GPA) of at least 2.75 on a 4.0 scale and must submit GRE scores and three letters of reference. To continue in the M.S. in Biomechanics program, students are required to maintain a 3.0 GPA in all coursework.

Program Requirements

The M.S in Biomechanics will consist of at least 36 post-baccalaureate credit hours that will be taken in a prescribed sequence to be developed by the student's graduate committee advisor. Students without a background in biomechanics will be advised to take additional foundation biomechanical courses. The Master of Science program consists of the following coursework:

Required (24 hours)

EDF 517 - Statistical Methods (3)
ESS 670 - Research in Physical Education (3)
HS 535 - Biomechanical Instrumentation with Data Procession in MATLAB (3)
HS 610 - Advanced Biomechanics (3)
HS 615 - Kinematic Analysis and Application in Biomechanics. ~~Mechanical Analysis~~ (3)
HS 635 - Kinetic Analysis and Application in Biomechanics~~Research Methods for Biomechanics~~ (3)
HS 650 - Gait (3)
HS 681 - Thesis or HS 660~~,~~ - Internship (3)

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Electives (9 hours)

These are only suggested courses. Some course may require permission from the instructor prior to enrollment. All pre-requisites must be met.

HS 578 - Biomechanics: Research Practicum. (3)
HS 595 - Trends in Biomechanical Analysis II. (3)
ESS 578 Exercise Metabolism
ESS 601 Advanced Exercise Testing
ESS 621 Exercise Physiology I
ESS 636 Structural Kinesiology
ESS 642 Devising and Implementing Training and Conditioning Programs
ESS 651 Mechanical Analysis of Motor Skills
ESS 670 Research in Kinesiology
HP 605 Medical Vocabularies and Classification Systems
ESS 644 Cardiovascular Exercise Physiology
ESS 645 Respiratory Exercise Physiology
ACB 620 Gross Anatomy/Embryology
BMS 600 Foundations of Biomedical Science
BMS 628 Neuroscience I
BMS 629 Neuroscience II
BMS 630 Neuroscience
BMS 632 Neuroscience Research Techniques
DTS 670 Advanced Medical Nutrition Therapy I
EDF 616 Advanced Studies in Human Development
EDF 617 Multiple Regression
MTH 518 Biostatistics
MPNA 724 Evidence-Based Research Methods I
MPNA 725 Evidence-Based Research Methods II

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MPNA 726 Statistical Methods for Research
SFT 560 Fundamentals of Ergonomics
SFT 610 Concepts in Occupational Safety and Health
SFT 630 Research in Occupational Safety and Health
SFT 645 Safety Engineering and Equipment Design
SFT 660 Human Factors in Accident Prevention

Thesis or Comprehensive Examination
The thesis project is a collaborative academic effort between the student and the faculty of the School of Kinesiology. The student can receive up to 6 credit hours toward his or her 36 credit hour degree requirement. The thesis project and oral defense of the student's thesis project must occur prior to the completion of the student's final semester in the program. The thesis project needs to reflect an effort that is at least equivalent to the 6 credit hours and is to be completed over 2 or more semesters.

As an alternative to a thesis project, a student can chose to take a written/oral comprehensive examination. The comprehensive examination will consist of responses to written and verbal questions that are prepared by select faculty members of the School of Kinesiology.

HEALTH SCIENCE (HS)
535 Biomechanical Instrumentation with Data Procession in MATLAB 3 hrs.

This course teaches students the skills to use biomechanical sensors as instruments for research, and the use of MatLab programming language to process the data they collect from their instruments.

578 Biomechanics: Research Practicum. 3 hrs.
This course offers "hands-on" work within the biomechanics lab. The student will assist with current research. This experience that allows students to gain practical experience within a lab setting.

610 Advanced Biomechanics. 3 hrs.
An advanced investigation into Newtonian mechanics and their application their uses in human movement analysis.

615 Mechanical Analysis of Activity. 3 hrs.
~~An investigation into the instrumentation used in biomechanical research and the effective use of it in biomechanical research.~~ This course entails a study of kinematics as it relates to the analysis of human movement involving the mechanical and anatomical characteristics of physical skills through the utilization research equipment. (PR: ~~HS 610 Advanced Biomechanics or equivalent,~~ Fundamental Physics and Linear Algebra)

635 Research Methods in Biomechanics. 3 hrs.
~~This course is designed to provide an understanding of technology use in biomechanics, effective methods development, and analysis of collected data.~~ Students will gain knowledge regarding biomechanics technologies to measure kinetics, acquire the skills to investigate forces and the human body, and learn how to process, analyze, and interpret kinetic data. (PR: ~~HS 615 or equivalent,~~ Fundamental Physics and Linear Algebra)

5. NEW Catalog Description

Biomechanics

Program Description
Biomechanics is the study of forces and their effects on living systems. Biomechanics provides advanced knowledge in biomechanics particularly related to performance enhancement and injury prevention. Students focus their academic course work on developing the ability to understand and apply the principles of biomechanics when serving as a movement analyst in competitive and recreational sport situations, as well as in the workplace.

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.
Prospective students wishing to enter Biomechanics at MU must meet all MU admission criteria for the graduate level and be fully admitted to the MU graduate program. In addition to the MU graduate college admission criteria, all students must apply to the College of Health Professions Biomechanics program. Completion of the undergraduate degree at MU does not guarantee admission to the M.S. program; however, preference will be given to Marshall alumni if all things are equal.

Additional admission requirements exist for the M.S. in Biomechanics program (see below).
Students may enter the program in three ways: 1} at the completion of a bachelor's degree, 2) transfer from another accredited university or school of higher learning, or, 3} after the junior year of a B.S. degree program with permission of the dean of the College of Health Professions (MU students only). Criteria for admission will match the MU standards for admission to graduate programs. Specifically, a student who desires admission as a degree-seeking graduate student must have an overall undergraduate Grade Point Average (GPA) of at least 2.75 on a 4.0 scale and must submit GRE scores and three letters of reference. To continue in the M.S. in Biomechanics program, students are required to maintain a 3.0 GPA in all coursework.
Program Requirements
The M.S in Biomechanics will consist of at least 36 post-baccalaureate credit hours that will be taken in a prescribed sequence to be developed by the student's graduate committee advisor. Students without a background in biomechanics will be advised to take additional foundation biomechanical courses. The Master of Science program consists of the following coursework:

Required (24 hours)
- EDF 517 - Statistical Methods (3)
- ESS 670 - Research in Physical Education (3)
- HS 535 - Biomechanical Instrumentation with Data Procession in MATLAB (3)
- HS 610 - Advanced Biomechanics (3)
- HS 615 - Kinematic Analysis and Application in Biomechanics. (3)
- HS 635 - Kinetic Analysis and Application in Biomechanics (3)
- HS 650 - Gait (3)

HS 681 - Thesis or HS 660- Internship(3)

Electives (9 hours)
These are only suggested courses. Some course may require permission from the instructor prior to enrollment. All pre-requisites must be met.
- HS 578 - Biomechanics: Research Practicum. (3)
- HS 595 - Trends in Biomechanical Analysis II. (3)
- ESS 578 Exercise Metabolism
- ESS 601 Advanced Exercise Testing
- ESS 621 Exercise Physiology I

ESS 636 Structural Kinesiology
ESS 642 Devising and Implementing Training and Conditioning Programs
ESS 651 Mechanical Analysis of Motor Skills
ESS 670 Research in Kinesiology
HP 605 Medical Vocabularies and Classification Systems
ESS 644 Cardiovascular Exercise Physiology
ESS 645 Respiratory Exercise Physiology
ACB 620 Gross Anatomy/Embryology
BMS 600 Foundations of Biomedical Science
BMS 628 Neuroscience I
BMS 629 Neuroscience II
BMS 630 Neuroscience
BMS 632 Neuroscience Research Techniques
DTS 670 Advanced Medical Nutrition Therapy I
EDF 616 Advanced Studies in Human Development
EDF 617 Multiple Regression
MTH 518 Biostatistics
MPNA 724 Evidence-Based Research Methods I
MPNA 725 Evidence-Based Research Methods II
MPNA 726 Statistical Methods for Research
SFT 560 Fundamentals of Ergonomics
SFT 610 Concepts in Occupational Safety and Health
SFT 630 Research in Occupational Safety and Health
SFT 645 Safety Engineering and Equipment Design
SFT 660 Human Factors in Accident Prevention

Thesis or Comprehensive Examination
The thesis project is a collaborative academic effort between the student and the faculty of the School of Kinesiology. The student can receive up to 6 credit hours toward his or her 36 credit hour degree requirement. The thesis project and oral defense of the student's thesis project must occur prior to the completion of the student's final semester in the program. The thesis project needs to reflect an effort that is at least equivalent to the 6 credit hours and is to be completed over 2 or more semesters.

As an alternative to a thesis project, a student can chose to take a written/oral comprehensive examination. The comprehensive examination will consist of responses to written and verbal questions that are prepared by select faculty members of the School of Kinesiology.

Catalog Course Descriptions.
HS 535 Biomechanical Instrumentation with Data Procession in MATLAB 3 hrs.

This course teaches students the skills to use biomechanical sensors as instruments for research, and the use of MatLab programming language to process the data they collect from their instruments.

HS 578 Biomechanics: Research Practicum. 3 hrs.
This course offers "hands-on" work within the biomechanics lab. The student will assist with current research. This experience that allows students to gain practical experience within a lab setting.

HS 615 Kinematic Analysis and Application in Biomechanics. 3 hrs.

This course entails a study of kinematics as it relates to the analysis of human movement involving the mechanical and anatomical characteristics of physical skills through the utilization research equipment. (PR: Fundamental Physics and Linear Algebra)

HS 635 Kinetic Analysis and Application in Biomechanics. 3 hrs.

Students will gain knowledge regarding biomechanics technologies to measure kinetics, acquire the skills to investigate forces and the human body, and learn how to process, analyze, and interpret kinetic data. (PR: Fundamental Physics and Linear Algebra)

Chair: Tracy Christofero

GC#6: Course Addition

Request for Graduate Course Addition

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: COLA Dept/Division: CMMStudies Alpha Designator/Number: CMM677 (◉) Graded ( ) CR/NC

Contact Person: Barbara J. Tarter Phone: (304) 696-2700

NEW COURSE DATA:

New Course Title: Grantwriting for Nonprofits

Alpha Designator/Number: C M M ~~6 7 7~~ 680 88C

Title Abbreviation: G r a n t w r i t i n g - N o n p r o f i t s

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

Provides a communication framework for analyzing a nonprofit agency; [illegible]; reviews the steps in grantwriting; matches the needs of the nonprofit organization with the grantfunder; and syntheses the material required to write a successful grant.

Co-requisite(s): None First Term to be Offered: Fall 2017

Prerequisite(s): None Credit Hours: 3 credits

Course(s) being deleted in place of this addition (*must submit course deletion form*): Not Applicable

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head *Cam Brammer*	Date 9/15/16
Registrar *Sonya G Cart* 090101	Date 9/16/16
College Curriculum Chair *[signature]*	Date 10/7/16
Graduate Council Chair *T Christofero*	Date 11-27-16

Form updated 10/2011

Rec'd In COLA Office
Date: 9/15/16

Request for Graduate Course Addition - Page 2

College: COLA Department/Division: Communication Studies Alpha Designator/Number: CMM677

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. FACULTY: Identify by name the faculty in your department/division who may teach this course.

Barbara J. Tarter

2. DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the proposal. Enter "***Not Applicable***" if not applicable.

Not Applicable

3. REQUIRED COURSE: If this course will be required by another deparment(s), identify it/them by name. Enter "***Not Applicable***" if not applicable.

Not Applicable

4. AGREEMENTS: If there are any agreements required to provide clinical experiences, attach the details and the signed agreement. Enter "***Not Applicable***" if not applicable.

Not Applicable

5. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials to teach this course, attach an estimate of the time and money required to secure these items. (Note: Approval of this form does not imply approval for additional resources.) Enter "***Not Applicable***" if not applicable.

Not Applicable

6. COURSE OBJECTIVES: (May be submitted as a separate document)

See Attached

Please note that this course has been offered as a Special Topics Course - Fall 2014, and is currently being offered during this term - Fall 2016.

7. COURSE OUTLINE (May be submitted as a separate document)

See Attached

8. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATES (May be submitted as a separate document)

Much of the material for this course is found on-line. The Community Toolbox will be used, found at ctb.ku.edu, for an analysis of the Nonprofit Agency; the Kellogg Foundaion Evaluation Handbook will be used to assess grant feasibility; the Logic Model Development Guide by the Kellogg Foundation will be used to analyze the steps to developing an effective project for a grant; the Purdue Owl will be used as it relates to grammar, writing style, and formatting; grants.gov will be used to locate potential federal grants; the Foundation Center--housed at the Cabell Library--will be used to locate foundation grants; material will be adapted from the American Grant Writers' Association to provide a format for effective inquiry letters and budgets; and a variety of articles will be posted on Blackboard that will be used to explain the steps to writing an effective grant. There really are not currently many "textbooks" about grantwriting. The book by Clarke (2009) entitled Storytelling for Grant Seekers: A Guide to Nonprofit Fundraising, will be used for the needs portion of the grants. Further, a host of statistical sites will be used to develop the needs sections.

9. EXAMPLE OF INSTRUCTIONAL METHODS (Lecture, lab, internship)

In addition to lectures, much of the material will be explained using in-class exercises. Speakers and a trip to the Cabell Library for an explanation of the Foundation Centers resources are also included. In-class writing activities will be used throughout and students are required to bring laptops to the class. Students will also locate a nonprofit agency to work with throughout the term and will gain information from this source as well. Reports from the agency to the instructor will occur twice during the semester.

Request for Graduate Course Addition - Page 4

10. EXAMPLE EVALUATION METHODS (CHAPTER, MIDTERM, FINAL, PROJECTS, ETC.)

Analysis of the Organization using the Evaluation of a Public Health Association; midterm & final; Electronic Needs Notebook; Draft Grant; Final Grant; Assignment locating federal and foundation grants; and Reviewer Evaluations

11. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE/GRADUATE COURSE

Not Applicable

12. PROVIDE COMPLETE BIBLIOGRAPHY (May be submitted as a separate document)

See Attached

Request for Graduate Course Addition - Page 5

Please insert in the text box below your course summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Course Number and Title:
Catalog Description:
Prerequisites:
First Term Offered:
Credit Hours:

Department: Communication Studies
Course Number and Title: CMM677 Grantwriting for Nonprofits
Catalog Description: Provides a communication framework for analyzing a nonprofit agency; identifies search methods for locating federal, state and foundation grants; reviews the steps in grantwriting; matches the needs of the nonprofit organization with the grantfunder; and syntheses the material required to write a successful grant.
Prerequisites: None
First Term Offered: Fall 2017
Credit Hours: 3

Special Topics: Grant Writing for Nonprofits– Fall 2016

SpTp: Grant Writing - 1802 - CMM 677 - 101

Instructor: Dr. Barbara J. Tarter (tarterb@marshall.edu)
Classroom: Smith Hall 261
Main Office: Smith Hall 257 (304) 696-6786

Personal Office: Smith Hall 271 Phone: (304) 696-2700

Office Hours**

TIME	Monday	Tuesday	Wednesday	Thursday
12:00-1:00			**Office Hours 12:00-1:00** (May have faculty meeting or Huntington City Mission Meeting)	
1:00-2:00	**Office Hours 1:00-2:00**	**Office Hours 1:00-2:00**	**Office Hours 1:00-2:00**	
2:00-3:00	**Persuasion 2:00-3:15 (Smith 261)**	**First Year Seminar 2:00-3:15 (Smith 263)**	**Persuasion 2:00-3:15 (Smith 261)**	**First Year Seminar 2:00-3:15 (Smith 263)**
3:00-4:00	**Office Hours 3:15-4:45**	**Office Hours 3:15-4:15**	**Office Hours 3:15-4:15**	**Office Hours 3:15-5:15**
4:00-5:00				
6:00-6:30	**Office Hours 6:00-6:30**			
6:30-7:00	**Grant-Writing-Graduate Class 6:30-9:00 Smith (261)**	**Tri-State Literacy Tutor (6:30-8:30)**		
7:00-8:00				
8:00-9:00				

**If the current office hours do not meet your needs, please let me know and additional times can be made available.

Textbooks:

Clarke, C. A. (2009). *Storytelling for grantseekers: A guide to nonprofit fundraising.* San Francisco, CA: Jossey-Bass.

Most of the readings will be placed on blackboard, provided in class, or links provided.

This course is a Special Topics course focused on learning the complex steps of grant writing. The course requires the application of communication skills throughout the grant process and will include analyzing the grant seeking organization for strengths and weaknesses related to grant seeking; exploring potential sources of grants; providing a step-by-step process for obtaining a grant; and participating in a grant evaluation process.

Communication Program Student Learning Outcomes

1. Understand basic concepts associated with the primary theories of communication.
2. Write a clear, concise, and reasoned paper on topics dealing with the concepts of communication.
3. Understand the research literature underlying the discipline of communication.
4. Demonstrate speaking competencies by composing a message; provide ideas and information suitable to the theory and audience.
5. Basic understanding of the nature of scientific inquiry, as applied to human behavior.
6. Familiarity with the four research methods commonly used to study human communication behaviors.
7. Greater skill in analytical thinking and writing.
8. Demonstrate "sense-making," the ability to apply knowledge to actual experience.

Relationships among Course, CMM Program, and MU Degree Profile Outcomes

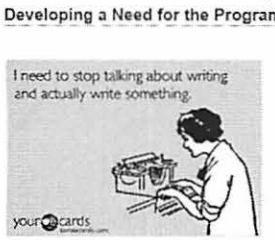
Course Outcomes	How Accomplished in this Course	How Evaluated in this Course	Program Outcomes	Degree Profile Outcomes
Students will locate resources supporting a need for the grant proposal	Classroom Discussion; Readings; Discussion Prompts; Lectures	Resource Needs Notebook; Draft Grant Proposal; Final Grant Proposal	5	Inquiry-based thinking
Students will analyze the staff, clients, and programs of a nonprofit organization to determine strengths, weaknesses and greatest needs.	Survey Tools; Interviews; Observation; Classroom Discussions; Lectures; Discussion Prompts; Readings	Organizational Analysis; Draft Grant Proposal; Final Grant Proposal	2, 8	Analytical inquiry
Students will combine the knowledge of the nonprofit organization with the mission and focus of the grant funder to generate an effective grant.	Guest Speakers; Discussion Prompts; Lectures; Classroom Interaction; Readings	Potential Grant Funders; Project Plan and Evaluation; Project Budget; Draft Grant Proposal; Final Grant Proposal	2, 7, 8	Integrative thinking Communication Fluency
Students will effectively apply the application of specific grant criteria to a variety of grants	Classroom Interactions; Lectures;	Reviewers Evaluations; Draft Grant Proposal;	4, 5, 7, 8	Communication Fluency

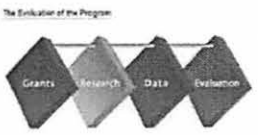
	Discussion Prompts; Readings;	Final Grant Proposal		Analytical Inquiry
Students will investigate the needs of the client population as they relate to current research and data related to the grant topic.	Classroom Interactions; Discussion Prompts; Readings	Resource Needs Notebook; Potential Grant Funders; Draft and Final Grant Proposal	1, 2, 3, 8	Broad Integrative Knowledge; Specialized Knowledge Communication Fluency

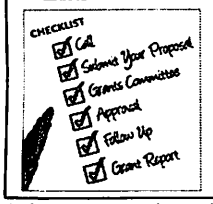
Assignments:

Date*	Topic	Readings	Assignments
Learning About the Organization			
August 22, 2016 	Benefits of Grant Writing "Knowing the Organization is a key to grant success" Program Evaluation	**Blackboard Readings** Evaluation of a Public Health Program Participatory Approaches to Planning Community Interventions Communicating Well Clark – Chapter 1	
August 29, 2016 	The Grant Process "Just the Basics" Review of the Parts of a Grant Types of Grants	**Blackboard Readings** Nonprofit 2013 Report Eight Steps to Grant Writing Debunking Grant Writing Myths How to Write a Grant The Art of Grantmanship Types of Grant Givers	**Assignment 1 – Organizational Letter of Commitment**
September 5, 2016	**Labor Day** – University Closed		

Finding Federal, State, and Foundation Grants			
September 12, 2016 	Locating Federal and State Grants	**Blackboard Readings** Federal Grant Stages Applying for Federal Grants System for Award Management (SAM) General Overview of Applying for Federal Grants Grant Terminology Grants.gov at http://www.grants.gov/applicants/apply-for-grants.html	**Assignment 2 – Organizational Analysis**
September 19, 2016 Locating Grants FOUNDATION CENTER FUNDING INFORMATION NETWORK	Locating Foundation Grants "Where do I start"? "Match the needs of your Organization to the needs of the Foundation"	Clark (Chapters 2 & 3) https://fconline.foundationcenter.org/welcome/tour **Blackboard Readings** Grant Writing Resources on the Web Funding Sources	Foundation Center **Meet at the Cabell County Library Ms. Mary Lou Pratt Speaker: Ms. Mary Lou Pratt
September 26, 2016	**Paul Daugherty** President & CEO at Philanthropy WV United States | Philanthropy  **Philanthropy WV**		**Assignment 3 – Locating Federal, State, and Foundation Grants**
Parts of a Grant			

October 3, 2016 	The Proposal "What is it that you are trying to accomplish"?	Clark (Chapter 4) **Blackboard Readings** Gherman, S. C. (2012) The Art of Grant Writing: Communicating Your Vision to Funders. Washington: Booktrope Editions. Short Course in Proposal Writing How to Write a Grant Proposal Sample Grant – Wind Energy	
October 10, 2016 	The Need for the Program "Why should the funding agency care"? Establish a Clear Timetable	Clark (Chapter 5) **Blackboard Readings** Logic Model Getting Your Share of the Pie Identifying a Project Select a Grant and Start Writing Smooth Words...	
October 17, 2016 	The Plan The Story Arc	Clark (Chapter 6) **Blackboard Readings** Building a Common Outcome Collaborative Grantmaking	
October 24, 2016			**EXAM I**

October 31, 2016 	The Evaluation of the Program	Clark (Chapter 7) **Blackboard Readings** Mapping Change The Evaluation Handbook	**Assignment 4 - Electronic Needs Resource Notebook**
November 7, 2016 	The Budget	Clark (Chapter 8) **Blackboard Readings** Successful and Unsuccessful Budgets Developing Your Budget	
November 14, 2016 	The Review Process	**Blackboard Readings** Corporation for National and Community Service Review Review SAMHSA	**Assignment 5 - The Draft Grant Proposal** **(Please bring 2 hard copies to class)**
November 21, 2016 – November 26, 2016 **Thanksgiving Holiday**			
November 28, 2016 	The Pre-Proposal Letter Abstracts Letters of Support	Clark (Chapter 4) **Blackboard Readings**	**Assignment 6 - Reviewers Evaluations**
December 5, 2016			**EXAM II**
December 12, 2016			

			**Assignment 7 - Final Grant**

*Please note: the syllabus is subject to change with the needs of the class and the instructor. There will also likely be added material to Blackboard, throughout the semester.

Assignments:

Assignment 1 - Organizational Letter of Commitment – The purpose of the *organizational letter of commitment* is to make sure that the nonprofit organization clearly understands their role in the grant-writing process. It protects you by asking them to commit to meeting with you for a period of time during the semester, so that you will have the material necessary to be successful. It also provides a structure for the organization so that they can understand what you are trying to accomplish. Ultimately, the decision to submit any grant that you write rests with the organization, so they need to feel like they are part of the process. You might also provide them with a syllabus so that they can follow along with the course. The organization will be asked to provide a brief acknowledgement of your participation with them both mid-semester and at the end of the semester. **(Not Graded)**

Assignment 2 - Organizational Analysis – This assignment involves a detailed analysis of the organization so that you have the best understanding possible, prior to starting the actual grant process. The assignment also is a good introduction to the logic model, which you will use in the development of the actual grant. A format is provided on Blackboard and will also be reviewed during class. **(15%)**

Assignment 3 - Locating Federal, State and Foundation Grants – A large part of grant writing is finding the best match for your organization's needs. This assignment will require exploring the three types of grants to find those that might be the best match. **(10%)**

EXAM I – Exams will be discussed in greater detail as we get closer. The material will be determined by the greatest needs of the class, with respect to understanding the material. **(15%)**

Assignment 4 - Electronic Needs Resource Notebook - Many would argue that this is the most important area of grant writing. The question is--why the funding agency should put your grant over others that have been submitted? This notebook should focus specifically on the proposal of your organization and should include news articles, research studies, statistical information about the population served, organizational material, and other documents that will be used in supporting the organization's needs.

Since these documents will be submitted electronically, all paper copies will need to be scanned into the overall document. A table of contents should be included that indicates the topics covered by the material. **(15%)**

Assignment 5 -Draft Grant Proposal – This is an excellent opportunity for you to receive feedback from others in the class and the instructor, prior to submitting the final grant. **(Not Graded)**

Assignment 6 – Reviewers Evaluations – This assignment includes the evaluation of your feedback to others, in the class, regarding their draft grants. Through reviewing other grants, you may be able to find things to include in your own. It will also provide an opportunity for you to use an evaluation sheet to rate the other grants, as a reviewer would be doing with yours. **(10 %)**

EXAM II – See Above – Depending on the needs of the class, it is possible that we will flip the exam and the final proposal due dates. **(15%)**

Assignment 7 - Final Grant Proposal – This should include your work throughout the entire semester. The evaluation will be based on the requirements of your specific grant-funding agency and your application of the needs of your organization. Further details will be provided throughout the course. **(20%)**

Assignments

	Percent	**Due Date**
Assignment 1 - Organizational Letter of Commitment	**Not Graded**	August 29, 2016
Assignment 2 - Organizational Analysis	**15%**	September 12, 2016
Assignment 3 - Locating Federal, State and Foundation Grants	**10%**	September 26, 2016
EXAM I	**15%**	October 24, 2016
Assignment 4 - Electronic Needs Resource Notebook	**15%**	October 31, 2016
Assignment 5 -Draft Grant Proposal	**Not Graded**	November 14, 2016
Assignment 6 – Reviewers Evaluations	**10%**	November 28, 2016
EXAM II	**15%**	December 5, 2016
Assignment 7 - Final Grant Proposal	**20%**	December 12, 2016
TOTAL:	**100%**	

Reference List– CMM 677 Grant Writing for Nonprofits

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Chair: Tracy Christofero | **GC#7: Course Change**

Request for Graduate Course Change

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: Business | Dept/Division: Fin & Econ | Current Alpha Designator/Number: Fin/665

Contact Person: Shaorong Zhang | Phone: 696-2605

CURRENT COURSE DATA:

Course Title: Portfolio Theory and Capital Markets

Alpha Designator/Number: F i n 6 6 5

Title Abbreviation: PORTFOLIO THEORY & CAPITAL

1. Complete this **five** page form in its entirety and route through the departments/committees below for changes to a course involving: course title, alpha designator, course number, course content, credit hours, or catalog description.
2. If this change will affect other departments that require this course, please send a memo to the affected department and include it with this packet, as well as the response received from the affected department.
3. If the changes made to this course will make the course similar in title or content to another department's courses, please send a memo to the affected department and include it with this packet as well as the response received from the affected department.
4. List courses, if any, that will be deleted because of this change (*must submit course deletion form).*
5. If the faculty requirements and/or equipment need to be changed upon approval of this proposal, attach a written estimate of additional needs.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head	Date 09/07/2016
Registrar 520201	Date 9/8/16
College Curriculum Chair	Date 27 SEP 16
Graduate Council Chair K Christofero	Date 11-27-16

Request for Graduate Course Change - Page 2

College: Business | Department/Division: Fin & Econ | Alpha Designator/Number: Fin/665

Provide complete information regarding the course change for each topic listed below.

Change in CATALOG TITLE: ☒ YES ☐ NO

From: PORTFOLIOTHEORYANDCAPITALMARKE (limited to 30 characters and spaces)

To: INVESTMENTS

If Yes, Rationale: The current title does not reflect what should be taught in this class. The Capital Markets part should not be the main emphasis of this class, but should taught in more depth in another graduate finance course Fin627 Financial Institutions and Markets. The title 'Investments' is more commonly used in most finance programs.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☒ YES ☐ NO

From: 665 To: 623

If Yes, Rationale: The current number is not consistent with the typical sequencing of finance courses in the graduate curriculum.

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

Change in CATALOG DESCRIPTION: ☒ YES ☐ NO IF YES, fill in below:

From: A study of modern portfolio theory and capital market theory as applied to portfolio management. Real-world considerations are introduced through case studies and management of simulated portfolios.

To: A study of fundamental investment principles, modern portfolio theory, and portfolio formation process and the evaluation of portfolio performance.

If Yes Rationale: The current description is too narrow in scope and does not include all the major topics to be taught in this class.

Change in COURSE CREDIT HOURS: ☐ YES ☒ NO If YES, fill in below:

NOTE: If credit hours increase/decrease, please provide documentation that specifies the adjusted work requirements.

From

To

Change in COURSE CONTENT: ☐ YES ☒ NO

From

To

Rationale

Request for Graduate Course Change-Page 4

College: Business

Department: Finance and Economics

Course Number/Title Fin623/Investments

1. REQUIRED COURSE: If this course is required by another department(s), identify it/them by name and attach the written notification you sent to them announcing to them the proposed change and any response received. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

2. COURSE DELETION: List any courses that will be deleted because of this change. A *Course Deletion* form is also required. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

3. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials as a result of this change, attach an estimate of the time and cost etc. required to secure these items. (NOTE: approval of this form does not imply approval for additional resources. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

Request for Graduate Course Change - Page 5

Please insert in the text box below your course change summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings) based on the appropriate change:

COURSE DESCRIPTION CHANGE	COURSE NUMBER CHANGE	COURSE TITLE CHANGE
Department:	Department:	Department:
Course Number and Title:	Current Course Number/Title:	Current Course Number/Title:
Rationale:	New Course Number:	New Course Title:
Course Description (old)	Rationale:	Rationale:
Course Description: (new)	Catalog Description:	Catalog Description:
Catalog Description:	Credit hours:	

COURSE DESCRIPTION CHANGE
Department: Finance and Economics; Course Number and Title: Fin623 Investments;
Rationale: The current description is too narrow in scope and does not include all the major topics to be taught in this class;
Course Description
(old) Course Description: A study of modern portfolio theory and capital market theory as applied to portfolio management. Real-world considerations are introduced through case studies and management of simulated portfolios;
(new) Catalog Description: A study of fundamental investment principles, modern portfolio theory, and portfolio formation process and the evaluation of portfolio performance.

COURSE NUMBER CHANGE
Department: Finance and Economics;
Current Course Number/Title: Fin665/Portfolio Theory and Capital Markets; New Course Number: Fin623;
Rationale: The current number is not consistent with the typical sequencing of finance courses in the graduate curriculum.
Catalog Description: A study of fundamental investment principles, modern portfolio theory, and portfolio formation process and the evaluation of portfolio performance;
Credit hours: 3.

COURSE TITLE CHANGE
Department: Finance and Economics;
Current Course Number/Title: Fin665/Portfolio Theory and Capital Markets;
New Course Title: Investments
Rationale: The current title does not reflect what should be taught in this class. The Capital Markets part should not be the main emphasis of this class, but should taught in more depth in another graduate finance course Fin627 Financial Institutions and Markets. The title 'Investments' is more commonly used in most finance programs.
Catalog Description: A study of fundamental investment principles, modern portfolio theory, and portfolio formation process and the evaluation of portfolio performance.

Chair: Tracy Christofero | **GC#6: Course Addition**

Request for Graduate Course Addition

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: Cola Dept/Division: History Alpha Designator/Number: 507 (•) Graded ( ) CR/NC

Contact Person: Greta Rensenbrink Phone: 696 2955

NEW COURSE DATA:

New Course Title: History of Sexuality

Alpha Designator/Number: H S T 5 0 7

Title Abbreviation: H I S T O R Y   O F   S E X U A L I T Y

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words): Examines the history of sexuality in North America in the context of cultural, legal, economic, political and social history from the 16th century to the present.

Co-requisite(s): N/A First Term to be Offered: SPRING 2017

Prerequisite(s): N/A Credit Hours: 3 N/A

Course(s) being deleted in place of this addition (*must submit course deletion form*): N/A

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head [signature]	Date 8/24/16
Registrar Sonya G Cant [signature]	Date 8/25/16
College Curriculum Chair Gretchen [signature]	Date 10/3/16
Graduate Council Chair T Christofero [signature]	Date 11-27-16

Form updated 10/2011

Rec'd In COLA Office
Date 8/24/16

Request for Graduate Course Addition - Page 2

College: COLA | Department/Division: HISTORY | Alpha Designator/Number: HST 507

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. FACULTY: Identify by name the faculty in your department/division who may teach this course.

Greta Rensenbrink.

2. DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the proposal. Enter "***Not Applicable***" if not applicable.

Not Applicable.

3. REQUIRED COURSE: If this course will be required by another deparment(s), identify it/them by name. Enter "***Not Applicable***" if not applicable.

Not Applicable.

4. AGREEMENTS: If there are any agreements required to provide clinical experiences, attach the details and the signed agreement. Enter "***Not Applicable***" if not applicable.

Not Applicable.

5. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials to teach this course, attach an estimate of the time and money required to secure these items. (Note: Approval of this form does not imply approval for additional resources.) Enter "***Not Applicable***" if not applicable.

Not Applicable.

6. COURSE OBJECTIVES: (May be submitted as a separate document)

See attached.

7. COURSE OUTLINE (May be submitted as a separate document)

See attached.

8. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATES (May be submitted as a separate document)

See attached.

9. EXAMPLE OF INSTRUCTIONAL METHODS (Lecture, lab, internship)

This course is primarily discussion based, although there are a couple of lecture.

Request for Graduate Course Addition - Page 4

10. EXAMPLE EVALUATION METHODS (CHAPTER, MIDTERM, FINAL, PROJECTS, ETC.)

Students will complete and essay midterm and final exam, as well as keeping an intellectual journal throughout the term. They will write a 15-page research paper and present their findings to the class.

11. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE/GRADUATE COURSE

Graduate students have a more rigorous assignment for their intellectual journals, they have longer research papers, and do individual rather than group presentations. They also have additional reading and will meet separately twice during the semester for discussion.

12. PROVIDE COMPLETE BIBLIOGRAPHY (May be submitted as a separate document)

SEE ATTACHED

Request for Graduate Course Addition - Page 5

Please insert in the text box below your course summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Course Number and Title:
Catalog Description:
Prerequisites:
First Term Offered:
Credit Hours:

Department: History
Course Number and Title: HST 507
Catalog Description: Examines the history of sexuality in North America in the context of cultural, legal, economic, political and social history from the 16th century to the present.
Prerequisites: NONE
First Term Offered: SPRING 2017
Credit Hours: 3

History 407/507: History of Sexuality

Syllabus and Schedule

Spring 2017, MW 1 to 2:15, 3 Credits
Dr. Greta Rensenbrink, Harris Hall 108

Office Hours: Mondays 4 to 5, Wednesdays 10-11:30, and by appointment.
If you can't meet during these times, please email me with a couple of possible times you could meet and I will get back to you. And please do not hesitate to make an appointment.

Office Phone: 696-2955.

Email: rensenbrink@marshall.edu.

Course Description:

Sex and sexuality are inherently fascinating. In the United States, sex has a rich history as a subject both of longing and of fear and anxiety. We tend to think of our history of one of increasing sexual freedom and liberation, perhaps accompanied by growing social and psychological problems. This course will challenge and complicate that understanding of our sexual history.

This course will explore the construction of sex and sexuality in the United States, beginning with the colonial period and ending with the late 20th century. We will be concerned both with changing understandings and experiences of sex itself, and with the ways that sexuality has worked as an aspect of relations of power and a force shaping historical change. That is, we will look at what sex *was* and how sex was *used*.

Some themes and topics (in the form of questions!): How has sex been regulated, and by whom? When did sexual identities get "invented" and why? How has scientific knowledge affected sexual behavior? How have people understood the connection between reproduction and sex? Were the Puritans and Victorians really sexually repressed? Why has sex been such a central facet of our understandings of racial difference? What does economics have to do with sex? What is sex, anyway? And how do we know?

The course will include a mixture of lecture, discussion, and writing exercises. Students should be prepared to do a significant amount of reading, and to contribute regularly to class discussions.

Required Texts:

- Kathy Peiss, ed. *Major Problems in the History of American Sexuality* (Houghton Mifflin, 2002).
- Other readings will be available on MuOnline. You will be required to print these out and bring the hard copy with you to class.

Additional Required Text for Graduate Students

- Helen Lefkowitz Horowitz, *Rereading Sex: Battles over Sexual Knowledge in Nineteenth-Century America* (New York: Knopf: 2002).

Desired Learner Outcomes and Objectives:

Do the box.

Course Student Learning Outcomes	*How students will practice each outcome in this Course*	*How student achievement of each outcome will be assessed in this Course*
Students will develop their understanding of the central problems in the history of sexuality	Cortical reading and discussion. (Grads: intellectual journals)	Writing assignments and essay exams
They will be able to discuss sexuality as a category of historical analysis	Discussions	Exams and presentations
Increase ability to think analytically	Discussions	Exams and short papers
Improve their critical approach to reading	Discussions	
Develop ability to express themselves through writing	Short writing assignments (Grads: intellectual journals)	Final papers and exams.
Develop their ability to express themselves orally	Discussions	Presentations
Develop their ability to work in teams	Small group discussions	Presentations (undergrad)

Requirements and Grading, Undergraduates:

- Short Papers (25%) There will be two short (5 page) papers due during the semester. Each is worth 12.5%. These assignments are designed to develop your critical reading and analytic ability. That is, they will encourage you to develop your own voice as a historian. You will have clear written instructions for each of these papers. They will be drawn from class materials and will require no outside reading. Late papers will not be accepted.

- Class Participation (30%). Includes discussion, (brief) in-class writing exercises, and general good citizenship. I will weight each of these three evenly and you will receive a midterm grade.

    - Discussion. This course will be discussion-driven and your active engagement in discussions is required. After each discussion day I record who spoke up and note which students were especially engaged contributors. Your discussion grade will be based on those records. In other words, not on if you are "right" when you speak up, but if you are speaking and are on topic.

- Writing exercises. I may ask you to write on a question relating to readings, or to respond to lecture material. You may use any notes you have taken on the readings or lecture, but not the readings themselves. These brief (10 minute) assignments will not be announced in advance. You cannot make these up, but may miss one without penalty. They will be graded on a check system. Pluses and minuses cancel each other out. If you have more check plusses than checks, you will get an A, fewer pluses or straight checks gets you a B, and check minuses pull your grade down.
- Good citizenship includes showing up, paying attention, and taking notes.

❖ Book Presentation (10%). You will choose a book from a list to read and present to the class. These presentations will be short and to the point—5 minutes with specific questions you must answer. You will also submit a short written summation of your presentation which is due on the day you present.

❖ Midterm (15%) and Final (20%). These will be take home exams. They must be typed. The point of the exams is to give you a chance to synthesize course readings and lectures and the thinking you have done for this course. You will write three short essays for which you will not need to do outside reading. You will need notes from lectures, discussions and readings in order to do what is required for the exams. Each essay will be 2-3 pages.

Requirements and Grading, Graduate Students:

❖ Class Participation (25%), including discussion and good citizenship.

❖ Intellectual Journal (50%). You will not write the short papers or do the book presentation. Instead I will collect weekly journals from you. Please acquire a 3-ring binder. You will submit it to me on Wednesday, and I will return it the following Monday. You must do 8 of them. No late journals will be accepted. They will be graded on a check system. Pluses and minuses cancel each other out. If you have more check plusses than checks, you will get an A, fewer plusses or straight checks gets you a B, and check minuses pull your grade down.

Journal entries will include (these are minimal numbers, students often write longer and that is fine):

- 1 page reflection on the discussions or lectures in the previous two classes (Wednesday of the previous week and Monday of the current week) and the readings from Monday (which we will have discussed).
- 1 page commenting on the readings for Wednesday—the day you are handing in your journal. You may want to look at the study questions I gave the undergrads as a jumping-off place. This will give you a chance to write about material we have not already discussed.
- ½ to 1 page putting all of the above in a larger context. You may want to relate this material to readings and discussion from previous weeks, think about how it ties to larger themes of the course, or connect it to ideas you have encountered elsewhere in your studies.

❖ Final Research Project (25%). You will find 15 sources, at least four of them primary sources, and write a 15-page paper on your topic. You will also give a short presentation to the class.

Grading Policy:

Grades for assignments will be posted on MuOnline as I do the grading.

Grades for major assignments will be on a 100 point scale.

Grading for this course will be determined as follows: 90-100% of all possible points is an A; 80-89% of all possible points is a B; 70-79% of all possible points is a C; 60-69% of all possible points is a D; 59% or below is an F. I round up on fractions—thus a 79.5 is a counted as an 80.

Academic Honesty:

Plagiarism on any assignment will result in failure of the course. No exceptions. Make sure everything you write is your own work. Even a phrase taken unaccredited from another source is unethical. I will report plagiarism to the Dean of Students office.

Policy Statement on Late Assignments:

The two short papers must be turned in on the day they are due. There are no exceptions, barring hospitalization or other extremity. For Grads, journals are also not accepted late.

In-class assignments are also not makeupable (new word!). But you will be able to skip one without penalty.

The midterm and final exam will be accepted late without penalty as long as I hear from you by the due date and you can make a reasonable case. If I get it late without having heard from you by the due date they will depreciate in value at the rate of 1 full grade a day.

If you miss your presentation day and there are other times available, you may reschedule, but you will lose ½ the points for the presentation. In other words, don't miss your turn!

Attendance Policy:

Please be sure you understand this policy, as it might seem counterintuitive! You can miss two classes without me asking why. More than that and your grade will suffer. The ONLY TIME I need to hear reasons or see excuses is if you have documented reasons for missing more than two classes. Otherwise, two classes is generally enough to cover the usual reasons you might need to miss.

Warning—if you skip two days at the beginning of the semester without good cause then later have to miss because you are sick, your grade will be affected. Please save your free skips for when you need them.

Policy for Students with Disabilities:

Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304 696-2271 to provide documentation of their disability. Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit http://www.marshall.edu/disabled or contact Disabled Student Services Office at Prichard Hall 11, phone 304-696-2271

University Policies

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/Academic Forgiveness/ Academic Probation and Suspension/Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment.

Schedule

Any readings with page numbers but without citations are from Peiss. Other readings will be on MuOnline.

Introduction, Theory, and Context

Week 1

January 9. Course Introduction

January 11. What is Sexuality and Why Does it Have a History?

Week 2

January 16: Martin Luther King, Jr. day (class does not meet)

January 18. Theorizing Sex, Sexuality and Their Relationship to Gender

Reading: Jeffrey Weeks, "Social Construction of Sexuality," (Peiss, 2-10).

Grad students read the whole theory section.

Week 3

January 23. Sex and Christianity: European Inheritances

Readings: "List of Christian Sexual Sins from the 7th or 8th century," in Matthew Kuefler, *The History of Sexuality Sourcebook*, 165-167 (online reading).

"Martin Luther on Sex and Marriage" and Bernard Mandeville, "Defense of Prostitution," in Kuefler, 205-209, (online reading).

Early Modern Sexualities

January 25. "Native" Sexualities

Readings: Baron Lahotan Describes Love and Marriage among the Huron, 1703. English Trader John Lawson Describes Native Sexuality in North Carolina, 1709. Father Joseph-Francoise Lafitau Praises Native Male Friendships, 1733 (Peiss, 27-36).

Week 4

January 30. Sex and Conquest

Readings: Antonia I. Castaneda, "Sexual Violence in the Spanish Conquest of California" (Peiss 47-56).

Father Luis Jayme Attacks Sexual Abuse of Indigenous Women, 1772 (Peiss, 36-38).

February 1. Sexual Interactions and the Founding of the English Colonies

First Short Paper Due in Class.

Reading: Theda Perdue, "Columbus Meets Pocahontas in the American South."

Week 5

February 6: Regulating Sex in the Colonies

Readings: John D'Emilio and Estelle Freedman, "Family Life and the Regulation of Deviance," in Phillips and Reay (online reading).

Grad Students also read: Richard Godbeer, "Sodomy in Colonial New England."

The 19th Century: Sex and the Rise & Fall of the Victorians

February 8. Lecture on Sex, Liberalism and Science

Grad students read: Thomas Laqueur, "Orgasm, Generation, and the Politics of the Reproductive Body," in Lancaster (online reading).

Week 6

February 13. Self-Control and Passionlessness: Gender and the Repressive Hypothesis

Readings: Nancy F. Cott, "Female Passionlessness: An Interpretation of Victorian Sexual Ideology, 1790-1850" (131-140).

Sylvester Graham Lectures Young Men on Self-Restraint, 1839 (Peiss, 115-117).

February 15. Sexuality, Race, and Violence in Slavery

Midterm essay questions will be handed out in class.

Readings: Brenda Stevenson, "Slave Marriage and Family Relations" (Peiss, 159-173).

Fugitive Slave Lewis Clarke Explains why "A Slave Can't Be a Man," 1842; J. W. Lindsay Describes Sexual and Family Relations Under Slavery, 1863; Dr. Esther Hill Hawks Recounts the Rape of "Susan Black," 1865; Harriet Jacobs Relates Incidents in the Life of a Slave Girl, 1861; Chaplain A. B. Randall Writes About the Freedpeople's Ideal of Marriage, 1865 (Peiss, 143-153).

Graduate Students also read: Martha Hodes, "Adultery: Dorothea Bourne and Edmond," in Elizabeth Reis, ed., *American Sexual Histories*, 146-164.

Week 7

February 20. Free Love and Obscenity

Readings: Jesse Battan, "'The World Made Flesh': Language, Authority, and Sexual Desire in Late 19th Century America" (Peiss, 252-264).

Anthony Comstock Condemns Obscene Literature (Peiss 243-44).

February 22. Midterms Due. Class will not otherwise meet

Week 8

February 27. Challenging the Repressive Hypothesis

Readings: Karen Lystra, "Sexuality in Victorian Courtship and Marriage," 229-237.

A Woman Writes Her Lover During the Civil War, 1865.

Michel Foucault, excerpt from the *History of Sexuality*.

February 29. Sexology and the Construction of Sexual Identities

Readings: Carroll Smith-Rosenberg, "The Female World of Love and Ritual" (201-213).

Jonathan Ned Katz, The Invention of Heterosexuality (348-356).

George Chauncey, "From Sexual Inversion to Homosexuality: Medicine and the Changing Conception of Female Deviance," in *Salmagundi* 58-59 (fall 1982-winter 1983): 114-46 (online reading).

Week 9

March 6. Lynching, Eugenics and the Racial Politics of "Civilization"

Readings: William H. Stallings Testifies about Ku Klux Klan Lynchings, 1871; Ida B. Wells-Barnett Exposes the Myth of the Black Rapist, 1892 (Peiss, 153-159).

Grad students also read: Molly Ladd-Taylor, "Eugenics, Sterilization and Social Welfare" (Peiss, 327-336).

March 8. Grad only discussion/undergrad film

Grad students read: Helen Lefkowitz Horowitz, *Rereading Sex: Battles over Sexual Knowledge in Nineteenth-Century America* (New York: Knopf: 2002).

Undergrads will watch *A Florida Enchantment* (1914).

Sex and Modernity in the 20th Century

Week 10

March 13. Pleasure and Pain: Working-Class Sexuality in the Early 20th Century

Linda Gordon, "Birth Control and Sexual Revolution" (Peiss, 320-327). Kathy Peiss, "Charity Girls and City Pleasures" (Peiss, 299-307). Wong Ah So Describes her Experiences as a Prostitute in the Early 1920s (278-279). Emma Goldman Analyzes "The Traffic in Women," 1911 (285-287). Eugene Caves Reports a Death from Illegal Abortion in Rural Wisconsin, 1896; Margaret Sanger Argues "The Case for Birth Control," 1817; Women Write Margaret Sanger for Birth Control Advice, 1924, 1930, 1935, 1936; Women's Use of a Baltimore Birth Control Clinic, 1929 (Peiss, 309-320).

March 15. Courtship and Dating in Modern America

Reading: Beth Bailey, "Sex Control," in *From Front Porch to Back Seat: Courtship in 20th Century America.*

Week 11

March 27. Sex, Race and Youth in the South

Second short paper due in class.

Reading: Susan Cahn, "Spirited Youth or Fiends Incarnate?: The Samarcand Arson Case and Female Adolescence in the American South,' in Pippa Holloway, ed., *Other Souths* (online reading).

March 29. Kinsey and Cold War America

Readings: Alfred Kinsey Reports on Americans' Sexual Behavior, 1948-1953 (368-372).

Marge McDonald Enters the Lesbian Community of Columbus, Ohio, 1955; Del Martin Explains Why Lesbians Need the Daughters of Bilitis, 1956 (381-384).

Sex and Postmodernity

Week 12

April 3. Transsexuality

Readings: Joanne Meyerowitz, "Sex Change and the Popular Press: Historical Notes on Transsexuality in the United States, 1930-1955" (online reading).

Primary Sources: Girl Changes into Man; Psychopathia Transexualis; New Sex Switches: Behind the Sensational Headlines Loom Unpleasant Medical Facts; I Want to Become a Woman (online readings), all from Reis, *American Sexual Histories*.

April 5· Graduate student research paper discussion/Undergrads work on presentations

Week 13

April 10. Sexual Revolutions

Readings: Beth Bailey, "Sexual Revolution(s)," in David Farber, ed., *The Sixties: From Memory to History* (University of North Carolina Press, 1994).

April 12. Sex in the 1970's

Readings TBA

Week 14

April 17. Sex, Fear, and Politics: The AIDS Pandemic in the 1980's

Discussion of the film: *We Were Here*. Watch on the course website before class.

April 19. Presentations

Week 15

April 24. Presentations

April 26. Presentations, finishing up

Exam questions will be handed out in class; you will have one week to complete the exam.

Bibliography, History of Sexuality

Peiss, Kathy. *Major Problems in the History of American Sexuality.* New York: Houghton Mifflin, 2002.

This is the text I have used for this course when taught as a special topics class. It is excellent and students love it. It combines excerpts from articles and an array of primary documents. Peiss is one of the major authorities in the field.

Edited Collections and Primary Sourcebooks

Keufler, Mathew. *The History of Sexuality Sourcebook.* Peterborough, Ontario, Canada: Broadview Press, 2007.

Lancaster, Roger N. and Michaela Di Leonardo. *The Gender/Sexuality Reader: Culture, History, Political Economy.* New Brunswick NJ: Routledge, 1997.

Peiss, Kathy and Christina Simmons, ed. *Passion and Power: Sexuality in History.* Philadelphia: Temple University Press, 1989.

Phillips, Kim. M. and Barry Reay, ed. *Sexualities in History: A Reader.* New York: Routledge, 2002.

Reis, Elizabeth, ed. *American Sexual Histories.* Malden, Mass: Blackwell, 2001.

Snitow, Ann, Christine Stansell and Sharon Thompson, ed. *Powers of Desire: The Politics of Sexuality.* New York: Monthly Review Press, 1983.

Theory

Foucault, Michel. *A History of Sexuality.* New York: Pantheon, 1978.

Weeks, Jeffrey. *Sexuality and its Discontents.* New York: Routledge, 1985.

Ancient, Medieval and Early Modern Sexualities

D'Emilio, John and Estelle Friedman. *Intimate Matters: A History of Sexuality in America.* New York: Harper and Row, 1988.

Dinshaw, Carolyn. *Getting Medieval: Sexualities and Communities, Pre- and Post-Modern.* Durham: Duke, 1999.

Fischer, Kirsten. *Suspect Relations: Sex, Race and Resistance in Colonial North Carolina.* Ithaca: Cornell University Press, 2001.

Foster, Thomas A. *Sex and the 18th Century Man: Massachusetts and the History of Sexuality in America.* Boston: Beacon Press, 2006.

Foster, Thomas A., ed. *Long Before Stonewall: Histories of Same-Sex Sexuality in Early America.* New York: New York University Press, 2007.

Garton, Stephen. *Histories of Sexuality: Antiquity to Sexual Revolution*. Routledge, 2014.

Johnson, Lyman L. *The Faces of Honor: Sex, Shame and Violence in Colonial Latin America*. Albuquerque, University of New Mexico Press, 1998.

Ryan, Christopher and Cacilda Jetha. *Sex at Dawn: How We Mate, Why We Stray, and What It Means for Modern Relationships*. Harper, 2011.

Wiesner-Hanks, Merry E. *Christianity and Sexuality in the Early Moderns World*. New York: Routledge, 2000.

Modern Sexualities:

Bailey, Beth L. *From Front Porch to Back Seat: Courtship in 20th Century America*. Baltimore: John Hopkins University Press, 1988.

Bailey, Beth. "Sexual Revolution(s)," in David Farber, ed., *The Sixties: From Memory to History* (University of North Carolina Press, 1994).

Bailey, Beth. *Sex in the Heartland*. Cambridge, Mass: Harvard University Press, 1999.

Brandt, Alan. *No Magic Bullet: A Social History of Venereal Disease in the United States since 1880*. New York: Oxford, 1987.

Bronstein, Carolyn. *Battling Pornography: The American Feminist Anti-Pornography Movement, 1976-1986*. New York: Cambridge University Press, 2011.

Buffington, Robert, et al, eds. *A Global History of Sexuality: The Modern Era*. Wiley-Blackwell, 2014.

Cahn, Susan. "Spirited Youth or Fiends Incarnate?: The Samarcand Arson Case and Female Adolescence in the American South." In Pippa Holloway, ed., *Other Souths*. University of Georgia Press, 2008.

Chauncey, George. "From Sexual Inversion to Homosexuality: Medicine and the Changing Conception of Female Deviance," in *Salmagundi* 58-59 (fall 1982-winter1983): 114-46.

D'Emilio, John. *Sexual Politics, Sexual Communities: The Making of a Homosexual Minority in the United States, 1940-1970*. Chicago: University of Chicago Press, 1983.

Donovan, Brian. *White Slavery Crusades: Race, Gender and Anti-vice Activism, 1887-1917*. Urbana: University of Illinois Press, 2006.

Fausto-Setrling, Anne. *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York: Basic Books, 2000.

Haag, Pamela. *Consent: Sexual Rights and the Transformation of Liberalism*. Ithaca, NY: Cornell, 1999.

Kimmel, Michael. *Manhood in America: A Cultural History*. New York: Free Press, 1996.

Kitch, Sally L. *Chaste Liberation: Celibacy and Female Cultural Status*. Chicago: University of Illinois Press, 1989.

Kunzel, Regina. *Fallen Women, Problem Girls: Unmarried Mothers and the Professionalization of Social Work, 1890-1945*. New Haven: Yale University Press, 1993.

Laqueur, Thomas. "Orgasm, Generation, and the Politics of the Reproductive Body," in Lancaster and Di Leonardo.

Lanser, Susan. *The Sexuality of History: Modernity and the Sapphic, 1565-1830*. Chicago: University of Chicago Press, 2014.

Meyerowitz, Joanne. *How Sex Changed: A History of Transsexuality in the United State*. Cambridge, Mass: Harvard University Press, 2002.

Reagan, Leslie J. *When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867-1973*. Berkeley: University of California Press, 1997.

Romano, Renee C. *Race Mixing: Black-White Marriage in Postwar America.* Cambridge, Mass: Harvard University Press, 2003.

Wood, Sharon E. *The Freedom of the Streets: Work, Citizenship and Sexuality in a Gilded Age City*. Chapel Hill: University of North Carolina Press, 2005.

Chair: Tracy Christofero | **GC#3: Intent to Plan**

Graduate Intent to Plan--Major or Degree

NOTE: This "Intent to Plan" form must be submitted and go through the approval process BEFORE you submit the form titled, "Request for Graduate Addition, Deletion or Change of a Major or Degree." For detailed information on new programs please see: http://wvhepcdoc.wvnet.edu/resources/133-11.pdf.

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair. If attachments are included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: COHP

Dept/Division: School of Nursing

Contact Person: Dr. Rebecca S. Appleton

Phone: 304-696-2632

New Degree Program: Doctor of Nursing Practice (DNP)

Effective Term/Year: Fall 20 [18] Spring 20 [ ] Summer 20 [ ]

Information on the following pages must be completed before signatures are obtained.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head	Date 10/3/16
College Curriculum Chair	Date 10/13/16
College Dean	Date 10/3/16
Graduate Council Chair	Date 11-
Provost/VP Academic Affairs	
Presidential Approval	
Board of Governors Approval	

Form updated 5/2012

Graduate Intent to Plan--Major or Degree-Page 2

Please provide a rationale for new degree program: (May attach separate page if needed)

See attached

1. ADDITIONAL RESOURCE REQUIREMENTS: If your new program requires additional faculty, equipment or specialized materials, attach an estimate of the time and money required to secure these items.
NOTE: Approval of this form does not imply approval for additional resources. Enter NONE if not applicable.

2. NON-DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the request and any response received from them. Enter NONE if not applicable.

See attached

For catalog changes as a result of the above actions, please fill in the following pages.

Rationale for the DNP program.

At present there are no Doctoral Programs in the School of Nursing, College of Health Professions at Marshall University. There are no DNP programs in the southeastern portion of the State of WV. The addition of a DNP program will provide advance practice nurses in WV the option to earn a professional doctorate and will increase the enrollment at Marshall University. The proposed DNP program is a natural extension of the excellent Master of Science of Nursing (MSN) Family Nurse Practitioner (FNP) program at Marshall.

1. **Additional Resource Requirements**:

Additional Faculty of 3, office space and equipment will be required. Please refer to the pro forma document on page 25.

2. **Non-Duplication:**

This is a new program; the classes are new for the Advanced Practice Nurse.

5. *New* Catalog Description

Insert a 'clean' copy of your proposed description, i.e., no strikethroughs or highlighting included. This should be what you are proposing for the new description. (May attach separate page if needed)

See attached

New Catalog Description

The Marshall University Doctor of Nursing Practice (DNP) program prepares advanced practice nurses to practice at the highest level of professional nursing. Students will experience customized learning during online synchronous and asynchronous courses. Students in the DNP program will complete 2 major scholarly works; A Portfolio of scholarly evidence; and the DNP project during the 42 credit hour program. Portfolio development and DNP projects will enhance personal and professional nursing expertise. This expert level of practice builds on past advanced practice education, experience, and certification. The DNP final project provides the basis for developing competence in the translation of evidence into practice and better healthcare.

Graduate Intent to Plan--Major or Degree-Page 4

Please insert in the text box below your summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
New Major or Degree:
Credit Hours:
Rationale:

Department: Nursing
New Major or Degree: Doctor of Nursing Practice (DNP)
Credit Hours: 42 credits

Rationale: See attached

Rationale:

The addition of a Doctor of Nursing Practice (DNP) program will provide nurses in WV and those in the U.S. the option to earn a professional doctorate while increasing enrollment at Marshall University. The proposed DNP program is a natural extension of the excellent Master of Science of Nursing (MSN) Family Nurse Practitioner (FNP) program at Marshall. Presently Nurses must seek post-master's education to receive a DNP from WVU or Shepard University in West Virginia, or travel out of state to obtain the DNP. The Marshall DNP program will help meet the gap in healthcare needs of the citizens of West Virginia.

MARSHALL UNIVERSITY

COLLEGE OF HEALTH PROFESSIONS
SCHOOL OF NURSING

AUGUST 2016

DOCTOR OF NURSING PRACTICE

EFFECTIVE DATE: AUGUST 2018

Committee:

Dr. Rebecca Appleton (chair)
Dr. Diana Stotts
Dr. Robin Walton
Dr. Susan Welch

Background:

The current healthcare environment continues to become increasingly complex. As a result, the education of healthcare professionals must evolve to meet these increased demands. In 2004, the American Association of Colleges of Nursing (AACN) voted to endorse the Position Statement on the Practice Doctorate of Nursing. The position statement called for the entry level for an Advanced Practice Registered Nurse to be a Doctorate in Nursing Practice (DNP). This position has also been endorsed by the National Organization of Nurse Practitioner Faculties (NONPF). In addition, the Institute of Medicine, the Joint Commission, The Robert Wood Johnson Foundation and other authorities have called for re-conceptualizing the education of healthcare professionals to require the highest level of scientific knowledge and practice expertise to assure quality patient outcomes (AACN, 2015). A DNP will place nurses at the educational level now required of physical therapists, pharmacists, psychologists, and many other healthcare professionals.

In response to these recommendations many colleges/schools of nursing developed DNP programs. Currently, 264 DNP programs are in existence in 48 states with an additional 60 programs in the planning stages. Enrollment in DNP programs increased from 14,688 to 18,352 between 2013 and 2014 (AACN, 2015). Many graduates from Marshall's MSN programs attend DNP programs in WV and other states. In West Virginia there are currently two DNP programs, one at West Virginia University (WVU) and the other at Shepherd University. WVU is the oldest DNP program in WV; the program is a synchronous online program. The Shepherd University DNP program first enrolled students in 2015; students attend classes on the Shepherd campus.

There are currently no DNP programs in the eastern or southern portion of West Virginia. West Virginia residents seeking a DNP must attend WVU or Shepherd University or seek education out of state. The proposed Marshall DNP program will be a blend of synchronous and asynchronous online courses primarily serving nurses from the local tri-state area and the eastern and southern portions of West Virginia. The

proposed program could also attract students from all over the nation as the growing RN to BSN program currently does.

Access to healthcare for the citizens of West Virginia has been an ongoing problem. In 2016, the West Virginia State legislature passed HB 4334. The purpose of this bill was to improve the access to healthcare through an expanded scope of practice and increased autonomy for nurse practitioners. This bill was signed into law by Governor Tomblin in March of this year. Nurse practitioners educated at the doctoral level will be more prepared to meet the complex healthcare needs of the citizens of West Virginia.

The Marshall University College of Health Professions and the School of Nursing present this Intent to Plan for a Doctor of Nursing Practice (DNP) program. The proposed program will consist of a minimum of 42 graduate credit hours obtained over five semesters of full-time work. Admission to the DNP program will be open to registered nurses with an earned M.S. in Nursing or MSN degree from an accredited program and documented certification in a recognized area of advanced practice nursing limited to certified nurse practitioners, nurse midwives and clinical nurse specialists.

Fiscal Note:

Although the DNP will be a blend of online synchronous and asynchronous courses and use many of the same resources that are used in the current MSN programs, some additional funding will be needed in the beginning. It is anticipated that additional faculty and staff, as well as office space and equipment will be needed for this program. See the attached pro forma.

Summary Statement

The Marshall University (MU) College of Health Professions (COHP) and the School of Nursing propose the addition of a Doctor of Nursing Practice (DNP) program in the School of Nursing. The DNP program will consist of a minimum of 42 graduate credit hours that will be obtained over a two-year period (five semesters) of full-time work. The framework of the program is based on the Essentials of Doctoral Education established by the AACN in 2006. This program will allow registered nurses with a master's degree in nursing and certification in advanced nursing practice to pursue a terminal degree in clinical nursing practice. Without this program the advanced practice nurses that graduate from the MU MSN program must seek doctoral preparation at other WV institutions or go outside the state of WV. In time this could have a devastating impact on the MSN program at Marshall if the alumni cannot complete the terminal degree in nursing here. The current MSN program has accreditation through the Accreditation Commission for Education in Nursing (ACEN) and has an established reputation of excellence based on the successful performance of its graduates.

To facilitate current student needs, there would be two entry points into the DNP program; 1) full admission for applicants with a) a MS in nursing or MSN degree from an accredited nursing program and b) certification in an area of advanced practice nursing; 2) provisional admission for students applying for the Marshall MSN program expressing an interest in completing the Marshall DNP degree. Provisionally admitted MSN students would be required to complete the MSN degree at Marshall and pass the advance practice certification exam before progressing on to the DNP program. These students will be given direct admission to the DNP program upon successful completion of the MSN program and passage of the certification exam. Depending on a student's aspirations, the MSN program (two years) and DNP program (two years) could potentially be completed in approximately four years of full-time study.

These graduates will be prepared to provide optimal health care services at the highest level of nursing to any community organization i.e. hospitals, clinics, etc. They will be able to assess and intervene to assist patients to achieve an optimal level of health using the most current technology, medication administration, best evidence and

research on a patient milieu. The DNP graduate can practice in hospitals with physicians and other staff members and be a leader in healthcare, reducing the rising costs and demands currently experienced in healthcare. Currently there are no DNP programs in the southeastern region of West Virginia.

TABLE OF CONTENTS

Doctor of Nursing Practice (DNP)

Marshall University

College of Health Professions

1. Program Description

The Marshall University (MU) College of Health Professions (COHP) and the School of Nursing (SON) propose the addition of a Doctor of Nursing Practice (DNP) program. The DNP is a practice doctorate similar to the MU programs in psychology (PsyD), physical therapy (DPT), and pharmacy (PharmD). The practice doctorate in nursing prepares experts in advanced nursing practice. There is a movement by many in nursing to make the DNP the entry level into advanced nursing practice versus the now accepted master's degree. According the AACN (2015) the clinical doctorate has evolved to the point where there are currently 264 active DNP programs in the United States with another 60 in the planning phase. In 2004 the AACN identified the following as benefits of the practice doctorate in nursing:

- Development of needed advanced competencies for increasingly complex practice, faculty and leadership roles;
- Enhance knowledge to improve nursing practice and patient outcomes;
- Enhanced leadership skills to strengthen practice and health care delivery;
- Better match of program requirements and credits and time with the credential earned;
- Provision of an advanced educational credential for those who require advanced practice knowledge but do not need or want a strong research focus;
- Enhanced ability to attract individuals to nursing from non-nursing backgrounds; and
- Increased supply of faculty for practice instruction (p. 4)

The proposed DNP program is a natural extension of the excellent Master of Science of Nursing (MSN) Family Nurse Practitioner (FNP) program at Marshall. Graduates of this program provide primary and specialized care to better the health of the citizens of the state of West Virginia and beyond. The DNP program would provide additional knowledge that would allow advanced practice nurses to:

- Use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice.
- Design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends.
- Design, direct and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable and patient-centered care.
- Apply relevant findings to develop practice guidelines and improve practice and the practice environment.
- Use information technology and research methods appropriately to identify gaps in evidence for practice, collect and analyze data from the literature and practice and design evidence-based interventions
- Function as a practice specialist/consultant in collaborative knowledge-generating research
- Disseminate findings from evidence-based practice and research to improve healthcare outcomes (AACN, 2006, p. 12)

Prospective students will enter the DNP program with a master's degree in nursing and certification of advanced practice. DNP students will complete a minimum of 42 graduate credit hours earned over five semesters of full-time study.

There are currently no DNP programs available in southern or eastern West Virginia at this time. The closest programs are at West Virginia University and University of Kentucky. There is also a new program at Shepherd University in the eastern panhandle of WV. Many of the MU MSN-FNP grads are seeking out these programs and others in the absence of a program at Marshall.

1.1 Program Mission – The mission of the proposed DNP program is consistent with the mission of Marshall University, particularly the following statements from the MU mission:

- Provide affordable, high quality undergraduate and graduate education appropriate for the state and the region;
- Provide services and resources to promote student learning, retention, and academic success;

- Enhance the quality of health care in the region

Additionally, the mission of the proposed DNP program is consistent with the College of Health Professions "The College of Health Professions (COHP) is committed to offering quality undergraduate and graduate nursing and health professions education. The focus of the College of Health Professions is upon being interactive with the community, including rural and underserved areas, and responding to contemporary and future needs of society, nursing, and the health professions."

1.2 Program Features – Proposed Catalog Description

The Marshall University Doctor of Nursing Practice (DNP) program prepares advanced practice nurses to practice at the highest level of professional nursing. Students will experience customized learning during online synchronous and asynchronous courses. Portfolio development and DNP projects will enhance personal and professional nursing expertise. This expert level of practice builds on past advanced practice education, experience, and certification. The DNP final project provides the basis for developing competence in the translation of evidence into practice and better healthcare.

Proposed Course Descriptions for the Doctor of Nursing Practice

Course descriptions: All courses are new

N800 – Foundations of Theory: Provides advance practice nurses with the ability to apply non-nursing and nursing theory to create innovation in health care.

N802 – Healthcare Informatics for Advanced Practice: Examination of information technologies used in various health care settings to monitor patient outcomes and improve practice.

N804 – Health Policy for Advanced Practice: This course will focus on knowledge and analysis of current political, legal and economic factors impacting current healthcare policy. Student will discuss methodologies to influence policy development.

N806 – Clinical Data Mgmt. & Analysis: Provides students with the opportunity to apply principles of data management, measurement and statistical analysis to clinical and quality improvement issues.

N808 – Prevention & Epidemiology: This course will introduce the language, principles and methods of epidemiology. Causal factors and modes of transmission using statistical tools and biomedical information will be addressed. Students will gain knowledge critical to understanding the natural history of diseases, the evaluation of preventative interventions, and relevance of epidemiological methods in advanced nursing practice.

N810 – Translation of Evidence into Practice: This course focuses on analysis of "best evidence" and critical appraisal of past and present research including statistical analysis to inform evidence-based practice. The course will examine historical and current research literature to develop a clinically relevant question. The course will include discussions on how to synthesize evidence-based practice literature, use clinically established guidelines, as well as statistical methods to inform clinical judgement and develop a scholarly DNP project.

N812 – Scientific Inquiry (Research): This course focuses on the essentials of the research process to facilitate students' ability to knowledgeably and effectively find, appraise, and apply scientific findings to nursing practice. Students access credible sources using a systematic approach, evaluate the quality of research findings, discuss methods of translating and integrating findings into nursing practice, and evaluate outcomes. This course examines basic concepts of data management, study design, and biostatistics using analytic software. Emphasizes statistical literacy and critical thinking for advanced practice nurses.

N814 – Focused Study: Specific to the student's clinical area of interest for the DNP project. This course is designed to enable students to study a selected topic in depth. The student and faculty advisor enter into a study contract describing the specific responsibilities and/or learning objectives of the student and the criteria to be used in evaluation and grading. Students will continue working on the DNP project and portfolio.

N816 – IRB submission: Provides an overview of the institutional review board process. Students will complete & submit their IRB application for their DNP project. PR: Approval of student's DNP project by faculty advisors.

N818 – Interdisciplinary Leadership and Role Development: This course focuses on the development of skills and competencies that will enhance the student's ability to lead interdisciplinary teams and implement change strategies to improve the quality of care in local, regional and national healthcare systems.

N 824 – DNP Role & Finance Seminar This course will focus on the core competencies required in the DNP role to effectively manage human and financial resources in complex healthcare systems.

N826 – DNP Project: Planning & Implementation: Students will explore and analyze selected health problems, client populations and/or systems of interest. Students' own evidence-based analysis and data from either clinical practice and/or epidemiological studies, and current course work will be used to guide the design and development of interventions directed at practice change, system changes, or aggregate health improvements. Building on the student's past studies and work, practice interventions will be refined. Under guidance of the academic advisor, students will implement the designed DNP project.

N828 – DNP Project: Evaluation: The DNP project experience culminates in the evaluation of the project. Students in this course will evaluate the findings or their project and dissemination the findings to those populations most effected by the information in order to ensure that "best healthcare" is available to all communities. (PR: N826)

1.2.1 Student Learning Outcomes

Graduates of the DNP program will be able to:

1. Expand advanced nursing practice by integrating the art and science of nursing with theory and knowledge from biophysical, psychosocial, political, ethical, technical, analytical, cultural, spiritual, environmental, and organizational areas
2. Act as a practice scholar to design and innovate, direct and evaluate system changes to promote safe, timely, effective, efficient, equitable and patient-centered care.
3. Engage in complex, evidence-based advanced-nursing practice and evaluate innovative approaches to care delivery for individuals, communities and populations.
4. Assume leadership roles and collaborate with other professionals to implement change that will improve the quality of care in complex healthcare systems.
5. Utilize databases and information technology to improve health care systems and health outcomes for individuals, families and communities.

1.2.2 Additional Program Outcomes

The DNP program will produce graduates who:

1. Translate knowledge into practice and policy to improve health and promote health equity through leadership, prevention, and innovation.
2. Assume leadership roles to influence health care and reduce health disparities, encourage cultural sensitivity and promote access to quality care.
3. Demonstrate clinical scholarship in identifying best practices and translate evidence into practice for population health.
4. Evaluate policy, care delivery, and organizational systems for current and future revision and change.

1.2.3 Admission & Performance Standards

Admission Requirements for DNP Students with an MSN degree that hold certification for Advance Practice Nursing

1. Satisfy Marshall University requirements for admission, be admitted to the MU graduate college.
2. MSN or MS in nursing degree from an ACEN- or CCNE- accredited program if earned in the United States.
3. Must hold current certification to practice in an area of advanced practice nursing. (i.e. FNP, PNP, etc.).
4. Demonstrate scholastic achievement as evidenced by a cumulative grade-point average of 3.0 or higher on a 4.0 scale for graduate work.
5. Evidence of a current unencumbered license as a registered nurse in a U.S. jurisdiction.
6. Submit all official transcripts for all degrees.
7. Submit current CV.
8. Brief narrative of professional goals and clinical interests.

Admission Requirements for BSN Students applying for admission to the MSN program for provisional admission to the DNP program

1. Acceptance to the Marshall MSN-FNP program or the Marshall University/Shenandoah University cooperative Midwifery (MW) or Psychiatric Mental Health Nurse Practitioner (PMHNP) program.
2. Students that do not complete the MSN-FNP program at Marshall University or Shenandoah cooperative programs will NOT progress to the DNP program.
3. Students that do not successfully pass an advanced practice nurse certification exam will NOT progress to the DNP program.

1.2.4 Program Requirements.

Along with successfully completing the required courses, students in the DNP program will also complete 2 major scholarly works; 1) A Portfolio of scholarly evidence; and 2) the DNP project.

The Portfolio consists of material developed by students related to the eight DNP essentials (AACN, 2006). The portfolio assists the students to validate attainment of the appropriate DNP essentials. Within the portfolio, students will also present evidence of professional growth from semester to semester. Faculty will review the student's portfolio at the end of each semester to ensure progress.

The students will also complete a DNP project. The DNP project may take on various forms but requires that every student will plan the project by identifying a problem/intervention, reviewing evidence to address the problem and developing a potential solution. All students will implement the solution/intervention, conduct an evaluation of the solution/intervention and report the outcomes. The project will be guided by assigned faculty who will guide the student's DNP project. Projects may be completed by as few as one student or as many as three students working as a team on the same project but no more than three students per team.

According to the "Task Force on the Implementation of the DNP" (2015) white pages, all DNP projects should:

a. Focus on a change that impacts healthcare outcomes either through direct or indirect care.
b. Have a system (micro-, meso-, or macro- level) or population/aggregate focus.
c. Demonstrate implementation in the appropriate arena or area of practice.
d. Include a plan for sustainability (e.g. financial, systems or political realities, not only theoretical abstractions).
e. Include an evaluation of processes and/or outcomes (formative or summative). DNP Projects should be designed so that processes and/or outcomes will be evaluated to guide practice and policy. Clinical significance is as important in guiding practice as statistical significance is in evaluating research.
f. Provide a foundation for future practice scholarship. (p. 4)

1.2.5 Program Delivery.

The proposed DNP program will be delivered completely online using Marshall University MU-online platform. Ecourses will be both synchronous and asynchronous. While many of the classes will be delivered asynchronous so that students may work at a personal pace. It is anticipated that several of the classes will be taught in the synchronous mode in which students will gather at a specific time and day on personal computers for class.

Some of the proposed classes that may require office equipment to teach synchronous classes include: Informatics, Epidemiology, Data Management, Portfolio discussion and the DNP project.

Students will be required to possess a personal computer that is compatible with MU software for completion of the course work.

II. Program Needs and Justification

A. Learning outcomes compared to MU's baccalaureate degree profile.

The proposed DNP program will build on the MU Baccalaureate degree profile. The rigorous curriculum and completion of the scholarly DNP project will expand on all of the domains of thinking which include: Communication Fluency, Creative Thinking, Ethical and Civic Thinking, Information Literacy, Inquiry-Based Thinking, Integrative Thinking, Intercultural Thinking, Metacognitive Thinking, and Quantitative Thinking.

B. Learning outcomes compared to Marshall's strategic plan.

The strategic vision of Marshall University reads "The vision of Marshall University is to inspire learning and creativity that ignites the mind, nurtures the spirit and fulfills the promise of a better future."

Nurses have been called into the profession of nursing. These nurses receive intrinsic rewards by providing care to the most vulnerable populations. Those in the profession are committed to life-long learning and recognize the importance of remaining current.

At completion of the program students are expected to expand nursing practice by integrating the art and science of nursing. The graduate will be able to act as a practice scholar that will design innovative new evidence based strategies to promote safe, timely, effective and efficient patient care.

Additionally, the DNP graduate will assume leadership roles and collaborate with other healthcare providers to improve the quality of care in complex healthcare systems. The end result will be healthier citizens of West Virginia and a better future.

C. Learning outcomes compared to the WV's statewide master plan

The proposed DNP program will meet two of the 2018 goals of the WV Higher Education Policy Commission (HEPC). Those goals are:

- Increase the number of students at system institutions completing quality academic programs.
- Increase the impact public colleges and universities have on West Virginia through production of graduates ready to contribute to the workforce and the community,

provision of needed services, and research and development activities that advance the state's economy. (HEPC, 2016)

The addition of a DNP program will provide advance practice nurses in WV the option to earn a professional doctorate and will increase the enrollment at Marshall University. Many of the Marshall University School of Nursing MSN-FNP grads already work as advanced practice nurses in the state of WV in both primary care and specialty areas which contribute to the state's economy. Graduates of the DNP program will also increase access to evidence-based health care to the state's vulnerable and underserved citizens. This care will also contribute to the state's economy through decreased health care costs.

1. Existing Programs

In West Virginia there are two DNP programs, one at West Virginia University (WVU) and the other at Shepherd University. WVU is the oldest DNP program in WV. Started in 2009, the WVU program is a synchronous online program. The Shepherd University DNP program first enrolled students in Fall 2015 with students attending classes on the Shepherd campus.

There are currently no DNP programs in the eastern or southern portion of West Virginia. West Virginia residents seeking a DNP must attend WVU or Shepherd University or seek education out of state. The proposed Marshall DNP program will be a partially synchronous and asynchronous online program primarily serving nurses from the local tri-state area and the eastern and southern portions of West Virginia. The program could also attract students from all over the nation as the MU RN to BSN program, MSN-Nursing Administration (NA), and MSN-Nursing Education (NE) currently do.

2. Program Planning & Development

A committee of four current MSN faculty formed during the 2016 spring semester to complete the intent to plan in the summer of 2016. The DNP program development was supported with stipends from the Dean of COHP, Michael Prewitt and Nursing Chair, Denise Landry. Two members of the committee attended a national workshop

about DNP program development. The stipends for the four faculty and INCO funds for the workshop are the only financial investment thus far in the development of this program.

National standards for DNP programs were presented at the conference. Committee members utilized these guidelines while developing this intent to plan.

A DNP program is highly needed in West Virginia at this time and at this location because Marshall is unable to assist alumni, current students or future students to fulfill terminal education goals. This is especially important to those seeking a terminal degree in nursing practice in the immediate tri-state area. This is the first submission of this DNP content.

2.1 Clientele and Need

At the present time, the Marshall University School of Nursing admits 50 students each year to the MSN program, approximately two-thirds of these students are in the FNP program with a few in the collaborative nurse midwife or psychiatric mental health nurse practitioner programs. Each of these advanced practice students could potentially become a student in the DNP program. Many of these students inquire about the possibility of continuing with a DNP at Marshall. Faculty in the School of Nursing have written many reference letters for students who had to attend other universities to earn the DNP.

Additionally, a DNP program will help to meet the healthcare needs of the citizens of West Virginia. According to the West Virginia Rural Health Association Work Force Demand Analysis (WVRHA, 2013), there are many factors affecting the quality of healthcare delivery systems and workforce supply in this state. Factors identified included an aging population, income, growing technologies, changing disease profiles, changing public health priorities and the growing focus on prevention. These forces directly impact the ability of many areas in the state to attract and retain healthcare services and providers.

The National Association of Community Health Centers published a report in 2009 entitled *Primary Care Access: An Essential Building Block of Health Reform.* This report indicated that over 60 million Americans lack adequate access to primary care

because of physician shortages in their communities. In West Virginia, 50 of 55 counties have been designated federally as medically underserved. Poverty and chronic diseases are higher in this state as compared to the rest of the nation. West Virginia has higher than average obesity rates, smoking and other high risk behaviors. West Virginia has one of the oldest populations in the nation. According to Centers for Medicare and Medicaid Services (CMS) up to 43 % of West Virginians are Medicare or Medicaid beneficiaries. Many physicians refuse to see these patients due to low reimbursement rates.

With the passage of the Patient Protection and Affordable Care Act the need for primary care providers has significantly increased. Research has documented that fewer medical students are entering primary care. A report in the Wall Street Journal reported a 25% decrease in the number of medical students choosing this area of practice (Sataline and Wang, 2010). This is largely due to the fact that physicians in a specialty practice will earn 20% to 30% more than a physician in general practice. Most medical students now graduate with large amounts of educational debt and face staggering malpractice costs. Sataline and Wang (2010) also noted that West Virginia only has 1.21 to 1.5 primary care physicians per 1000 West Virginia residents. The West Virginia Rural Health Association Workforce Demand analysis reported that 20% of United States population lives in rural areas while only 9% of physicians choose to practice in these areas. The report acknowledges that NPs are more likely to practice in these areas and to help meet the needs of underserved and vulnerable populations.

2.2 Employment Opportunities

Many of the Marshall University School of Nursing MSN-FNP grads already work as advanced practice nurses in the state of WV in both primary care and specialty areas. Given the changes in health care with the Affordable Care Act, there is now more than ever a need for more advanced practice nurses as more people who previously only sought episodic care in urgent care and emergency rooms now access primary care. Additionally, the proposed DNP would provide advanced practice nurses with the tools to change health care at the individual community and state levels. Sites of

employment would be rural/urban health care centers and hospitals as well as local, state and federal government agencies.

2.3 Program Impact

An impact of the DNP program will be an increased applicant pool in the MSN-FNP program. Individuals wanting to obtain the DNP degree will enroll in the MSN-FNP program and after graduation will continue in the DNP program. Another impact of the DNP program will be the addition of DNP students in the epidemiology and informatics classes in public health and informatics departments respectively.

2.4 Cooperative Agreements

The MSN-FNP program currently has 340 clinical agreements with agencies and preceptors. These agencies could also be utilized by doctoral students in the DNP program. There will be the need for additional agencies if students come to the program from outside the state of West Virginia.

2.5 Alternatives to Program

There are no alternatives to the DNP program. No terminal degree programs in nursing currently exist at Marshall. Registered nurses can get a terminal degree at Marshall in other disciplines such as the Education Doctorate (Ed.D) or the Doctorate of Management Practice in Nurse Anesthesia (DMPNA). The other alternative is for students seeking a practice doctorate is to go to another university.

3. Program Implementation & Projected Resource Requirements

1. Program Administration.

The DNP program will have a Director who will be responsible for the first line administration of the program. The pro forma also lists an administrative assistant that will be responsible for clerical work as well as student records. The DNP will be housed in the College of Health Professions and the School of Nursing. The ultimate administrative responsibility will be with the Dean of the College of Health Professions and the Chair of the School of Nursing.

2. Program Projection.

It is proposed that the DNP program will admit 20 full-time equivalent students during the first two years, 25 in the third and subsequent years. It is anticipated that by year five the program will have 50 full-time equivalent students and will graduate 25 full-time equivalent students each year.

3. Faculty Instructional Resources.

The full-time DNP director will be hired prior to academic year 2017-2018 and will spend that year developing policies, courses, recruiting students and hiring faculty. The next two years the DNP director's time will be 0.5 administrative and 0.5 teaching. Thereafter the DNP director's time will be 0.3 administrative and 0.7 teaching. The DNP director should have at least two years' experience in teaching in a DNP program and/or director of a DNP program. It is anticipated that the director will be hired at the associate or full professor rank.

A full-time (level 10) administrative assistant will be hired in June of 2018 to assist the director and create student records. It is hoped that this position could be half time for the MSN program as well. One full-time faculty will be hired for academic year 2018-2019 when the first students enroll in courses. A second full-time faculty will be hired the next academic year. The DNP faculty should have at least one-year experience in teaching in a DNP program. The faculty will be hired as assistant or associate professors.

School of Nursing faculty will serve as members of the DNP project teams. Dual faculty will come from other disciplines such as public health and health informatics. Adjunct faculty may serve as course instructors or DNP project team members. The committee proposes the utilization of one full-time or two part-time graduate assistant(s) to assist SON faculty with research and/or assist with teaching in the BSN or MSN programs. See the attached pro forma for proposed costs associated with these positions.

4. Library Resources and Instructional Materials.

Students will use current library resources such as the online nursing databases that are currently available from the Drinko Library at Marshall. SQUIRE software will be used for the DNP student Portfolio Project. That software is currently free through the Robert Wood Johnson Foundation. Current MU Webcasting technology will be used for synchronous communications with students online. Blackboard technology will be used in all online DNP classes.

5. Support Service Requirements.

The DNP is an online program therefore no additional support services are required other than what is indicated in the pro forma. This program will continue to use IT technologies & services that are already available at Marshall University.

6. Facilities Requirements.

The DNP program will be online and therefore the only additional space needed will be office space for the director of the program, administrative associate and faculty. Dr. Prewitt, Dean of COHP, has indicated that there may be office space in Prichard Hall, by the time the program begins to accommodate the staff and director. If not, the personnel may be located at the South Charleston campus.

7. Operating Resource Requirements.

Operating expenses will be needed in this program. Initially, two office spaces will be needed for the Director and one administrative assistant. Each of these individuals will need an office, telephone, computer and internet services. The administrative assistant will also need file cabinets for student records. These should be available from surplus on campus. Additional office supplies will be needed. Student tuition and fees should be adequate to support the expenditures needed for the program.

8. Source of Operating Resources.

The Doctor of Nursing Practice (DNP) program is a pro forma program; revenue will exceed expenses the second year when students enroll in the program. No state funding will be required for this program.

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APPENDIX

Page

DPN Proforma	2017 Year 1	2018 Year 2	2019 year 3	2020 Year 4	2021 Year 5	2022 Year 6	2023 Year7	2024 Year 8
Number of students served through course offerings	0	0	0	0	0	0	0	0
Headcount								
FTE								
# Of student Credit Hour by Courses								
Number of Majors								
Headcount								
FTE Majors		20	40	50	50	50	50	50
# Of student credit hours by majors in the program/academic		480	840	1050	1050	1050	1050	1050
Tuition ($600/credit hour 2.3% increase each year)		288,000	519,120	668,850	689,850	710,850	731,850	753,900
Number of degrees granted annually			20	20	25	25	25	25
5 Year projection total operating resources								
A.FTE position								
1. DNP director (12 Month Contract)	1	1	1	1	1	1	1	1
2. Full-Time Faculty	0	1	2	2	2	2	2	2
3. Dual faculty	0	0	2	3	4	4	4	4
4. Adiunct faculty	0	2	2	2	2	2	2	2
5. Graduate Assistants	0	0	1	1	1	1	1	1
6. Other Personnel:								
a.Administrative Associate (shared with MSN program)	1	1	1	1	1	1	1	1
B.Operating Costs								
1 Personnel Services								
A.DNP director	127,000	127,000	127,000	127,000	127,000	127,000	139,0700	139,700
B. Full Time Faculty		82,550	165,100	165,100	165,100	165,100	165,100	165,100
C.Dual Faculty			6,000	9,000	12,000	12,000	12,000	12,000
D.Part-Time faculty			6,000	6,000	6,000	6,000	6,000	6,000
E. Graduate assistant		16,700	17,152	17,608	18,088	18,568	19,072	19,600
F. Non-Academic personnel	3,940	23,640	23,640	23,640	23,640	23,640	23,640	23,640
Total Salaries	130,940	249,890	344,892	348,348	351,828	352,308	365,512	366,040
5 year projection of total operating resource requirements								
1.Current expenses								
Network to University system ($51/month/computer & phone)	1224	1836	2448	2448	2448	2448	2448	2448
a.Office Supplies	1500	1500	1500	1500	1500	1500	1500	1500
b.Student portfolio software	0	0	0	0	0	0	0	0
c.Accreditation fees (candidacy $2500, yearly $1200, site visitor	2500		6200	1200	1200	1200	1200	1200
2.Repairs and alterations	0	0	0	0	0	0	0	0
3.Equipment								
a.Educational equipment	0	0	0	0	0	0	0	0
4.Nonrecurring expense								
Faculty and staff computers	1000	500	500	0	0	0	0	0
Desktop printers	600	300	300	0	0	0	0	0
Initial hookup to university system ($500/computer)	1000	1000						
Office furniture	1600	800	800					
Advertising for faculty positions	2000	1000						
Payback to university for program startup costs			44,000	44,000	44,00			
Total operating resource costs	11,424	7,436	51,048	55,148	51,048	6,148	5,148	5,148
Total Costs	130940	257,326	395,940	403,496	401,976	358,456	370,660	371,188
Total Revenue Generated	0	288,000	519,120	668,850	689,850	710,850	731,850	753,900
Difference	-130940	30,674	123,180	265,354	287,874	352,394	361,190	382,712

DNP Full-Time Curriculum

	Fall	Spring	Summer
Year 1	Foundations of Theory for Advanced Practice (3 cr.) Informatics for ANP (3 cr.) Health Policy for Advanced Nursing Practice (ANP) (3 cr. This includes Resource Mgmt. & Law)	Clinical Data Mgmt. & Analysis (3 cr.) Prevention & Epidemiology for Advanced Nursing Practice (ANP) (3 cr.) Translation of Evidence into Nursing Practice (3 cr. This includes a review of Research & EBP, and beginnings of their project)	Scientific Inquiry (3 cr.) Focused Study: Specific to the student's area. (2 cr.) IRB submission (1 cr.)
	9 credits	**9 credits**	**6 credits**
Year 2	Interdisciplinary Leadership and Role Development for Practice Excellence (3 cr.) DNP project (part A) (6 cr.)	DNP Role & Finance Seminar (3 cr.) DNP project (part B) (6 Cr.)	
	9 credits	**9 credits**	**42 credits total**

DNP Part-Time Curriculum

	Fall	Spring	Summer
Year 1	Foundations of Theory for Advanced Practice (3 cr.) Health Policy for Advanced Nursing Practice (ANP) (3 cr. This includes Resource Mgmt. & Law)	Translation of Evidence into Nursing Practice (3 cr. This includes a review of Research & EBP, and beginnings of their project) Prevention & Epidemiology for Advanced Nursing Practice (ANP) (3 cr.)	Scientific Inquiry (3 cr.)
	6 credits	**6 credits**	**3 credits**
Year 2	Informatics for ANP (3 cr.) Interdisciplinary Leadership and Role Development for Practice Excellence (3 cr.)	Clinical Data Mgmt. & Analysis (3 cr.) DNP Role & Finance Seminar (3 cr.)	Focused Study: Specific to the student's area. (2 cr.) IRB submission (1 cr.)
	6 credits	**6 credits**	**3 credit**
Year 3	DNP project (part A) (6 cr.)	DNP project (part B) (6 Cr.)	
	6 credits	**6credits**	**Total of 42 credits**

Request for Graduate Non-Curricular Changes

PLEASE USE THIS FORM FOR ALL NON-CURRICULAR CHANGE REQUESTS (changes in admission requirements or requirements for graduation, changes in or new policies/procedures, changes in program descriptions in catalog, general language changes in catalog.)

SIGNATURES may not be required, depending on the nature of the request and from where it originates. Consult Graduate Council chair.

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair.
3. The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.

College: School of Pharmacy

Dept/Division: Pharmacy

Contact Person: H. Glenn Anderson Jr., Pharm.D.

Phone: 62305; 806-236-4037

Rationale for Request

(May attach separate page if needed)

Addition of new dual degree program (PharmD-MPH) to school offerings. Catalog update to recognize this dual degree offering.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.
NOTE: all requests may not require all signatures.

Department/Division Chair	Date 10/14/16
Registrar Sonya G Cantrell S12001	Date 10-17-16
College Curriculum Committee Chair (or Dean if no college curriculum committee)	Date 10.14.2016
Graduate Council Chair	Date 11-27-16

NOTE: please complete information required on the following pages before obtaining signatures above.

1. **Current Catalog Description (if applicable):** Please insert the catalog description from the current catalog for entries you would like to change. (May attach separate page if needed)

On page 215: Please insert the following under new sub-headings before the sub-heading "Minimum Requirements for Admission":

Dual Degree: Pharm. D. and MPH:

Students admitted to the School of Pharmacy may also seek admission to the Graduate College to pursue a Master of Public Health (MPH) degree. Students selecting this option will be awarded the Pharm. D. and MPH degrees at the same time. The application procedure and the student's enrollment status will vary depending on the student's undergraduate degree. All students wishing to pursue the dual degree option must first consult with the Pharm. D. advisor regarding when they should apply for admission. Students who are admitted to the MPH program will be advised by a Pharm. D. advisor and an MPH advisor. The advisors are responsible for ensuring students are making appropriate progress toward both degrees, enroll in the proper sequence of courses, and enroll in the proper section of the courses.

Pharm. D. Students Holding a Baccalaureate Degree: All students who have earned a baccalaureate degree from a regionally accredited college or university may apply for admission to the MPH program. Students must meet the published admission criteria and complete the published degree requirements for the MPH program.

Pharm. D. Students Who Do Not Have a Baccalaureate Degree: Students who have not earned a baccalaureate degree from a regionally accredited college or university may apply for admission to the MPH program and pursue the degree under the following conditions. During their enrollment in the two degree programs, students who do not hold the baccalaureate will be continuously classified as Provisionally Admitted for the MPH program. Students beginning the final semester of the Pharm. D. program of study will apply for graduation. Students in good academic standing in both programs and eligible to receive both degrees at the end of the term will be reclassified as Fully Admitted to the MPH program. Students who withdraw or are dismissed from the Pharm. D. program will also be withdrawn from the MPH program regardless of level of degree completion or academic standing.

Request for Graduate Non-Curricular Changes-Page 3

2. **Edits to current description:** Attach a PDF copy of the current catalog description prepared in MS WORD with strikethroughs to mark proposed deletions and use the highlight function to indicate proposed new text.

Request for Non-Curricular Changes-Page 4

3. **New Catalog Description:** Provide a "clean" copy of your proposed description without strikethroughs or highlighting. This should be what you are proposing for the new description. (May attach separate page if needed)

Request for Non-Curricular Changes-Page 5

Please insert in the text box below your proposed change information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Type of change request:
Department:
Degree program:
Effective date *(Fall/Spring/Summer, Year)*

Type of change request:	Non curricular
Department:	Pharmacy
Degree Program:	PharmD
Effective date:	Spring 2017

PHARMD/MPH PROGRAM DESCRIPTION

Overview

The PharmD/MPH Program enables students to earn a Doctor of Pharmacy degree from the School of Pharmacy and a Masters of Public Health degree from the College of Health Professions, School of Public Health upon graduation. The program addresses the increasing need for pharmacists and pharmaceutical researchers who are knowledgeable in the areas of pharmacy, biostatistics, and public health.

Students interested in leadership positions that demand knowledge of pharmacy sciences and public health concepts will benefit from this course of study. Graduates of the of PharmD/MPH program will have the training, knowledge, expertise, and skills to assume the following positions:

- Assistant Professor of Pharmacy Practice
- Clinical Infectious Disease Specialist
- Chronic Disease Management Coordinator
- Biosecurity Specialist
- Disaster Preparedness Coordinator
- Disaster Preparedness Researcher
- Informatics Specialist
- Outcomes Researcher
- Public Health Administrator
- Public Health Information Officer
- Regulatory Coordinator
- Survey Researcher

Admission Requirements:
Students who have been admitted into the School of Pharmacy will need to have completed an undergraduate degree and achieved a minimum GPA of 3.0 out of 4.0 to be considered for official admission into the PharmD/MPH program. Students are eligible for probationary admission [1] if they have met one of the following conditions:

1. Matriculating student meeting minimum requirements of a prerequisite GPA of 2.75 on a 4.0 scale and PCAT score of 50 Composite percentile or above, and
2. Current PharmD students who have completed $\geq$ 18 hours within the PharmD program and have achieved a minimum GPA of 3.0 on a 4.0 scale.

Application Process

Application is a two-step process. Students first apply to the PharmD program through the PharmCAS system (http://www.pharmcas.org, and see http://www.marshall.edu/pharmacy/students/prospective-students/admissions/). Current PharmD students and those students accepted into the matriculating class are eligible for admission to the PharmD/MBA program. Applicants must complete the PharmD/MBA supplemental application (http://www.marshall.edu/graduate/programs/how-to-apply-for-admission/) and pay all requested application fees. Applicants are reviewed by the PharmD/MBA Admissions Committee by a rolling process.

[1] Students with "probationary admission" will change to "admission" status upon receipt of their bachelor's degree or prior to their final semester of enrollment in the PharmD program.

Application Fees and Tuition[2]

PharmD/MBA Supplemental Application Fee[3]	$140
Tuition ($/semester credit hour)	$495

Contacts:

School of Pharmacy:
H. Glenn Anderson Jr., PharmD
Associate Dean of Academic and Curricular Affairs
One John Marshall Dr.
Hunting WV 25755-2950
304-696-2305
andersonh@marshall.edu

School of Public Health
Paul Kadetz, DPhil (Oxon.), MPH, MSN, MSOM, MSc. (Oxon.), APRN-BC, LAc.
Associate Professor, Chair of Department of Public Health, Director of MPH Program,
Marshall University, Prichard Hall, Room 218
One John Marshall Drive
Huntington, WV 25755
304-696-5772
kadetz@marshall.edu

[2] Tuition and fees reviewed annually and are subject to change with agreement of the two schools.
[3] PharmD supplemental application fee ($100) plus Graduate Admissions supplemental fee ($40)

APPENDIX B: Pathway Program - Curriculum will result in receipt of both a Masters of Public Health and Doctor of pharmacy degrees

MPH Courses
Shared PharmD/MPH courses

P1 Academic Year[4]

Fall Semester	Hours (SCH)	Spring Semester	Hours (SCH)	
PHAR 541	4	PHAR 543	4	
PHAR 542	4	PHAR 544	4	
PHAR 551	5	PHAR 532	3	
PHAR 511	1	PHAR 521	2	
PHAR 531	3	PHAR 545	4	
PHAR 811	1	PHAR 812	1	
PH 611*[5]	3	PH 641	3	
Total	21	Total	21	42 SCH for Year

P2 Academic Year

Fall Semester	Hours (SCH)	Spring Semester	Hours (SCH)	
PHAR 661	6	PHAR 671	7	
PHAR 631	3	PHAR 633	3	
PHAR 632	3	PHAR 634[5]	3	
PHAR 621[6]	2	PHAR 612	1	
PHAR 611	1	PHAR 635	3	
PHAR 622[7]	2	PHAR 814	1	
PHAR 813	1	PH 631	2	
PH 621*[8]	2			
Total	20	Total	20	40 SCH for Year

P3 Academic Year

Fall Semester	Hours (SCH)	Spring Semester	Hours (SCH)	
PHAR 751	5	PHAR 761	6	
PHAR 741	4	PHAR 721	2	
PHAR 722	2	Elective 2	3	
Elective 1	3	PHAR 817	1	
PHAR 815	1	PHAR 816	1	
PHAR 818	1	PHAR 712	1	
PHAR 711	1	PHAR 731	3	
PH Selective I[9]	3	PH Selective V[9]	2	
Total	20		19	39 SCH for Year

[4] Current syllabi and a description of the four-year curriculum in its entirety may be found at http://www.marshall.edu/pharmacy/students/prospective-students/professional_curriculum/ .
[5] Replaces PH 655 Health Care Policy
[6] Replaces PH 693 Law and Ethics
[7] Replaces PH 686 Informatics
[8] Meets PharmD elective requirments
[9] Student selects either Global and Community Health Track (course taken include: PH 671, PH 642, PH 661, PH 672, and PH 662) or Research, Evaluation & Policy Track (PH 615, PH 622, PH 617, PH 616, and PH 656)

P4 Academic Year

Summer Semester	Hours (SCH)
PHAR 8XX[10]	5
PHAR 8XX	5
PHAR 886	5
Total	15

Fall Semester	Hours (SCH)	Spring Semester	Hours (SCH)	
PH Selective II[9]	3	PH 651	2	
PH Selective III[9]	3	PH Selective IV[9]	3	
PHAR 881	5	PH 694 or PH 695	3	
PHAR 882	5	PHAR 884	5	
PHAR 883	5	PHAR 885	5	
		PHAR 891	4	
Total	21		22	58 SCH for Year

[10] PHAR 8XX indicates elective course offerings

Chair: Tracy Christofero | **GC#4: Major or Degree**

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

NOTE: Before you submit a request for a new Major or Degree, you must submit an INTENT TO PLAN form. Only after the INTENT TO PLAN goes through the approval process are you ready to submit this request for a new Major or Degree. For detailed information on new programs please see: http://wvhepcdoc.wvnet.edu/resources/133-11.pdf.

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: Pharmacy

Dept/Division: Pharmaceutical Sciences and Research

Contact Person: M. O. Faruk Khan

Phone: 63094

Degree Program: Master's in Pharmaceutical Sciences

Check action requested: ☒ Addition ☐ Deletion ☐ Change

Effective Term/Year: Fall 20 ☐ Spring 20 ☐ Summer 20 17

Information on the following pages must be completed before signatures are obtained.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head: Faruk Khan (Digitally signed by Faruk Khan DN: cn=Faruk Khan, o=MUSOP, ou=DPSR, email=khanmo@marshall.edu, c=US Date: 2016.08.31 07:50:08 -04'00') [signature]	Date 9/6/2016
College Curriculum Chair [signature]	Date 9/13/2016
College Dean [signature]	Date 9/18/16
Graduate Council Chair [signature]	Date 11-27-16
Provost/VP Academic Affairs	Date
Presidential Approval	Date
Board of Governors Approval	Date

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

The graduate program in Pharmaceutical Sciences aims to provide students with the training and skills required to prepare them for careers in academia, pharmaceutical industry, or public/private research institutions. This program involves an intensive curriculum consisting of didactic courses and research. The program goals are: (1) to attract highly qualified graduate students in West Virginia; (2) to provide comprehensive multidisciplinary training and research opportunities to the students enrolled in the program; (3) to enrich the educational opportunities of students in the Pharm.D. program by providing well trained and highly motivated graduate teaching assistants; (4) to provide highly trained and versatile scientists to meet the needs of the growing biotechnology sector in West Virginia; and (5) to gain national recognition for the Marshall University through the future accomplishments of our graduates in the field of pharmaceutical sciences.

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)

Attachment 1: Course curriculum. There are a few minor changes from the existing PharmD curriculum in addition to addition of a few new courses.

1. ADDITIONAL RESOURCE REQUIREMENTS: If your program requires additional faculty, equipment or specialized materials to ADD or CHANGE this major or degree, attach an estimate of the time and money required to secure these items.
NOTE: Approval of this form does not imply approval for additional resources. Enter NONE if not applicable.

The School of Pharmacy will seed the launch of the MSPS program with an allocation of $300,000 (research indirects and practice monies) dispersed over 4 years. The MSPS program is expected to be self-sufficient after the 4th year (please see the attached pro forma). No new faculty, staff, or other resources is requested. The existing faculty/staff and facilities will be sufficient to run this program.

Attachment: Budget proforma.

2. NON-DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the request and any response received from them. Enter NONE if not applicable.

NONE

For catalog changes as a result of the above actions, please fill in the following pages.

3. *Current* Catalog Description

Insert the *Current* Catalog Description and page number from the latest catalog for entries you would like to change. (May attach separate page if needed)

None

4. *Edits* to the Current Description

Attach a PDF copy of the current catalog description prepared in MS WORD with strikethroughs to mark proposed deletions and use the highlight function to indicate proposed new text.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 4

5. *New* Catalog Description

Insert a 'clean' copy of your proposed description, i.e., no strikethroughs or highlighting included. This should be what you are proposing for the new description. (May attach separate page if needed)

(Attachment: Course Curriculum). Additional Description is as follows:
Program Description
The Department of Pharmaceutical Sciences at the Marshall University School of Pharmacy Master of Science (M.S.) (thesis and non-thesis options) degrees with a major in Pharmaceutical Sciences. Students may complete the requirements for a M.S. under a faculty mentor in areas ranging from cellular and molecular pharmacology to antibiotic formulation and methods of drug delivery.

The M.S. (Thesis) degree in Pharmaceutical Sciences is preparation for further study or employment requiring pharmaceutical research experience and requires a thesis. An M.S. student must be mentored by a faculty member, so applicants are encouraged (but not required) to contact potential faculty advisors about research projects and graduate assistantships prior to application for admission. Information about faculty may be accessed through the School of Pharmacy website (www.http://www.marshall.edu/pharmacy/academic-departments/pharmaceutical-sciences-and-research/). The M.S. (non-thesis) degree does not require a thesis and allows students to strengthen their education in Pharmaceutical Sciences through the completion of advanced coursework and a research program.

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. Application deadlines are April 15 and November 15 for Fall and Spring admissions, respectively.

Applicants should send these materials directly to the Graduate Admissions Office:
- Three letters of recommendation from academic or professional references;
- Graduate Record Exam (GRE) scores. Applicants must specify that official test scores are to be sent directly to Marshall University.

Applicant must also have:
- An earned baccalaureate degree, a combination undergraduate GPA of 3.0 on a 4.0 scale for all previously completed undergraduate university work and a GRE score of at least 150 on both verbal and quantitative sections and a writing score of at least 4.0 or matriculating students with a recommended PCAT score of 50. Prior to admission, prospective students must also complete an on-site or video interview.

Graduate Assistantships
Students interested in applying for financial support must submit a completed Application for Graduate Assistantship by April 15 or November 15 for the Fall or Spring semester, respectively. The Application for Graduate Assistantship Form is available from the Department of Pharmaceutical Sciences website ((http://www.marshall.edu/pharmacy/academic-departments/pharmaceutical-sciences-and-research/).

Requirement for All Degrees
A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements. Students must also have a thesis committee (M.S.) or advising committee (M.A.) consisting of no fewer than three faculty (including the student's advisor) assembled by the end of their first year. Students must meet with their committees at least once within their first year and at least once per semester (excluding the defense) in subsequent years.

M.S. Degree Requirements for thesis option
- Students must complete the graduate course work as noted in the attached document including the thesis. The maximum amount of credit that may be earned for the thesis is 12 hours.
- Candidates must register for and participate in PHARXXX Graduate Seminar during each of the semesters in which they are actively enrolled in the graduate program.
- Not more than 4 hours of Graduate Seminar (PHAR XXXX) may be used to complete the MS program credit requirement.
- Successful completion of the Masters program in Pharmaceutical Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation.
- Upon completion of course requirements and the thesis, M.S. candidates must pass a comprehensive oral examination.

M.S. Degree Requirements for non-thesis option
- Students must complete the required graduate course work as noted in the attached document
- Candidates must register for and participate in PHARXXX Graduate Seminar during each of the semesters in which they are actively enrolled in the graduate program.
- Not more than 4 hours of Graduate Seminar (PHAR XXXX) may be used to complete the MA program credit requirement.
- Not more than 4 semester hours credit in Independent Study (PHAR XXXX) or Special Problems (PHAR XXXX) can be used to complete the Elective requirements.
- Successful completion of the Masters program in Pharmaceutical Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation.

Request for Graduate Addition, Deletion, or Change of a Major or Degree-Page 5

Please insert in the text box below your change summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Major or Degree:
Type of Change: *(addition, deletion, change)*
Rationale:

Department of Pharmaceutical Sciences and Research
Master's in Pharmaceutical Sciences
Addition
The graduate program in Pharmaceutical Sciences aims to provide students with the training and skills required to prepare them for careers in academia, pharmaceutical industry, or public/private research institutions. This program involves an intensive curriculum consisting of didactic courses and research. The program goals are: (1) to attract highly qualified graduate students in West Virginia; (2) to provide comprehensive multidisciplinary training and research opportunities to the students enrolled in the program; (3) to enrich the educational opportunities of students in the Pharm.D. program by providing well trained and highly motivated graduate teaching assistants; (4) to provide highly trained and versatile scientists to meet the needs of the growing biotechnology sector in West Virginia; and (5) to gain national recognition for the Marshall University through the future accomplishments of our graduates in the field of pharmaceutical sciences.

The proposed program would be the only master's degree program in Pharmaceutical Sciences in a public university in the State of West Virginia. This program will likely be attractive to pre-health profession undergraduate students from biology, biochemistry, microbiology, and chemistry. This program will provide a rigorous training experience, both lecture and laboratory, for those students wishing to further their education at the doctoral level. This program will enhance the ability of Marshall to compete nationally in attracting the very best graduate students. These graduate students will play essential roles both in providing high quality instruction as Teaching Assistants and in discovering new knowledge while pursuing their research projects. This degree will also allow outstanding undergraduate students to remain at Marshall for their Master's degree when they are currently going elsewhere. This new degree addresses Marshall University's stated mission of providing educational opportunities in advanced technologies, healthcare education, and addressing industry needs.

MSPS Pro Forma								
FY2017 - FY2025	Year #1 7/17-6/18	Year #2 7/18-6/19	Year #3 7/19-6/20	Year #4 7/20-6/21	Year #5 7/21-6/22	Year #6 7/22-6/23	Year #7 7/23-6/24	Year #8 7/24-6/25
Source Budget								
MSPS tuition revenue	**-**	**34,073**	**42,446**	**82,133**	**123,343**	**129,511**	**149,622**	**157,103**
School of Pharmacy Start Up	**90,000**	**80,000**	**100,000**	**30,000**	**-**	**-**	**-**	**-**
TOTAL SOURCES	**90,000**	**114,073**	**142,446**	**112,133**	**123,343**	**129,511**	**149,622**	**157,103**
Use Budget								
PROGRAM ADMINISTRATION & FACULTY								
Faculty Director Stipend	-	-	-	-	-	-	-	-
Instructor (Brian Train Position, $60,000 salary)	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Benefits-Faculty Administration	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Total Faculty-Administration	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
Direct Expenditures								
Operating Expenses (5% inflation FY16>)	16,500	16,573	14,947	14,633	15,365	16,133	16,940	17,787
MSPS Stipends - Thesis	36,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Classroom expansion project			30,000					
ANNUAL OPERATING EXPENSES	52,500	76,573	104,947	74,633	75,365	76,133	76,940	77,787
TOTAL USES	**90,000**	**114,073**	**142,447**	**112,133**	**112,865**	**113,633**	**114,440**	**115,287**
NET TOTAL BUDGET	**-**	**-**	**(1)**	**0**	**10,479**	**15,878**	**35,182**	**41,816**
Enrollment								
Dual Degree	0	2	3	5	5	5	5	5
Thesis	3	5	5	5	5	5	5	5
Non-Thesis	0	2	2	4	7	7	8	8
Fee Rate Increase		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Tuition Rate (per SCH)	550	578	606	637	669	702	737	774
Credit Hours (MSPS originated SCH only)								
PharmD/MSPS Dual Degree								
Fall	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Spring	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
MSPS - nonThesis								
Fall	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Spring	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
MSPS - Thesis								
Fall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spring	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Annual tuition per student - Dual Degree	6,050	6,353	6,670	7,004	7,354	7,722	8,108	8,513
Annual tuition per student - non-Thesis	10,175	10,684	11,218	11,779	12,368	12,986	13,635	14,317
Annual Thesis Stipend	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
We assume a 5% increase in T&F each year.								

1sch
6 hrs/week
15 weeks

103,355

This revenue will be utilized to buy an NMR, critical for DPSR research and MS training

Institution:	Marshall University School of Pharmacy
Date:	July 20, 2016
Category of Action Required:	Proposal for New Academic Program
Title of Degree:	Masters of Sciences in Pharmaceutical Sciences, or Masters of Arts in Pharmaceutical Sciences
Location:	Huntington, West Virginia
Effective Date of Proposed Action:	Fall 2017

Summary Statement:

The graduate program in Pharmaceutical Sciences aims to provide students with the training and skills required to prepare them for careers in academia, pharmaceutical industry, or public/private research institutions. This program involves an intensive curriculum consisting of didactic courses and research. The program of study is based on the background and career objectives of each student and tailored to meet individual needs. Both thesis and non-thesis options are available. Students pursuing the thesis option are required to conduct original research and to write and publicly defend a thesis. Students graduating from this program are guaranteed an interview during the next application cycle for entry into the Marshall University, Pharm.D. program provided they earn a GPA of 3.0 or better in all coursework. Full-time students typically complete the M.S. degree program in two years.

§133-11-3. Marshall University, School of Pharmacy
Masters of Science Program in Pharmaceutical Sciences

3.9. Program Description

3.9.1. Program Objectives

The program goals are: (1) to attract highly qualified graduate students in West Virginia; (2) to provide comprehensive multidisciplinary training and research opportunities to the students enrolled in the program; (3) to enrich the educational opportunities of students in the Pharm.D. program by providing well trained and highly motivated graduate teaching assistants; (4) to provide highly trained and versatile scientists to meet the needs of the growing biotechnology sector in West Virginia; and (5) to gain national recognition for the Marshall University through the future accomplishments of our graduates in the field of pharmaceutical sciences.

3.9.2. Program Identification: Each proposal shall include an appropriate program identification as provided in the Classification of Instructional Programs (CIP) developed and published by the U.S. Department of Education Center for Education Statistics.
CIP Identification: 51.2099

3.9.3. Program Features: Summarize the important features of the program and include a full catalog description.

Pharmaceutical Sciences is a highly interdisciplinary field that involves the integration of concepts from organic chemistry, biochemistry, physiology, pharmacology, and molecular biology for the design, and synthesis of drugs as well as for understanding the mechanism of drug action. Some of the primary goals of pharmaceutical sciences involve the discovery and development of novel drugs, efficient use of existing drugs, lowering the cost of therapy employing cheaper protocols for manufacturing the drugs, and quality control of the manufactured drug products. Emphasis is placed on the development of the ability to critically evaluate the literature and problem solving, research and laboratory skills. Students are expected to publish the results of their work in refereed journals, thereby making a contribution to the body of knowledge in their profession. Research opportunities are available utilizing whole body, animal, cellular and molecular techniques. The MS program in Pharmaceutical Sciences will most often attract undergraduates with degrees in biology and chemistry.

3.9.3.1. Admissions and Performance Standards

All prospective pharmaceutical science graduate students must have earned a baccalaureate degree and completed all the required coursework as listed below:

1. Completed all required pre-pharmacy courses (note: inquiries regarding prerequisite course equivalency should be forwarded to MUSOP Student Affairs at 304-696-7354). These courses include:

English Composition.....	6 credit hours or 2 semesters
Calculus.....	5 credit hours or 1 semester
Statistics.....	3 credit hours or 1 semester
Biology with Lab.....	8 credit hours or 2 semesters
General Chemistry with Lab.....	10 credit hours or 2 semesters
Human Anatomy*	4 credit hours or 1 semester
Human Physiology*.....	4 credit hours or 1 semester
Microbiology*	4 credit hours or 1 semester
Organic Chemistry with Lab	9 credit hours or 2 semesters
Physics with Lab	8 credit hours or 2 semesters
Social Science elective	credit hours or 1 semester

*Suggested but not required.

2. A recommended minimum undergraduate Grade Point Average (GPA) of 3.0 or higher on a 4.0 scale for all previously completed undergraduate university work
3. A recommended GRE score of at least 50 percentile on both the verbal and quantitative sections and writing score of at least 4.0 OR matriculating students with a recommended PCAT score of 50 Composite percentile or above
4. Three (3) letters of professional recommendation
5. Complete University Graduate School Application (http://www.marshall.edu/admissions/apply/)
6. Submitted all required application fees ($50)
7. Completed an on-site interview or video interview
8. International students for whom English is a second language are required to have earned a Test of English as a Foreign Language (TOEFL) score of at least 550 (213 computer based or 80 internet based).
9. Submit official transcripts

Application Review Process

The Coordinator of Graduate Admissions forwards all applications to the Director of Graduate Studies. The Director of Graduate studies will distribute copies of each application to the members of the Pharmaceutical Sciences Graduate Program Admissions Committee (PSGA), who represent the Department of pharmaceutical Science. The PSGA will formally review the application in a regular or special meeting and vote to accept or reject the application for admission into the Pharmaceutical Sciences Graduate Program. The Director of Graduate Studies will inform the Chair of the status of applications to the Pharmaceutical Sciences Graduate program. Applicants accepted into the Pharmaceutical Sciences Graduate Program will receive an acceptance letter from the Coordinator of Graduate Admissions signed by the Dean of Marshall University School of Pharmacy. Students lacking one or more of the above courses are encouraged to apply and can be admitted to the program contingent on completion of the prerequisites and with permission of the faculty. Undergraduate course deficiencies must be made up by the time the student completes 18 semester hours of graduate coursework.

3.9.3.2. Program Requirements

1. Core Course requirements (MS- Thesis option)

Fall, Year 1			**Spring, Year 1**		
PHAR531	Biopharm 1	3	*MSPS542	MS Biopharm 2	4
*MSPS556	Biochemistry &Mol Biol	5	*MSPS551	MS Prin. Dis. Drug Actions	5
*MSPS531	MS Fund. Med Chem	3	*MSPS511	Seminar	1
*MSPS511	Seminar	1	*MSPS512	Res. Conduct of Res.	1
			*MSPS621	Regulatory Affairs	1
	Total	**12**		**Total**	**12**
Fall, Year 2			**Spring, Year 2**		
*MSPS641	MS Pharmacometrics	4	*MSPS511	Seminar	1
*MSPS511	Seminar	1	*MSPS669	Thesis	4-6
*MSPS669	Thesis	4-6	*MSPS622	Product Development by QbD	2
	Total	**9-11**		**Total**	**7-9**
				Total for program	**40-44**

2. Core Course Requirements (MS – Non-thesis option)

Fall, Year 1			Spring, Year 1		
PHAR531	Biopharm 1	3	*MSPS542	MS Biopharm 2	4
*MSPS556	Biochemistry & Mol Biol	4	*MSPS551	MS Prin. Dis. Drug Actions	5
*MSPS531	MS Fund. Med Chem	3	*MSPS511	Seminar	1
*MSPS511	Seminar	1	*MSPS512	Res. Conduct of Res.	1
			*MSPS621	Regulatory Affairs	1
	Total	**12**		**Total**	**12**
Fall, Year 2			**Spring, Year 2**		
*MSPS641	MS Pharmacometrics	4	*MSPS511	Seminar	1
*MSPS511	Seminar	1	XXXX	Electives	3-4
XXXX	Electives	3-4	MSPS622	Product Development by QbD	2
	Total	**8-9**		**Total**	**6-7**
				Total for program	**38-40**

3. GPA Requirement: To successfully graduate with an MS/MA degree students should maintain a minimum 3.00 cumulative GPA.

4. Degree plan: It is advantageous to the student to begin graduate study in a fall semester. The degree plan may vary depending upon availability of **course** offerings in a given semester. Students are able to select additional courses in consultation with a faculty advisor, with a goal of developing a study plan that is individually tailored to the student's particular interests. Students are recommended to identify an advisor and develop a plan of study during the first semester of the program. A three person advisory committee must be selected prior to beginning the second year of the program. Each student is expected to complete the program in two years, barring exceptional circumstances. Pharmaceutical sciences graduate students are required to submit a plan of study prior to completing 17 hours of graduate credit.

Each M.S. student will select a formal Masters committee consisting of the major advisor and two committee members, no later than the beginning of the student's second year in the program. With approval from the student's committee, the students on the thesis option will complete a thesis and an oral examination in defense of the thesis. Satisfactory completion of the requirement will be determined by the thesis committee. Evaluation of transferable credits from other institutions will be the responsibility of the Graduate College.

5. Thesis

The thesis will be based on a research project that the student will work on during the M.S. program. The faculty advisor will help the student select a topic and mentor the student in his/her progress. Students selecting the thesis option will be required to present a written report of the thesis and present it to the thesis committee for approval. The committee will consist of three faculty members (faculty advisor and 2 other faculty from the Department of Pharmaceutical Science and Research at the School of Pharmacy). In addition, students will be required to defend their thesis via an oral presentation of the content at the end of their program. The oral defense may also include questions based on the required course work completed by the student. Candidates who successfully complete this portion will be conferred the M.S. degree.

6. Funding for Graduate Assistants

Applicants are considered for a financial support during the admission evaluation process. Selection for support is competitive. Financial support can only be offered to formally admitted M.S. students and can only be processed for officially matriculated students. The amount of financial support may vary but may be available up to the full cost of attendance. To maintain assistantship status, all student assistants must at a minimum:

- Be an admitted, matriculated, and active student in good standing in a graduate-level degree program at Marshall University.
- Maintain a minimum 3.00 cumulative GPA each term and adhere to the Minimum Satisfactory Academic Progress policy for their particular academic program.
- Commit significant hours each week of each term to academic research under the guidance of their Advisor/Program Coordinator/Research Supervisor.
- Work with faculty members on research projects leading to the Master's Thesis for 20 hours a week during the Fall and Spring semesters and 40 hours a week during the summer semester.

3.9.4. Program Outcomes

The graduates will master the key concepts in the discipline of their interest in pharmaceutical sciences (Pharmaceutics, Medicinal Chemistry, Pharmaceutical Analysis, Pharmacology). They will be able to work independently or in collaboration with others in their area of expertise as an investigator. After graduation, they will be prepared for a career as an independent scientist through class room learning, seminars, independent research, and thesis.

Program Student Learning Outcomes

- Demonstrate the ability to critically assess the scientific literature.
- Engage in and conduct original research.
- Design and implement research experiments to critically test research hypotheses.
- Demonstrate the ability to present scientific data.
- Develop strong verbal and written communication skills.
- Behave in a professional and ethical manner.

3.9.5. Program Delivery: Describe any instructional delivery methodologies to be employed, such as compressed video, World Wide Web, etc. Indicate costs associated with distance education or technology-based delivery.

None

§133-11-4. Program Need and Justification.

4.1. Relationship to Institutional Goals/Objectives: Relate this program to the institution's goals and objectives and the statewide master plan.

How does the proposed program supplement the current programs available?

This program will likely be attractive to pre-health profession undergraduate students from biology, biochemistry, microbiology, and chemistry. This program will provide a rigorous training experience, both lecture and laboratory, for those students wishing to further their education at the doctoral level.

How does this program advance the campus' academic mission and fit priorities?

Creation of the M.A. / M.S. program in Pharmaceutical Sciences will enhance the ability of Marshall to compete nationally in attracting the very best graduate students. These graduate students will play essential roles both in providing high quality instruction as Teaching Assistants and in discovering new knowledge while pursuing their research projects. This degree will also allow outstanding undergraduate students to remain at Marshall for their Master's degree when they are currently going elsewhere. This new degree addresses Marshall University's stated mission of providing educational opportunities in advanced technologies, healthcare education, and addressing industry needs.

How does this program support or advance West Virginia's needs and interests?

West Virginia has a continued need for growth in biotechnology and health-related industries to bolster its economy. Such businesses require the support of state educational institutions that will provide highly trained scientists. The new graduate program in Pharmaceutical Sciences is supported by a strong group of research-active faculty with national reputations in a broad range of disciplines. The expertise and research interests of the faculty complement each other and taken together provide an opportunity to create a comprehensive graduate training program in Pharmaceutical Sciences. The enthusiasm for research and graduate education among this diverse group of faculty provides outstanding opportunities for graduate students seeking a top-level science education.

4.2. Existing Programs: List similar programs (and their locations) offered by other institutions (public or private) in West Virginia. State why additional programs or locations are desirable.

The proposed program would be the only master's degree program in Pharmaceutical Sciences in a public university in the State of West Virginia.

4.3. Program Planning and Development: Indicate the history to date of the development and submission of this program proposal. What resources (e.g., personnel, financial, equipment) have already been invested in this program? What planning activities have supported this proposal?

None

4.4. Clientele and Need: Describe the clientele to be served and state which of their specific needs will be met by the program. Indicate any special characteristics, such as age, vocation, or academic background. Indicate manpower needs, interest on the part of industry, research and other institutions, governmental agencies, or other indicators justifying the need for the program.

The M.S. Thesis option will produce trained pharmaceutical scientists that are needed by private industry, government (non-academic), other non-academic, and academic institutions. The nonthesis students will be interested in pursuing their career in PharmD education. The existing MUSOP PharmD program identified the need of high standard students who will be highly successful in the PharmD degree and will lead the health care sector in the pharmaceutical care. This will build reputation of MUSOP nationally. The PharmD-MS dual degree students will be highly valuable in the pharmaceutical care as well.

4.5. Employment Opportunities: Present a factual assessment of the employment opportunities that are likely to be available to program graduates. Include data and references supporting this assessment. Indicate the types and number of jobs for which such a curriculum is appropriate.

It has been shown by 2015 AAPS Salary Survey that 94% of the MS level pharmaceutical scientists are employed by private industry, and only 4% are employed by academic institutions as research associates and/or instructors. Within private industry, the major areas of employment are in pharmaceutical dosage form design, pharmaceutical analytical development, biopharmaceutics and pharmacokinetics and management and administration of R & D. All these areas will be the focus of the M.S. curriculum. If the M.S. graduates would like to get into academia, then they may choose to pursue Ph.D. in Pharmaceutical Sciences. Up to 21% of the PhD level pharmaceutical scientists are entering a career in academia and 73% in private industry according to the same survey results.

The job market for prospective masters of pharmaceutical sciences graduates is very good and graduates are almost guaranteed employment upon completion of degree. One web search for pharmaceutical scientist jobs returned 6 job sites with numerous postings. The number of postings of full time positions per site ranged from as many 7000 on JobisJob.com [1] to more than 3000 on Indeed.com [2] and as few as 18 on monster.com [3]. In the states of West Virginia, Kentucky

and Ohio, more than 40 current full-time positions were posted for pharmaceutical scientists jobs [4]. Most job opportunities in these states require minimally, a master's degree in the pharmaceutical sciences or related field with experience in some form of pharmaceutical research.

1. JobisJob. Available from: http://www.simplyhired.com/search?q=pharmaceutical+scientist.
2. Indeed. Available from: http://www.indeed.com/q-Pharmaceutical-Scientist-jobs.html.
3. Monster. Available from: http://www.monster.com/jobs/q-pharmaceutical-scientist-jobs.aspx.
4. CareerJet. Available from: http://www.careerjet.com/pharmaceutical-scientist-jobs/west-virginia-23068.html.

4.6. Program Impact: Describe the impact of this program on other programs that it will support or that will be supported by it.

The program will seek to recruit, educate and graduate 4-5 students per year. This program will support, and also be supported by the PharmD program by enrolling students who would like to conduct dual degree (PharmD/MSPS). This will also impact the other degrees within campus such as the biological sciences and Chemistry undergraduates who would like to advance their career in pharmaceutical fields.

4.7. Cooperative Arrangements: Describe any cooperative arrangements (including clinical affiliations, internship opportunities, personnel exchanges, and equipment sharing) that have been explored.

None

4.8. Alternatives to Program Development: Describe any alternatives to the development of this program that have been considered and why they were rejected.

No other alternative to this program is proposed or created. The alternative is to maintain the *status quo*. This will not advance the level of pharmaceutical sciences research being conducted and will not advance the opportunities for WV students.

§133-11-5. Program Implementation and Projected Resource Requirements.
133CSR11 5.1. Program Administration: Describe the administrative organization for the program and explain what changes, if any, will be required in the institutional administrative organization.

PROPOSED STRUCTURE AND OPERATION

1.) Director of Graduate Studies

This position will be appointed by the Dean. This position will serve for two years initially and may be renewed subject to a satisfactory administrative review.

2.) Faculty Participation

A group of 8-9 FTE will comprise the core faculty.

Additional faculty will be drawn from all colleges and disciplines as appropriate, based on needed expertise and availability of time to commit. Faculty participation will be governed by the policies outlined in the Green Book

3) Pharmaceutical Sciences Graduate Program Admissions Committee (PSGA).

Three faculty within the department will serve on the admissions committee on a rotating basis.

5.3. Faculty Instructional Requirements: Indicate the number, probable rank, experience, and cost of faculty required over the five-year period.

No new resources are required for this program and no additional faculty or staff hires are needed to implement the proposed program. Team teaching and rotation of assignments among the faculty involved will make it possible to offer the new courses required for the program with no net reduction in faculty contributions to other undergraduate and graduate programs.

5.4. Library Resources and Instructional Materials: Evaluate the adequacy of existing library resources and instructional materials for the proposed program. Estimate the nature and probable cost of additional resources necessary to bring the proposed program to an accreditable level.

No new resources are required for this program and no additional library or instructional resources are needed to implement the proposed program. Present resources are sufficient for proposal accreditation.

5.5. Support Service Requirements: Indicate the nature of any additional support services (e.g., laboratories, computer facilities, equipment, etc.) likely to be required by the proposed program. Include the expected costs, and describe how such expansions will be incorporated into the institutional budget.

The current DPSR staffs who support the Pharm.D. graduate program will be reassigned to the new M.S. program. These include approximately 0.2 secretarial FTE and 0.2 technical network support FTE.

5.6. Facilities Requirements: Indicate whether the program will require the addition of new space or facilities or the remodeling or renovation of existing space. If so, provide a statement detailing such plans and space needs and their estimated funding requirements. Describe the impact of this new program on space utilization requirements.

No new facilities, remodeling or renovation of existing space is required for this program.

5.7. Operating Resource Requirements: Using FORM 2, provide a summary of operating resource requirements by object of expenditure.

No new operating resource requirements are required for this program.

5.8. Source of Operating Resources: Indicate the source of operating resource requirements if the service levels are to reach those projected in FORM 1. Describe any institutional plans to reallocate resources to the program in each year of the five-year period. Describe the supplementary resource needs that are beyond the usual or expected institutional allocations that are derived through the regular budget request process.

Course work / Electives

Pharmacy

MSPS511 Seminar. 1-4; hrs. (PR: Permission) **New course**
MSPS532 MS Medicinal Chemistry. 3 hrs **New course**
MSPS542 MS Biopharmaceutics 2. 4 hrs **New course**
MSPS554 MS Principles of Disease and Drug Action. 5 hrs **New course**
MSPS556 MS Biochem and Mol Biol. 5 hrs **New course**
MSPS580-583 MS Special Topics. 1-4; hrs. (PR: Permission) **New course**
MSPS585-588 MS Independent Study. 1-4 hrs. CR/NC (PR: Permission) **New course**
MSPS512 Res. Conduct of Res.
MSPS621Regulatory Affairs
MSPS511 Seminar
MSPS669 Thesis
***MSPS622 Product Development by QbD**
PHARMS611 Integrated Laboratory II. 1 hr. Practical hands-on experience in modern scientific methods used in biochemistry, pharmaceutics, pharmacology, pharmacometrics; and analytical methods employed to detect, characterize, and quantitate naturally occurring substances and drug molecules. (PR: P2 standing)
PHAR635 Bridging Research Outcomes and Patient Care. 3 hrs. The fundamentals of clinical and outcomes research will be discussed and applied to patient care. Students will gain an understanding of study design, research methods, statistical analysis, and pharmacotherapy.
PHAR650-652 MS Special Problems. 1-3; 1-3; 1-3 hrs. By permission of adviser, graded CR/NC. **New course**
PHAR679 MS Problem Report. 1-4 hrs. Preparation and completion of a written report from experimental or field research in biological sciences. (PR: permission) **New course**
PHAR699 Thesis 1-6 hrs. **New course**

Biological Sciences

BSC517 Biostatistics. 3 hrs. Statistical skills for biological/biomedical research, with emphasis on applications. Experimental design/survey sampling, estimation/hypothesis testing procedures, regression, ANOVA, multiple comparisons. Implementation using statistical software such as SAS, BMDP. Same as MTH 518. (PR: Permission)
BSC522 Animal Physiology. 4 hrs. I. Physiological principles operating in cells, organs, and systems of animals, with a focus on vertebrate, including human, function. (PR: BSC 322; CHM 355; MTH 140 or 132 or 229; or permission)
BSC640 Cell Biology and Biotechnology. 3 hrs. Broad coverage of applied cell biology, biotechnology with high current interest and utility to the medical, agricultural and commercial product development. Application of DNA technologies for biotech communication. (PR: BSC 322 or equivalent)

Biomedical Sciences

BMS600 Biochemical, Cellular and Molecular Foundations of Biomedical Science. 7 hrs. I. A study of the structure and metabolism of biological compounds, the molecular biology of the cell, and the interactions of cell components. (PR: One year of Biology and Organic Chemistry and consent of instructor)
BMS601 Introduction to Nucleic Acids and Proteins. 3 hrs. A molecular and cell biological study of the structure and function of nucleic acids and proteins. (PR: Consent of instructor)
BMS602 Introduction to Cell Structure and Metabolism. 3 hrs. A molecular and cell biological study of the structure of cells and of cellular metabolism. (CR: BMS 601; PR: Consent of instructor)
BMS603 Regulation of Cell Function. 2 hrs. An advanced molecular and cell biological study of cell metabolism and the regulation of cell function. (PR: BMS 601, BMS 602, and consent of instructor)

BMS604 Cellular Basis of Disease. 1 hr. A molecular and cell biological study of the basis of diseases prevalent in Appalachia. (PR: BMS 601, BMS 602, and consent of instructor)
BMS617 Statistical Techniques for the Biomedical Sciences. 3 hrs. An application-oriented course in statistical concepts and techniques aimed at prospective researchers in the biomedical sciences.

BMS644 Responsible Conduct of Research. 1 hr. CR/NC. Responsible conduct of research, including human subjects, live vertebrate animals, conflict of interest, mentor/mentee responsibilities, collaborative research, peer review, data management, research misconduct, and responsible authorship, with case discussions.
BMS651 Cancer Biology. 4 hrs. An advanced graduate course on the core principles of initiation, progression, treatment and prevention of cancer, based on current literature. (PR: BMS 600, and permission of instructor)
BMS652 Cancer Biology Colloquium. 1 hr. This is a mentored journal club for graduate students covering selected areas of current interest in cancer biology research. (PR: Permission of instructor)
BMS660 Communication Skills for Biomedical Sciences I. 1 hr. Biomedical graduate students are trained to plan, prepare, and deliver effective scientific presentations.
BMS661 Communication Skills for Biomedical Sciences II. 1 hr. Biomedical graduate students are trained to plan, prepare, and deliver effective scientific presentations.
BMS665 Cardiovascular Disease, Obesity, Diabetes Research Colloquium. 1 hrs. CR/NC. A seminar-style series that will focus on recent advances in topics related to cardiovascular disease, diabetes and obesity.

Chemistry
CHM 511 Modern Instrumental Methods in Chemistry and Biochemistry. 4 hrs. This course investigates the theory and functional aspects of modern analytical instrumentation. Emphasis is placed on components of instruments and the applicability of various techniques to specific analytical problems.
CHM548 Advanced Inorganic Chemistry I. 4 hrs. Study of physical properties and periodic relationships of inorganic materials. 3 lec--2 lab. (PR: CHM 356 and 307 or 357)
CHM549 Advanced Inorganic Chemistry II. 3 hrs. A detailed consideration of bonding, structure, reaction rates and equilibrium involving inorganic materials. (PR: CHM 448 or equivalent)
CHM 551 Biological Mass Spectrometry. 4 hrs. This course investigates the theory and applications of mass spectrometry. It includes a laboratory component in which you will learn to run the mass spectrometers and interpret mass spectral results.
CHM567 Intermediate Biochemistry. 3 hrs. A survey course including introduction to basic biochemical concepts, bioenergetics and information transfer.
CHM678 Applied Microscopy in Research. 4 hrs. Catalog Description: A combined lecture/lab/self-motivated research course that results in a microscopy-based project to be presented by each student at an open forum (can augment thesis project). (PR: instructor permission)

Exercise Science and Sport
ESS578 Exercise Metabolism. 3 hrs. Addresses the principles of sport nutrition and its effects on physiological systems, body composition, and human exercise performance. (PR: ESS 621 or permission)
ESS621 Exercise Physiology I (Cardiorespiratory and Metabolic Adaptations). 3 hrs. Topics would include bioenergetics, integration of metabolism, metabolic response to exercise, neuroendocrine control of metabolism during exercise, cardiovascular control and adaptation during exercise and respiratory control and adaptation during exercise. (REC: ESS 201 and 345 or equivalent)
ESS623 Advanced Exercise Physiology II (Neuromuscular and Environmental Adaptations). 3 hrs. The course is designed to study the neuromuscular and environmental adaptations to both the acute and chronic effects of exercise. Cellular and Molecular Adaptations will be explored. (PR: ESS 621)

ESS644 Cardiovascular Exercise Physiology. 3 hrs. Detailed study of the anatomy and physiology of the cardiovascular system and its response to acute and chronic exercise. (PR: ESS 621, ESS 623, ESS 670)
ESS645 Respiratory Exercise Physiology. 3 hrs. Detailed study of the anatomy and physiology of the respiratory system and its response to acute and chronic exercise. (PR: ESS 621, ESS 623, ESS 670)
ESS646 Neuromuscular Exercise Physiology/Plasticity. 3 hrs. This course is a detailed study of the structure and function of the neuromuscular system along with the etiology and functional consequences of numerous neuromuscular diseases. (PR: ESS 621, ESS 623, ESS 670)

Mathematics
MTH512 Regression Analysis. 3 hrs. Determining regression models; deriving parameter estimates using calculus; detailed coverage of tests of assumptions and remedial procedures (transformations and weighted least-squares); multiple and polynomial regression; tests and corrections for autocorrelation.
MTH513 Experimental Designs. 3 hrs. Principles of experimentation; analysis of variance; Latin square and related designs; factorial designs, response surface; robustness; nested and split-plot designs.
MTH518 Biostatistics. 3 hrs. Statistical skills for biological/biomedical research, with emphasis on applications. Experimental design/survey sampling, estimation/hypothesis testing procedures, regression, ANOVA, multiple comparisons. Implementation using statistical software such as SAS, BMDP. May not be used for any degree offered by the Department of Mathematics.
MTH520 Nonparametric Statistics. 3 hrs. Coverage of a variety of nonparametric or distribution-free methods for practical statistical inference problems in hypothesis testing and estimation, including rank procedures and randomization procedures.
MTH525 Sampling Designs and Estimation. 3 hrs. Coverage of the theory and applications of a variety of sampling designs; sample size determination; ratio and regression estimates; comparisons among the designs. (PR: MTH 326 or permission)

Pharmacology
PMC610 Introduction to Pharmacology. 3 hrs., An indepth presentation of the history and introductory principles of pharmacology. Designed to acquaint students with pharmacology as a scientific discipline and provide the basis for more advanced courses. (PR: Consent of instructor)
PMC621 Medical Pharmacology I. 6 hrs. This course will encompass the core pharmacology concepts as well as drugs used in the treatment of infectious diseases, cancer, hematological matters, nervous system agents and cardiovascular drugs. (PR: BMS 600 or equivalent; REC: PHS 629 desirable)
PMC622 Medical Pharmacology II. 2 hrs. This course will encompass the core pharmacology concepts as well as drugs used in the treatment of pulmonary, gastrointestinal, endocrine, renal and musculoskeletal diseases, drugs specific for men's and women's health, dermatological agents and toxicology. (PR: BMS 600 or equivalent; REC: PHS 629 desirable)
PMC625 Drug Metabolism. 3 hrs., Topics will include a discussion of the metabolizing enzymes, enzyme induction and inhibition, toxic metabolites, prodrugs, metabolic disorders and analytical methods for studying drug metabolism. (PR: consent of instructor)
PMC630 Chemical Aspects of Pharmacology. 3 hrs., An introduction to the chemical principles of pharmacology. The chemical classification, acid- base chemistry and stereochemical properties of drugs and the reactivity of drugs with biological systems will be discussed. (PR: organic chemistry, consent of instructor)
PMC635 Neuropharmacology. 3 hrs., A study of the actions of drugs on the nervous system.
PMC640 Behavioral Pharmacology. 3 hrs., Behavioral methods for assaying drug action. (PR: consent of instructor)
PMC643 Introductory Cardiopulmonary Pharmacology. 3 hrs. A general overview of the principles of pharmacology and the mechanisms and effects of cardiovascular and respiratory drugs. (PR: PHS 629 or BSC 522, consent of instructor)

PMC645 Advanced Cardiopulmonary Pharmacology. 3 hrs., An in-depth presentation of pharmacological aspects of cardiovascular and pulmonary systems. Current knowledge, principles and methods used in cardiopulmonary research will be discussed. (PR: PMC 620 or PMC 643; consent of instructor)
PMC650 General Toxicology. 3 hrs., An in depth presentation of the general principles and methods of toxicology. Mechanism, distribution and organ system responses to toxins and methods of toxicological evaluation will be discussed. (PR: consent of instructor; PMC 610 or PMC 621 highly recommended)

Physiology
PHS626 Neurophysiology I: Neuron Function and Introduction to Neural Systems. 1 hr. To study and understand the basic functional principles of the cells of the nervous system, and organization of cells into functional systems. (PR: BMS 600 or permission of instructor)
PHS627 Neurophysiology II: Neuronal Systems. 1 hr. To study and understand the major functional systems of the brain. (PR: PHS 626)
PHS628 Mammalian Neurophysiology. 2 hrs. This course is a basic introductory, survey course covering neurophysiology from subcellular level to behavioral level. (PR: Consent of instructor)
PHS629 Mammalian Physiology. 6 hrs. II. A study of mammalian systems including pulmonary, renal, cardiovascular, gastrointestinal, endocrine and reproductive systems. Emphasis will be placed on homeostatic mechanisms and on experimental approaches to physiology. (PR: PHS 628 or PHS 626, PHS 627)
PHS666 Physiology of the Cell. 3 hrs. An in-depth study of selected topics in cell physiology

Public Health
PH602 Public Health Biology. 2 hrs. Review 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.
PH611 Epidemiology. 3 hrs. An introduction to basic concepts of epidemiology, including risk, study design, and analysis. Students apply these techniques to examine outbreaks and evaluate preventives, diagnostics and treatments.
PH621 Statistical Methods I. 3 hrs. 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.
PH622 Statistical Methods II. 2 hrs. Examination of procedures including multiple linear and logistic regression, survival analysis, advanced non-parametric tests, repeated measures. Students gain experience in the use of SAS software for data management and analysis.
PH661 Chronic Disease. 3 hrs. Examination of major chronic diseases including mechanisms of development, risk, diagnosis and interventional strategies. Scope of the course includes cardiovascular, respiratory and neurodegenerative disorders, as well as diabetes and cancer. (PR: PH 611)

Material for GSC3: MS Pharm Sciences Intent to Plan

Please provide a rationale for new degree program: (May attach separate page if needed)

The graduate program in Pharmaceutical Sciences aims to provide students with the training and skills required to prepare them for careers in academia, pharmaceutical industry, or public/private research institutions. This program involves an intensive curriculum consisting of didactic courses and research.

The program goals are: (1) to attract highly qualified graduate students in West Virginia; (2) to provide comprehensive multidisciplinary training and research opportunities to the students enrolled in the program; (3) to enrich the educational opportunities of students in the Pharm.D. program by providing well trained and highly motivated graduate teaching assistants; (4) to provide highly trained and versatile scientists to meet the needs of the growing biotechnology sector in West Virginia; and (5) to gain national recognition for the Marshall University through the future accomplishments of our graduates in the field of pharmaceutical sciences.

The proposed program would be the only master's degree program in Pharmaceutical Sciences in a public university in the State of West Virginia.

1. ADDITIONAL RESOURCE REQUIREMENTS: If your new program requires additional faculty, equipment or specialized materials, attach an estimate of the time and money required to secure these items. NOTE: Approval of this form does not imply approval for additional resources. Enter NONE if not applicable.

NONE

2. NON-DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the request and any response received from them. Enter NONE if not applicable.

NONE

***New* Catalog Description** Insert a 'clean' copy of your proposed description, i.e., no strikethroughs or highlighting included. This should be what you are proposing for the new description. (May attach separate page if needed)

Program Description

The Department of Pharmaceutical Sciences at the Marshall University School of Pharmacy Master of Science (M.S.) and Master of Arts (M.A.) degrees with a major in Pharmaceutical Sciences. Students may complete the requirements for a M.S. under a faculty mentor in areas ranging from cellular and molecular pharmacology to antibiotic formulation and methods of drug delivery.

The Master of Science (M.S.) degree in Pharmaceutical Sciences is preparation for further study or employment requiring pharmaceutical research experience and requires a thesis. An M.S. student must be mentored by a faculty member, so applicants are encouraged (but not required) to contact potential faculty advisors about research projects and graduate assistantships prior to application for admission. Information about faculty may be accessed through the School of Pharmacy website (www.
http://www.marshall.edu/pharmacy/academic-departments/pharmaceutical-sciences-and-research/). The Master of Arts (M.A.) degree does not require a thesis and allows students to strengthen their education in Pharmaceutical Sciences through the completion of advanced coursework and a research program.

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. Application deadlines are April 15 and November 15 for Fall and Spring admissions, respectively.

Applicants should send these materials directly to the Graduate Admissions Office:

- Three letters of recommendation from academic or professional references;
- Graduate Record Exam (GRE) scores. Applicants must specify that official test scores are to be sent directly to Marshall University.

Applicant must also have:

- An earned baccalaureate degree, a combination undergraduate GPA of 3.0 on a 4.0 scale for all previously completed undergraduate university work and a GRE score of at least 150 on both verbal and quantitative sections and a writing score of at least 4.0 or matriculating students with a recommended PCAT score of 50. Prior to admission, prospective students must also complete an on-site or video interview.

Graduate Assistantships

Students interested in applying for financial support must submit a completed Application for Graduate Assistantship by April 15 or November 15 for the Fall or Spring semester, respectively. The Application for Graduate Assistantship Form is available from the Department of Pharmaceutical Sciences website ((http://www.marshall.edu/pharmacy/academic-departments/pharmaceutical-sciences-and-research/).

Requirement for All Degrees

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements. Students must also have a thesis committee (M.S.) or advising committee (M.A.) consisting of no fewer than three faculty (including the student's advisor) assembled by the end of their first year. Students must meet with their committees at least once within their first year and at least once per semester (excluding the defense) in subsequent years.

M.S. Degree Requirements

- Students must complete the following graduate course work, including the thesis. The maximum amount of credit that may be earned for the thesis is 12 hours.
- Candidates for the M.S. degree must register for and participate in PHARXXX Graduate Seminar during each of the semesters in which they are actively enrolled in the graduate program.
- Not more than 4 hours of Graduate Seminar (PHAR XXXX) may be used to complete the MS program credit requirement.

- Successful completion of the Masters program in Pharmaceutical Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation.
- Upon completion of course requirements and the thesis, M.S. candidates must pass a comprehensive oral examination.

Core Course requirements (MS- Thesis option)

Fall, Year 1			Spring, Year 1		
PHAR541	MS Biopharm 1	4	PHAR442	MS Biopharm 2	4
PHAR556	MS Biochemistry	5	PHAR554	MS Prin. Dis. Drug Actions	5
PHAR532	MS Fund. Med Chem	3	PHAR511	Seminar	1
PHAR511	Seminar	1	BMS664	Res. Conduct of Res.	1
	Total	**13**		**Total**	**11**
Fall, Year 2			**Spring, Year 2**		
PHAR641	MS Pharmacometrics	4	PHAR511	Seminar	1
PHAR511	Seminar	1	PHAR699	Thesis	6
PHAR699	Thesis	6	XXXX	Product Development by QbD	
XXXXXX	Regulatory Affairs	2			
	Total	**13**		**Total**	**9**
				Total for Program	**46**

M.A. Degree Requirements

- Students must complete the following graduate course work.
- Candidates for the M.A. degree must register for and participate in PHARXXX Graduate Seminar during each of the semesters in which they are actively enrolled in the graduate program.
- Not more than 4 hours of Graduate Seminar (PHAR XXXX) may be used to complete the MA program credit requirement.
- Not more than 4 semester hours credit in Independent Study (PHAR XXXX) or Special Problems (PHAR XXXX) can be used to complete the Elective requirements.
- Successful completion of the Masters program in Pharmaceutical Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation.

Core Course Requirements (MA - Non thesis option)

Fall, Year 1			Spring, Year 1		
PHAR541	MS Biopharm 1	4	PHAR442	MS Biopharm 2	4
PHAR556	MS Biochemistry	5	PHAR554	MS Prin. Dis. Drug Actions	5
PHAR532	MS Fund. Med Chem	3	PHAR511	Seminar	1
PHAR801	Elective	3-4	BMS664	Resp. Conduct of Res.	1
	Total	**15-16**		**Total**	**11**
Fall, Year 2			**Spring, Year 2**		
PHAR641	MS Pharmacometrics	4	PHAR511	Seminar	1
PHAR511	Seminar	1	XXXX	Electives	6-8
XXXX	Electives	4-6	XXXX	Product Development by QbD	2
XXXX	Regulatory Affairs	2			
	Total	**11-13**		**Total**	**9-11**
				Total for program	**46-51**

Please insert in the text box below your summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
New Major or Degree:
Credit Hours:
Rationale:

Department: School of Pharmacy
New Major or Degree: Masters of Science program in Pharmaceutical Sciences
Credit hours: 46-51 (depending upon MS or MA option)
Rationale:
The graduate program in Pharmaceutical Sciences aims to provide students with the training and skills required to prepare them for careers in academia, pharmaceutical industry, or public/private research institutions. This program involves an intensive curriculum consisting of didactic courses and research. The program of study is based on the background and career objectives of each student and tailored to meet individual needs. Both thesis (M.S.) and non-thesis (M.A.) options are available. Students pursuing the thesis option are required to conduct original research and to write and publicly defend a thesis. Students graduating from this program are guaranteed an interview during the next application cycle for entry into the Marshall University, Pharm.D. program provided they earn a GPA of 3.0 or better in all coursework. Full-time students typically complete the M.S. degree program in two years.

Chair: Tracy Christofero | **GC#6: Course Addition**

Request for Graduate Course Addition

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: Pharmacy | Dept/Division: DPPAR | Alpha Designator/Number: PHAR8xx | (●) Graded ( ) CR/NC

Contact Person: Nicole Winston | Phone: 304-696-7369

NEW COURSE DATA:

New Course Title: Clinical Aspects of Prescription Medications

Alpha Designator/Number: P H A R 7 3 2

Title Abbreviation: C l i n A s p e c t s R x M e d s

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
A discussion of the clinical aspects of medications will be covered with an emphasis on 1) pharmaceutical calculations and 2) analysis of the differences between various drugs and drug classes.

Co-requisite(s): N/A | First Term to be Offered: Spring 2017

Prerequisite(s): P-3 Status | Credit Hours: 3

Course(s) being deleted in place of this addition (*must submit course deletion form*):

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head	Date 6-14-16
Registrar 5/2001	Date 9-20-16
College Curriculum Chair	Date 6/14/16
Graduate Council Chair	Date 11-27-16

Request for Graduate Course Addition - Page 2

College: Pharmacy | Department/Division: DDAR | Alpha Designator/Number: PHAR 8xx

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. FACULTY: Identify by name the faculty in your department/division who may teach this course.

Nicole Winston
Elaine Cruze
Charles Babcock
Leesa Prunty

2. DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the proposal. Enter "***Not Applicable***" if not applicable.

Not Applicable

3. REQUIRED COURSE: If this course will be required by another deparment(s), identify it/them by name. Enter "***Not Applicable***" if not applicable.

Not Applicable

4. AGREEMENTS: If there are any agreements required to provide clinical experiences, attach the details and the signed agreement. Enter "***Not Applicable***" if not applicable.

Not Applicable

5. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials to teach this course, attach an estimate of the time and money required to secure these items. (Note: Approval of this form does not imply approval for additional resources.) Enter "***Not Applicable***" if not applicable.

Not Applicable

6. COURSE OBJECTIVES: (May be submitted as a separate document)

See attached

7. COURSE OUTLINE (May be submitted as a separate document)

See attached

8. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATES (May be submitted as a separate document)

Not Applicable

9. EXAMPLE OF INSTRUCTIONAL METHODS (Lecture, lab, internship)

Studio classroom with active learning
Lecture

Request for Graduate Course Addition - Page 4

10. EXAMPLE EVALUATION METHODS (CHAPTER, MIDTERM, FINAL, PROJECTS, ETC.)

See attached

11. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE/GRADUATE COURSE

Not Applicable

12. PROVIDE COMPLETE BIBLIOGRAPHY (May be submitted as a separate document)

Not Applicable

Request for Graduate Course Addition - Page 5

Please insert in the text box below your course summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Course Number and Title:
Catalog Description:
Prerequisites:
First Term Offered:
Credit Hours:

Department: Pharmacy Practice, Administration, and Research
Course Number and Title: PHAR8~~XX~~732, Clinical Asepcts of Prescription Medications
Catalog Description: A discussion of the clinical aspects of medications will be covered with an emphasis on 1) pharmaceutical calculations and 2) analysis of the differences between various drugs and drug classes.
Prerequisites: P-3 status
First Term Offered: Spring, 2017
Credit Hours: 3

MARSHALL UNIVERSITY
www.marshall.edu

School of Pharmacy

SYLLABUS
Clinical Aspects of Prescription Medications
SPRING 2016

This syllabus is not to be construed as a contract with the student and is subject to change.

The School of Pharmacy reserves the right to change the course syllabus. *The School should notify the students through the course notification system or by an email preferably through the Blackboard system.*

Materials used in this class may be copyrighted and should not be shared with individuals not enrolled in this course.

Course meeting days and time	Tuesdays, 1:30PM to 4 PM
Location	TBD
Team Leader / Instructor	Dr. Nicole Rockich Winston
Office	149
Phone	(304) 696-7369
Email	winstonn@marshall.edu
Office hours	Wednesday – 12 to 1 PM

Faculty	Email	Office	Phone Number	Office Hours / Appointments accepted?
Elaine Cruse	crusee@marshall.edu	Cubicles	NA	Mondays – 12 to 1 PM
Ck Babcock	babcockc@marshall.edu	138	304-696-7380	Mondays – 12 to 1 PM
Leesa Prunty	pruntyl@marshall.edu	Cubicles	304-526-4875	TBD

Student: If the instructor accepts appointments, then please email the instructor for availability. The student can expect the instructor to respond to E-mails and phone messages within 72 hours.

Course Description: A discussion of the clinical aspects of medications will be covered with an emphasis on 1) pharmaceutical calculations and 2) analysis of the differences between various drugs and drug classes.

Prerequisites: P-3 status

Text Books:

Required: None

Course Objectives:

Number	Objective	Linkage to MUSOP Abilities	How Assessed

1	Review and differentiate the mechanisms of action, clinical uses, effects, and adverse reactions associated with various medications	1, 10	Exams
2	Compare and contrast as well as recognize important differences between prescription medications within various drug classes	1, 10	Exams
3	Review and discuss clinical pearls associated with commonly prescribed medications	1, 10	Exams
4	Enhance clinical communication skills	1, 10	Exams
5	Simulate critical thinking and motivate students to "think like a pharmacist"	1, 10	Exams
6	Perform pharmaceutical calculations	1, 5, 10	Exams

Schedule of Activities:

Date	#	Meeting Format	Meeting Topic	Course Student Learning Outcomes	Instructor
1/12	1	Overview discussion (OD), in-class activity (ICA)	Misc topics/Introduction	• Review and discuss the principles of Pharmacology (1,10) • Review and discuss Biomedical and Biopharmaceutics core concepts (1,10) •	Babcock/Cruse
1/19	2	OD, ICA	Anti-infectives	• Review and discuss the pharmacology and mechanism of action of anti-infectives (1,10) • Differentiate between anti-infectives (1, 10) • Review and discuss anti-infective coverage (1,10) • Discuss clinical pearls associated with anti-infectives (1,10)	Babcock
1/26	3	OD, ICA	Anti-virals	• See above	Babcock
2/2	4	OD, ICA	Cardiovascular	• Review and discuss the pharmacology and mechanism of cardiac drugs (1,10) • Differentiate between cardiac drugs within classes (1, 10) • Discuss clinical pearls associated with cardiac drugs (1,10)	Cruse
2/9	5	OD, ICA	Cardiovascular	• See above	Babcock

2/16	6	OD, ICA	Renal/Misc drugs	• Review and discuss the pharmacology and mechanism of action of drugs that affect the renal system (1,10)	Cruse/Babcock
2/23	7	OD, ICA	Respiratory, Anti-inflammatory and Immunomodulating Agents	• Review and discuss the pharmacology and mechanism of respiratory, anti-inflammatory and immunomodulating agents (1,10) • Differentiate between respiratory, anti-inflammatory and immunomodulating agents (1, 10) • Discuss clinical pearls associated with respiratory, anti-inflammatory and immunomodulating agents (1,10)	Cruse
3/1	8	OD, ICA	Pharmaceutical Calculations	• Review and calculate necessary ingredients based on compounding prescription (1, 5, 10) • Review and calculate pharmaceutical conversions (1, 5, 10) • Review and calculate using aliquots and alligations (1, 5, 10) • Review and calculate weight-based dosing, renal-based dosing and pump rates (1, 5, 10)	Winston
3/8	9	OD, ICA	Pharmaceutical Calculations	• See above	Winston
3/15	**MIDTERM EXAM (SESSIONS 1-7)**				
3/29	10	OD, ICA	Oncology	• Review and discuss the pharmacology and mechanism of oncology medications (1,10) • Differentiate between oncology drugs within classes (1, 10) • Discuss clinical pearls associated with oncology drugs (1,10)	Booth/Babcock
4/5	11	OD, ICA	Endocrine Drugs Men and Women Health	• Review and discuss the pharmacology and mechanism of endocrine drugs (1,10) • Differentiate between endocrine drugs within classes (1, 10) • Discuss clinical pearls associated with endocrine drugs (1,10)	Oakes/Cruse
4/12	12	OD, ICA	Central Nervous System Drugs	• Review and discuss the pharmacology and mechanism of	Oakes/Babcock

				CNS drugs (1,10) • Differentiate between CNS drugs within classes (1, 10) • Discuss clinical pearls associated with CNS drugs (1,10)	
4/19	13	OD, ICA	Gastrointestinal Nutrition	• Review and discuss the pharmacology and mechanism of gastrointestinal medications (1,10) • Differentiate between gastrointestinal drugs within classes (1, 10) • Discuss clinical pearls associated with gastrointestinal drugs (1,10)	Prunty
4/26	FINAL EXAM (CUMALATIVE)*				

*** -indicates major assessment**

Course Evaluation (grading): Student mastery of the material will be evaluated by quizzes and exams administered throughout the semester. The majority of testable material will originate from instructor-provided handouts (≥80%). The remaining testable material will be presented during class sessions. In-class activities will assess student understanding of the material and will be graded based on completeness and accuracy.

Point or Percentage Distribution: Midterm exam: 40%
Final Exam: 50%
Activities/quizzes/assignments: 10%

Letter grades distribution:
A = 89.50 to 100%
B = 79.50 to less than 89.50%
C = 69.50 to less than 79.50%
F = Less than 69.50%

Course Evaluation (assessment): At or near the end of the course, students are expected to complete an evaluation of the course content, learning approaches, student assessment and instructors according to School of Pharmacy procedures.

Assignment and examination grades will be posted in Blackboard within 7 days unless otherwise stated.

Attendance policy: Each student is expected to attend class. Attendance at graded events is mandatory. Only excused absences accepted – see university and school policies. The instructor must be contacted prior to the exam, unless circumstances are prohibitory. Please note – the student is solely responsible for any materials missed.

UNIVERSITY POLICIES

University policies regarding **Academic Dishonesty, Students with Disabilities, University Computing Services' Acceptable Use, Affirmative Action, and Sexual Harassment can be found at http://www.marshall.edu/wpmu/academic-affairs/policies/.**

School of Pharmacy Policies

SOCIAL JUSTICE POLICY STATEMENT

Marshall University is committed to bringing about mutual understanding and respect among all individuals and groups at the University. As part of Marshall University, School of Pharmacy has made a commitment to social justice. Therefore, no one will be discriminated against on the basis of race, gender, ethnicity, age, sexual orientation, religion, social class, or differing viewpoints. Each student will be viewed as a valuable member of this class and as the faculty for the course, I will strive to facilitate an atmosphere/learning environment where mutual understanding and respect are actualized.

ACADEMIC, ETHICAL, AND PROFESSIONAL CONDUCT

Student expectorations for academic, ethical, and professional conduct are defined within the school's Ethical and Professional Conduct Policy and the university's Academic Dishonesty Policy.

Second Chance and Remediation Policy

Second chance and remediation are mechanisms designed to assist students who have struggled within the classroom environment in demonstrating achievement of classroom and curricular learning outcomes. These processes are described in sections 200.001.003 (Second Chance) and 200.001.004 (Remediation) of the Academic Standards for Grading, Progressions, Dismissal, and Re-admission Policy.

Test Security Policy

In order to ensure the security of all examinations, the School of Pharmacy has adopted the following policies:

1. Test Administration

   A. Non-electronic testing
      a. Students may not access any electronic equipment during the exam that has not been provided by the faculty, including but not limited to calculators, cell phones, laptops and PDAs.
   B. Electronic testing
      a. Only those resources (electronic or otherwise) approved by the instructor may be used or accessed during the testing session.

2. Test Review

   A. Students will not be allowed to view any exam without direct supervision of course faculty or site facilitator
   B. Students must review tests within time specified by the course faculty.
   C. Limited numbers of students may be allowed to view the exam at one time depending on office size, space, and faculty preference.
   D. Students will be allowed to review the exam only one time, and time limits may be placed on review as specified by course faculty.
   E. NO notes can be taken by the student while reviewing the test, and students are not allowed to access any electronics while reviewing the tests. NO copies electronic or written!

F. Individual student printouts for exams are to be retained by the faculty.
G. Faculty have the right to place further restrictions on test review as deemed necessary.

Name _____

Please select the best answer for each question

1. **Nafcillin is the drug of choice for MRSA: (1pt)**
   A. True
   B. False

2. **Amoxicillin is bactericidal and time above MIC is the main pharmacodynamics parameter: (1 pt)**
   A. True
   B. False

3. **Which of the following is the beta-lactamase inhibitor in Unasyn that also has activity against Acinetobacter: (2 pt)**
   A. Clavulanic acid
   B. Sulbactam
   C. Tazobactam
   D. Avibactam

4. **Which of the following cephalosporins has clinical activity against Pseudomonas aeruginosa: (2 pt)**
   A. Cefepime
   B. Ceftaroline
   C. Ceftriaxone
   D. A and B

5. **Which of the following is the most appropriate response to a patient who is experiencing "red man's syndrome" with vancomycin: (1 pt)**
   A. Stop vancomycin infusion and change to another appropriate antibiotic
   B. Slow down vancomycin infusion rate

6. **All of the following carbapenems have activity against pseudomonas EXCEPT: (2 pt)**
   A. Imipenem/cilastatin
   B. Meropenem
   C. Doripenem
   D. Ertapenem

7. **Outdated tetracyclines should be avoided since they have been associated with the development of liver failure: (1 pt)**
   A. True
   B. False

8. **Which of the following antibiotics inhibit DNA topoisomerases, prolong QT, cause confusion in older adults, and have been linked to tendon rupture: (1 pt)**
   A. Daptomycin
   B. Minocycline
   C. Aztreonam
   D. Ciprofloxacin

9. **Which of the following is the first line treatment for the first occurrence of mild to moderate Clostridium difficile infection: (1 pt)**
   A. Clindamycin
   B. Clarithromycin
   C. Metronidazole
   D. Linezolid

10. **Which of the following antibiotics requires a baseline CK and weekly thereafter due to the potential adverse effect of rhabdomyolysis: (1 pt)**
   A. Daptomycin
   B. Linezolid
   C. Azithromycin
   D. Rifampin

11. **Which of the following antituberculosis drugs is associated with optic neuritis: (2 pt)**
   A. Ethambutol
   B. Isoniazid
   C. Rifampin
   D. Pyrazinamide

12. **Which of the following is the drug of choice for aspergillus infections: (1 pt)**
   A. Colistin
   B. Voriconazole
   C. Caspofungin
   D. Nitrofurantoin

13. **Itraconazole capsules and oral solution are interchangeable (AB rated): (1 pt)**
    A. True
    B. False

14. **Which of the following would be the most appropriate therapy to treat MRSA pneumonia? (2 pt)**
    A. Vancomycin
    B. Daptomycin
    C. Augmentin
    D. Ceftriaxone

15. **Please list 4 antibiotics of different classes that have activity against MRSA. (Wrong answers will be 0.5 point reduction each): (2 pt)**

16. **A patient is growing coagulase negative staphylococcus in 1 out of 2 bottles from two different blood cultures. Which of the following is most likely to be true? (1 pt)**
    A. The organism is likely Staphylococcus aureus and is NOT a contaminant
    B. The organism is likely Staphylococcus aureus and IS a contaminant
    C. The organism is likely Staphylococcus epidermidis and is NOT a contaminant
    D. The organism is likely Staphylococcus epidermidis and IS a contaminant

17. **Please describe how a D-test is performed and when/why it should be used: (2 pt)**

18. **Which of the following HIV medications is most likely to cause unusual dreams? (2 pt)**
    A. Tenofovir
    B. Emtricitabine
    C. Efavirenz
    D. Ritonavir

19. **Which of the following HIV medications is most likely to cause hyperbilirubinemia and jaundice? (2 pt)**
    A. Abacavir
    B. Lamivudine
    C. Atazanavir
    D. None of these

20. **Which class of HIV medications may cause lipodystrophy, hyperlipidemia, hyperglycemia, and elevated LFTs? (2 pt)**
    A. Protease inhibitors
    B. NNRTIs
    C. NRTIs
    D. Fusion inhibitors

21. **Which two HIV medications are known to cause pancreatitis and peripheral neuropathy? (2pt)**

    _____ _____

22. **Which opportunistic infection has an indication for prophylaxis at a CD4 count < 50 cells/mm^3 (1 pt)**
    A. Pneumocystis carinii pneumonia (PCP/PJP)
    B. Mycobacterium avium complex (MAC)
    C. Mucormycosis
    D. Stenotrophomonas

23. **What is the three-letter abbreviation for zidovudine? (2pt)**

    _____

24. **Please describe the mechanism of action for raltegravir: (2pt)**

25. **Which of the following would be the most appropriate for a cytomegalovirus infection (CMV)? (2 pt)**
    A. Acyclovir
    B. Valacyclovir
    C. Ganciclovir
    D. Colistin

26. **Which of the following medications may cause hypothyroidism? (2pt)**
    A. Amitriptyline
    B. Amiodarone
    C. Levothyroxine
    D. Sertraline

27. **Why should glucophage be held for at least 48 hours after receiving IV contrast dye? (2pt)**

28. **Which of the following sulfonylurea medications has an active renal metabolite and can be found on the 2012 Beer's list? (2pt)**
    A. Glyburide
    B. Glimepiride
    C. Glipizide
    D. Glucophage

29. **Which of the following insulin products has the longest duration of action? (2pt)**
    A. Lantus
    B. Humulin N
    C. Novolin R

D. Novolog

30. Cushing's syndrome is due to prolonged exposure of abnormally high amounts of corticosteroids: (1 pt)

A. True
B. False

31. Prednisone can cause drug induced hyperglycemia: (1 pt)

A. True
B. False

32. Which of the following bisphosphonates is dosed once yearly for osteoporosis treatment? (2pt)

A. Alendronate
B. Ibandronate
C. Risedronate
D. Zoledronic Acid

33. Why should estrogen only products be avoided in women with an intact uterus? (2pt)

34. Furosemide reduces mortality in patients with heart failure with reduced ejection fraction: (1pt)

A. True
B. False

35. Please describe how hypokalemia can potentially increase digoxin toxicity: (2 pt)

36. Patients should be counseled to not take nitrates within 24 hours of using Viagra: (1pt)

A. True
B. False

37. What does each letter in the acronym $CHADS_2$ stand for? When and why do we calculate this score in patients? (4 pt)

38. Please describe the effect on heart rate for the following medications. Please write an "I" for increase; "D" for decrease; or "N" for no change (2pt)

Drug	**Heart Rate**
Toprol XL	
Dobutamine	
Diltiazem	
Ranolazine	

39. **Please complete the table with the associated areas/receptors as it relates to dopamine (3 pt)**

2-5 mcg/kg/min	
5-10 mcg/kg/min	
> 10 mcg/kg/min	

40. **Which of the following medications is expected to increase the INR in a patient on warfarin therapy: (2 pt)**
    A. Bactrim
    B. Rifampin
    C. Cipro
    D. A and C

41. **Gynecomastia is most associated as an adverse effect with which medication: (1 pt)**
    A. Spironolactone
    B. Eplerenone
    C. Lisinopril
    D. Hydralazine

42. **Which of the following is an evidence based beta blocker with alpha blocking properties that can be used to reduce mortality in patients with heart failure and reduced ejection fraction: (2pt)**
    A. Metoprolol succinate
    B. Carvedilol
    C. Nebivolol
    D. Labetalol

43. **Which of the following P2Y12 inhibitors has been most associated with dyspnea as an adverse effect? (1 pt)**
    A. Clopidogrel
    B. Ticagrelor
    C. Prasugrel
    D. Ticlopidine

44. **Which of the following target specific oral anticoagulants must be dose adjusted based on renal function? (2pt)**
    A. Apixaban
    B. Rivaroxaban
    C. Dabigatran
    D. Edoxaban
    E. All of the above

45. **What is the reversal agent for Heparin? (2 pt)**

    _____

46. **Which of the following statin and dose would be expected to lower the LDL THE MOST (most potent): (2 pt)**
    A. Rosuvastatin 40 mg
    B. Atorvastatin 80 mg
    C. Simvastatin 80 mg
    D. Pravastatin 40 mg

47. **Which of the following medications is expected to INCREASE serum potassium levels: (2 pt)**
    A. Furosemide
    B. Spironolactone
    C. HCTZ
    D. Metolazone

48. **One potential advantage to unfractionated heparin (UFH) over LMWHs (e.g. enoxaparin) is that UFH does not routinely require dose adjustments based on renal function: (1 pt)**
    A. True
    B. False

49. **Prinivil/Zestril is considered a first line agent for hypertension in African American patients: (1 pt)**
    A. True
    B. False

50. Please indicate whether the following response is mediated by the activation of the sympathetic or parasympathetic nervous system: (2pt)

Response from activation	Sympathetic (S) or Parasympathetic (P)
Increase heart rate	
Mydriasis	
Bronchi dilation	
Increased peristalsis/digestion	

51. Which of the following is a CYP 3A4 inducer? (2 pt)

A. Phenytoin
B. Azithromycin
C. Amiodarone
D. Fluconazole

52. SSRIs are less toxic in overdose when compared to TCAs: (1 pt)

A. True
B. False

53. Which of the following is true of bupropion? (2 pt)

A. May increase incidence of seizures in patients with eating disorders
B. Has low incidence of sexual dysfunction
C. Associated with hypertension
D. A and B
E. A and C

54. Which SSRI is associated with more weight gain and constipation? (2 pt)

A. Prozac
B. Zoloft
C. Celexa
D. Paxil

55. **Which of the following medication pairings is incorrect: (2 pt)**
    A. Mirtazepine – weight gain
    B. Trazodone – sedation
    C. Haloperidol – EPS
    D. Venlafaxine - SSRI

56. **Zyprexa would be expected to cause more bone marrow suppression/agranulocytosis when compared to clozapine (1 pt)**
    A. True
    B. False

57. **Atypical antipsychotics are generally associated with less EPS than older typical antipsychotics: (1 pt)**
    A. True
    B. False

58. **Which of the following products used for ADHD has a lysine covalently bound to D-amphetamine to reduce the potential for abuse? (2 pt)**
    A. Vyvanse
    B. Daytrana
    C. Concerta
    D. Ritalin

59. **Which of the following medications has been associated with SIADH, aplastic anemia, and requires an HLA-B*1502 genetic test if you're of Asian ancestry: (2 pt)**
    A. Clozapine
    B. Carbamazepine
    C. Phenytoin
    D. Ziprasidone

60. **Thiazides can decrease serum lithium concentrations: (1 pt)**
    A. True
    B. False

BONUS

1. **List the vitamin K dependent clotting factors:**

   _____ _____ _____ _____

2. **In regards to toxicity, TCA is an acronym for:**

   _____

3. **Ecstasy (methylenedioxymethamphetamine) is a basic molecule that is excreted in the urine. If you were a drug abuser how might you attempt to mask the presence of drug in the urine using the theory of ion trapping? Select a masking method and defend your answer.**

Chair: Tracy Christofero | **GC#9: Non-Curricular**

Request for Graduate Non-Curricular Changes

PLEASE USE THIS FORM FOR ALL NON-CURRICULAR CHANGE REQUESTS (changes in admission requirements or requirements for graduation, changes in or new policies/procedures, changes in program descriptions in catalog, general language changes in catalog.)

SIGNATURES may not be required, depending on the nature of the request and from where it originates. Consult Graduate Council chair.

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair.
3. The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.

College: Graduate - COLA

Dept/Division: Sociology & Anthropology

Contact Person: Maggie Stone

Phone: 502-727-8902

Rationale for Request

(May attach separate page if needed)

1) Amending GRE requirements to more closely align with other MA Sociology programs nationwide such that GRE scores are considered in light of other materials submitted without a particular cutoff or minimum required score.

2) Amending conditional and provisional admission references That did not fall into compliance with required wording.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.
NOTE: all requests may not require all signatures.

Department/Division Chair	Date 5/31/2016
Registrar	Date 6/2/16
College Curriculum Committee Chair (or Dean if no college curriculum committee)	Date 10/4/16
Graduate Council Chair	Date 11-27-16

NOTE: please complete information required on the following pages before obtaining signatures above.

Request for Graduate Non-Curricular Changes-Page 2

1. **Current Catalog Description (if applicable):** Please insert the catalog description from the current catalog for entries you would like to change. *(May attach separate page if needed)*

Admission to the program is offered to a limited number of qualified students demonstrating academic excellence and professional promise. Applicants who have submitted a complete application, who fulfill the requirements stated above, and who have achieved a combined GRE score of 651, or the equivalent measure of the new GREs implemented fall 2011, will be considered for Full Admission. Students who do not fulfill all requirements stated above (including the minimum GRE score) may be considered for admission on a provisional or conditional basis. (See definitions of Provisional and Conditional admission in this catalog).

Request for Graduate Non-Curricular Changes-Page 3

2. **Edits to current description:** Attach a PDF copy of the current catalog description prepared in MS WORD with strikethroughs to mark proposed deletions and use the highlight function to indicate proposed new text.

Graduate Council
Request for Non-Curricular Changes-Page 4

3. **New Catalog Description:** Provide a "clean" copy of your proposed description without strikethroughs or highlighting. This should be what you are proposing for the new description. (May attach separate page if needed)

Admission to the program is offered to a limited number of qualified students demonstrating academic excellence and professional promise. There is no minimum GRE score required for evaluation of your application by the committee. Scores are reviewed in the context of the applicant's entire file. Applicants who have submitted a complete application and fulfill the requirements stated above will be considered for Full Admission. The Sociology program may admit applicants provisionally, on a limited basis, at the discretion of the program. The Sociology program does not admit applicants on a conditional basis.

Graduate Council
Request for Non-Curricular Changes-Page 5

Please insert in the text box below your proposed change information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Type of change request:
Department:
Degree program:
Effective date *(Fall/Spring/Summer, Year)*

Type of change request: Non-Curricular
Department: Sociology and Anthropology
Degree program: M.A. Sociology
Effective date (Fall/Spring/Summer, Year): Fall, 2016

Admission to the program is offered to a limited number of qualified students demonstrating academic excellence and professional promise. ~~Applicants who have submitted a complete application, who fulfill the requirements stated above, and who have achieved a combined GRE score of 651, or the equivalent measure of the new GREs implemented fall 2011,~~ There is no minimum GRE score required for evaluation of your application by the committee. Scores are reviewed in the context of the applicant's entire file. Applicants who have submitted a complete application and fulfill the requirements stated above will be considered for Full Admission. ~~Students who do not fulfill all requirements stated above (including the minimum GRE score) may be considered for admission on a provisional or conditional basis. (See definitions of Provisional and Conditional admission in this catalog).~~ The Sociology program may admit applicants provisionally, on a limited basis, at the discretion of the program. The Sociology program does not admit applicants on a conditional basis.

Chair: Tracy Christofero | **GC#6: Course Addition**

Request for Graduate Course Addition

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: COLA | Dept/Division: Sociology & Anthrop | Alpha Designator/Number: SOC551 | (•) Graded ( ) CR/NC

Contact Person: Marty Laubach | Phone: 304-696-2798

NEW COURSE DATA:

New Course Title: Science Knowledge & Technology

Alpha Designator/Number: s o c 5 5 1

Title Abbreviation: s c i e n c e k n o w l e d g e & t e c h

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Studies science knowledge and technology as a human endeavor. Examines the processes and products, controversies, social impacts, interactions between science and other social institutions like religion and politics.

Co-requisite(s): N/A | First Term to be Offered: Spring 2017

Prerequisite(s): N/A | Credit Hours: 3

Course(s) being deleted in place of this addition (*must submit course deletion form*): N/A

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head	Date 9/7/2016
Registrar 451101	Date 9/12/16
College Curriculum Chair	Date 10/10/16
Graduate Council Chair	Date 11-27-16

Form updated 10/2011

Rec'd in COLA Office Date: 9/12/16

Request for Graduate Course Addition - Page 2

College: COLA | Department/Division: Sociology & Anthropology | Alpha Designator/Number: SOC551

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. FACULTY: Identify by name the faculty in your department/division who may teach this course.

Marty Laubach

2. DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the proposal. Enter "***Not Applicable***" if not applicable.

Not Applicable

3. REQUIRED COURSE: If this course will be required by another deparment(s), identify it/them by name. Enter "***Not Applicable***" if not applicable.

Not Applicable

4. AGREEMENTS: If there are any agreements required to provide clinical experiences, attach the details and the signed agreement. Enter "***Not Applicable***" if not applicable.

Not Applicable

5. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials to teach this course, attach an estimate of the time and money required to secure these items. (Note: Approval of this form does not imply approval for additional resources.) Enter "***Not Applicable***" if not applicable.

Not Applicable

6. COURSE OBJECTIVES: (May be submitted as a separate document)

- articulate and apply the dominant theories and concerns of the sociological study of science and knowledge
- articulate the current political and social issues faced by the scientific community
- recognize and articulate the basic historical developments in the study of science and knowledge
- recognize and articulate the social processes involved in science as an epistemology and as an institution
- recognize and articulate the differences between science and technology and the social processes underlying technological development

7. COURSE OUTLINE (May be submitted as a separate document)

Social Theories & Meaning Worlds
Science & Intelligent Design
Appropriating Legitimacy: What the Bleep Do We Know
Knowledge classics: Berger & Luckmann
What Is Science and Technology Studies
"Science Wars" or "Do you believe in reality?"
History of Science: Shapin
The Prehistory of Science and Technology Studies
The Kuhnian Revolution
Questioning Functionalism in the Sociology of Science
Stratification and Discrimination
The Strong Programme and the Sociology of Knowledge
The Social Construction of Scientific and Technical Realities
Feminist Epistemologies of Science
Actor-Network Theory
Two Questions Concerning Technology
Studying Laboratories
Controversies
Standardization and Objectivity
Rhetoric and Discourse
The Unnaturalness of Science and Technology
The Public Understanding of Science
Expertise and Public Participation
Political Economies of Knowledge
Ethics in Research
Science & Technology Issues

8. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATES (May be submitted as a separate document)

Berger & Luckmann. The Social Construction of Reality. Anchor. ISBN 0-385-05898-5
Shapin. The Social History of Truth Chicago ISBN 0-226-75019-1
Sismondo. An Introduction to Science and Technology Studies. 2nd ed. Blackwell. ISBN 0-631-23444-6
Kuhn. The Structure of Scientific Revolutions. Chicago. ISBN 0-226-45808-3
Hackett et al. The Handbook of Science and Technology Studies (3rd edition). MIT Press. ISBN 978-0-262-08364-5
Kleinman. Science and Technology in Society. Blackwell. Isbn-10 978-0-631-23182-0

9. EXAMPLE OF INSTRUCTIONAL METHODS (Lecture, lab, internship)

This course will be a combination of lecture, videos, and student presentations of summaries of articles and of research projects. A unique feature of this course has been the participation of Michael Castellani, Chair of Chemistry, to debate points of difference between social and physical science perspectives.

10. EXAMPLE EVALUATION METHODS (CHAPTER, MIDTERM, FINAL, PROJECTS, ETC.)

There will be 5 essays on topics covered, a final exam, summaries of articles and book chapters, and a final project. Summaries and the final project include presentations.

11. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE/GRADUATE COURSE

Graduate students will summarize books instead of articles, and will have more substantial final project

12. PROVIDE COMPLETE BIBLIOGRAPHY (May be submitted as a separate document)

Barnes, B. 1985. About Science. Blackwell
Berger, P & Luckmann, T. 1967. The Social Construction of Reality. Anchor.
Bloor, D. 1991. Knowledge and Social Imagery. University of Chicago Press.
Callon, D. 1986. "Some Elements of a Sociology of Translation." Pps 196-233 in Power, Action, and Belief, ed J. Law. Routledge
Gieryn, T.F. 1999. Cultural Boundaries of Science. University of Chicago Press.
Gilbert, G.N. & Mulkay, M. 1984. Opening Pandora's Box: A Sociological Analysis of Scientists' Discourse. Cambridge University Press.
Hackett, E.J., Amsterdamska, O., Lynch M.E. and Wajcman, J. 2007. The Handbook of Science and Technology Studies (3rd edition). MIT Press.
Haraway, D. 1991. Simians, Cyborgs, and Women. Routledge.
Harding, S. 1991. Whose Science? Whose Knowledge? Thinking from Women's Lives. Cornell University Press.
Kleinman, D.L. 1991. Science and Technology in Society. Blackwell.
Knorr-Cetina, K.D. 1983. *"The Ethnographic Study of Scientific Work: Towards a Constructivist Interpretation of Science."* Pp. 115-40 in Science Observed: Perspectives on the Social Study of Science, ed by K.D. Knorr-Cetina, and M. Mulkay. Sage Publication
Kuhn, T. 1970. The Structure of Scientific Revolutions. University of Chicago Press.
Latour, B. 1983. Give Me a Laboratory and I Will Raise the World." Pps 141-70 in Science Observed: Perspectives on the Social Study of Science, ed by K.D. Knorr-Cetina, and M. Mulkay. Sage Publication
Latour .B. 1999. Pandora's Hope: Essays on the Reality of Science Studies. Harvard University Press.
Mannheim, K. 1967. Ideology and Utopia. Harcourt.
Merton, R.K. 1973. The Sociology of Science. University of Chicago Press.
Porter, T.M. 1992. "Quantification and the Accounting Ideal in Science." Social Studies of Science 22: 633-52.
Shapin, S. 1994. The Social History of Truth. University of Chicago Press
Sismondo, S. 2010. An Introduction to Science and Technology Studies. Blackwell.
Sokal, A. 1996. "Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity." Social Text 46: 217-25.
Sokal, A. 1996. "A Physicist Experiments with Cultural Studies." Lingua Franca May, 1996.
Zukerman, H. 1977. "Deviant Behavior and Social Control in Science." Pps 87-138 in Deviance and Social Change, ed. E. Sagrin. Sage.

Request for Graduate Course Addition - Page 5

Please insert in the text box below your course summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Course Number and Title:
Catalog Description:
Prerequisites:
First Term Offered:
Credit Hours:

Department: Sociology and Anthropology
Course Number and Title: SOC551 Science Knowledge and Technology
Catalog Description: Studies science knowledge and technology as a human endeavor. Examines the processes and products, controversies, social impacts, interactions between science and other social institutions like religion and politics.
Prerequisites: none
First Term Offered: Spring 2017
Credit Hours: 3

SOC551 Sociology of Science, Knowledge & Technology T,Th 2:00-3:15 Smith Hall 531
Marty Laubach laubach@marshall.edu
Department of Sociology & Anthropology phone: 696-2798
Smith Hall 728 Office Hours: M,W 12:30:-3:00; T,Th 12:30-1:30

***** NOTE: All emails to us should use the internet (not Blackboard) and start the subject line with: SOC451 *****

Description: "Exploration of the effects of social factors on the development and authorization of knowledge claims, especially science and technology."

One of the more interesting developments in contemporary sociology has been the growing popularity of science and technology studies. This has grown from an intersection of the more traditional study of knowledge, power and politics, and cultural studies – especially given the importance of technology in driving social change and globalization. It is also a case of science looking back at itself – applying its own methods to understand how we know what we know, how theories come to be accepted as truth, and how we "do" discovery. Needless to say, given developing the global division of labor, understanding the processes of science and technology will be critical to America maintaining some level of our standard of living.

This course will start with classics in the sociology of knowledge, then delve into a history of scientific epistemology, tackle the development of science and technology studies since the 1960s, and end with contemporary research and concerns with theory, practices, politics, institutions, and technosciences.

Objectives:

Course Objectives (students will be able to..)	Practice the outcomes (formative & diagnostic)	Assess student achievement (summative)
articulate and apply the dominant theories and concerns of the sociological study of science and knowledge	Class discussion & exercises; online discussion: summaries of articles and books	Formal essays, exams, term paper
articulate the current political and social issues faced by the scientific community	Class discussion & exercises; online discussion: summaries of articles and books	Formal essays, exams, term paper
recognize and articulate the basic historical developments in the study of science and knowledge	Class discussion & exercises; online discussion: summaries of relevant articles and books	Formal essays, exams, term paper
to recognize and articulate the social processes involved in science as an epistemology and as an institution	Class discussion & exercises; online discussion: summaries of articles and books	Formal essays,, exams, term paper
recognize and articulate the differences between science and technology and the social processes underlying technological development	Class discussion & exercises; online discussion: summaries of articles and books	Formal essays, term paper
Enhance their writing skills and strategy	Low stakes writing assignments, summaries	Formal essays, exams, term paper

Grading: I am using a grading procedure called specifications grading (see Linda Nelson, 2015. *Specifications Grading: Restoring Rigor, Motivating Students, and Saving Faculty Time*. Sterling VA: Stylus Publishing LLC.). In this course, each assignment will be graded on a pass/fail basis, and if an assignment does not pass, you will receive a critique of the deficiency and have an opportunity to resubmit the assignment. Each assignment is worth the number of points below. A semester grade of "A" requires 90 points, a "B" requires 80 points, a "C" requires 70 points, a "D" requires 60 points, and a failing grade will be given for students who do not accumulate 60 points.

Course grades will be computed as:

Summaries	30%	Participation	10%
5 Reflection essays	25%	take home final	15%
Paper	20%		

MUOnline: The course will use MUOnline Blackboard Learning System, an internet web browser based online classroom system, to retrieve handouts, class notes and grades, and as a forum through which you can ask questions about assignments or readings, or can continue classroom discussions. Assistance with the university's computer facilities can be obtained from Marshall's Computing Services (696-3200 or helpdesk@marshall.edu) or by appointment with the instructor. We will also use Collaborate for remote attendance and archiving classes.

Class participation: Each class meeting will consist primarily of videos, lecture, or student presentation and class discussion on questions posed from the course material. While instructors may present a brief summary lecture of material all students are required to read, this will quickly turn to class discussion. At that point the instructors will ensure that the discussion stays on topic, that all students have opportunities to participate, and that the basic material is covered. These discussions offer opportunities for low-stake diagnostic assessment of student progress toward the course objectives. As part of your participation grade you will be expected to offer substantive comments on your colleague's summaries. Participation points can also be earned by offering substantive comments to the posted summaries (below). The number of overall grade points will be given at midterm and at the end of the course.

Summaries: While all students are responsible for all of the readings, undergraduate students will break down the workload by assigning book chapters and articles to students who will write a two page (single spaced) summary that include the basic argument, a "take-away," and questions for discussion. These summaries will be posted on MUOnline in the blog for each topic so that all students can use them as guides for the essays and final exam and for discussion. Graduate students will be responsible for the undergraduate material (i.e. these will be used in the essays), but you will expected to write and present four summaries (5 page minimum) of supplementary materials. These can include subsequent chapters in the books from which undergraduates will only read one chapter (e.g. Gieryn, Latour) or other books or articles you will propose. These summaries can become an annotated bibliography for your paper. Depending on enrollment, graduate students may be asked to meet 4 times outside the regular class meeting (on negotiated dates) to present and discuss summaries.

Class paper: Each student will write a 15 page research paper on a topic which you will propose. These papers will be written in a formal style, with double-spaced lines, using 12 point

proportional font (Ariel or Times New Roman – NOT Courier), with one inch margins. Papers must focus on sociological issues, **explicitly** illustrating or expanding some point made in the course material or in lecture. These papers will be written and revised incrementally, and will include peer reviews by other students in the course:
Feb 7 – submit 3 possible paper topics
Feb 28 – formal proposal with topic, thesis statement, outline of ideas, bibliography
Mar 14 – submit introduction, thesis, and literature review
Mar 28 – peer review
Apr 25 – presentations
Apr 27 – submit paper

Essays and Exam: The class will several essay assignments through the semester and a take home exam due **May 4.** Each will cover the material since the previous assignment and will demonstrate that you have read the materials and understand what has been presented in class. It will therefore be important that you utilize and reference materials developed in the course including lectures, videos, discussion, summaries, and the textbook. The essays will offer opportunities for formative and diagnostic assessments, and the exam and course paper offer opportunities for summative assessment of student progress toward the course objectives.

Policies: By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/. Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

Required Texts:
Berger & Luckmann. *The Social Construction of Reality.* Anchor. ISBN 0-385-05898-5

Shapin. *The Social History of Truth* Chicago ISBN 0-226-75019-1

Sismondo. *An Introduction to Science and Technology Studies.* 2nd ed. Blackwell. ISBN 0-631-23444-6

Kuhn. *The Structure of Scientific Revolutions.* Chicago. ISBN 0-226-45808-3

Hackett et al. *The Handbook of Science and Technology Studies* (3rd edition). MIT Press. ISBN 978-0-262-08364-5

Kleinman. *Science and Technology in Society.* Blackwell. Isbn-10 978-0-631-23182-0

(note: this syllabus is subject to revision at the instructor's discretion)

Course Topic Outline and Assignment Schedule:

date	topic	summary	papers
10-Jan	introduction		
12-Jan	Science & Intelligent Design	1-2	
17-Jan	Appropriating Legitimacy: What the Bleep Do We Know	1-2	
19-Jan	Social Theories & Meaning Worlds	1-3	
24-Jan	Social Theories & Meaning Worlds	5-10	
26-Jan	Knowledge classics: Berger & Luckmann	1-4	
31-Jan	What Is Science and Technology Studies	5-8	essay 1
2-Feb	"Science Wars" or "Do you believe in reality?"	9,10	topics
7-Feb	History of Science: Shapin	1-9	
9-Feb	The Prehistory of Science and Technology Studies	10	
14-Feb	The Kuhnian Revolution	1-9	
16-Feb	Questioning Functionalism in the Sociology of Science	10,1	essay 2
21-Feb	Stratification and Discrimination	2,3	
23-Feb	The Strong Programme and the Sociology of Knowledge	4	
28-Feb	The Social Construction of Scientific and Technical Realities	5,6	formal proposal
2-Mar	Feminist Epistemologies of Science	7-9	
7-Mar	Actor-Network Theory	10	
9-Mar	Two Questions Concerning Technology	1,2	essay 3
14-Mar	Studying Laboratories	3-5	intro, thesis, literature review
16-Mar	Controversies	6	
21-Mar	Spring Break		
23-Mar	Spring Break		
28-Mar	Standardization and Objectivity	7	peer review
30-Mar	Rhetoric and Discourse	8,9	essay 4
4-Apr	The Unnaturalness of Science and Technology	10	
6-Apr	The Public Understanding of Science	1	
11-Apr	Expertise and Public Participation	2	
13-Apr	Political Economies of Knowledge	3	essay 5
18-Apr	Ethics in Research		
20-Apr	Science & Technology Issues	4-10	
25-Apr	presentations		
27-Apr	presentations		paper due
4-May	final exam 12:45-2:45 pm		final exam due

Reading List

date	who	author	chap	title
12-Jan	**Science & Intelligent Design**			
	1	BB		Can Science Prove the Existence of God
	2	BB		God is on the ropes: The brilliant new science that has creationists and the Christian right terrified
17-Jan	**Appropriating Legitimacy: What the Bleep Do We Know**			
	6	BB		"Consciousness Creates Reality" – Physicists Admit The Universe Is Immaterial, Mental & Spiritual
	7	BB		Is Consciousness A Product Of The Brain Or Is The Brain The Receiver Of Consciousness?
	8	BB		Quantum and Consciousness Often Mean Nonsense
	9	BB		Why Physicists Are Saying Consciousness Is A State Of Matter, Like a Solid, A Liquid Or A Gas
	10	BB		The Physics of Angels: Exploring the Realm Where Science and Spirit Meet
19-Jan	**Social Theories & Meaning Worlds**			
	all	Laubach	pdf	The Epistemology of Esoteric Culture: Spiritual Claim-Making within the American Neopagan Community
	3	BB		How Politics Makes Us Stupid
	4	BB		The Most Depressing Discovery about the Brain, Ever
	5	BB		The Backfire Effect: The Psychology of Why We Have a Hard Time Changing Our Minds
26-Jan	**Knowledge Classics**			
	all	Berger & Luckmann	0	Introduction: The Problem of the Sociology of Knowledge
	1		1	The Foundations of Knowledge in Everyday Life
	2		2.1	Institutionalization
	3		2.2	Legitimation
	4		3.1 3.2 3.3 3.4	Internalization of Reality Internalization and Social Structure Theories about Identity Organism and Identity
	all		4	Conclusion: The Sociology of Knowledge and Sociological Theory
31-Jan	**What Is Science and Technology Studies**			
	5	Sismondo	H-1	Science and Technology Studies and an Engaged Program
	6	Mody & Kaiser	H-16	Scientific Training and the Creation of Scientific Knowledge
	7	Shapin	H-18	Science and the Modern World
	8	Jasanoff	H-30	Making Order: Law and Science in Action
2-Feb	**"Science Wars" or "Do you believe in reality?"**			
	all	Sokol	pdf	Hermaneutics of Quantum Gravity
	all	Sokol	pdf	A Physicist Experiments with Cultural Studies
	9	Gieryn	pdf	Epilogue: Home to Roost: "Science Wars" as Boundary Work
	10	Latour	pdf	Pandora's Hope: Do You Believe in Reality?

7-Feb	**History of Science: Shapin**			
	all	Shapin	0	The Argument Summarized
	1		1	The Great Civility: Truth, Trust, and Moral Order
	2		2	Who Was Then a Gentleman? Integrity and Gentle Identity in Early Modern England
	3		3	A Social History of Truth-Telling: Knowledge, Social Practice, and the Credibility of Gentlemen
	4		4	Who Was Robert Boyle? The Creation and Presentation of of an Experimental Identity
	5		5	Epistemological Decorum: The Practical Management of Factual Testimony
	6		6	Knowing about People and Knowing about Things: A Moral History of Scientific Credibility
	7		7	Certainty and Civility: Mathematics and Boyle's Experimental Conversation
	8		8	Invisible Technicians: Masters, Servants, and the Making of Experimental Knowledge
	all			Epilogue: The Way We Live Now
	9	BB	BB	From Ancient Egypt To Modern Science: The Forgotten Link
9-Feb	**The Prehistory of Science and Technology Studies**			
	all	Sismondo	S-1	The Prehistory of Science and Technology Studies
	10	Turner	H-2	The Social Study of Science before Kuhn
14-Feb	**The Kuhnian Revolution**			
	all	Sismondo	S-2	The Kuhnian Revolution
	1	Kuhn	1	Introduction: A Role for History
	1		2	The Route to Normal Science
	2		3	The Nature of Normal Science
	2		4	Normal Science as Puzzle-solving
	3		5	The Priority of Paradigms
	3		6	Anomaly and the Emergence of Scientific Discoveries
	4		7	Crisis and the Emergence of Scientific Theories
	4		8	The Response to Crisis
	5		9	The Nature and Necessity of Scientific Revolutions
	6		10	Revolutions as Changes of World View
	7		11	The Invisibility of Revolutions
	7		12	The Resolutions of Revolutions
	8		13	Progress through Revolutions
	9			Postscript
16-Feb	**Questioning Functionalism in the Sociology of Science**			
	all	Sismondo	S-3	Questioning Functionalism in the Sociology of Science
	10	Merton	pdf	The Normative Structure of Science
	1	Solomon	H-10	STS and Social Epistemology of Science
21-Feb	**Stratification and Discrimination**			
	all	Sismondo	S-4	Stratification and Discrimination
	2	Merton	pdf	The Matthew Effect in Science
	3	Etzkowitz et al	H-17	The Coming Gender Revolution in Science
26-Feb	**The Strong Programme and the Sociology of Knowledge**			
	all	Sismondo	S-5	The Strong Programme and the Sociology of Knowledge
	4	Bloor	pdf	The Strong Programme and the Sociology of Knowledge

28-Feb	**The Social Construction of Scientific and Technical Realities**			
	all	Sismondo	S-6	The Social Construction of Scientific and Technical Realities
	5	Knorr-Cetina	pdf	The Ethnographic Study of Scientific Work: Towards a Constructivist Interpretation of Science
	6	Clarke & Star	H-5	The Social Worlds Framework: A Theory/Methods Package
2-Mar	**Feminist Epistemologies of Science**			
	all	Sismondo	S-7	Feminist Epistemologies of Science
	7	Haraway	pdf	Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective
	8	Harding	pdf	Whose Science? Whose Knowledge? What is Feminist Epistemology?
	9	Suchman	H-6	Feminist STS and the Sciences of the Artificial
7-Mar	**Actor-Network Theory**			
	all	Sismondo	S-8	Actor-Network Theory
	10	Callon	pdf	Some Elements of a Sociology of Translation
9-Mar	**Two Questions Concerning Technology**			
	All	Sismondo	S-9	Two Questions Concerning Technology
	1	Wyatt	H-7	Technological Determinism is Dead; Long Live Technological Determinism
	2	Oudshoorn & Pinch	H-22	User-Technology Relationships: Some Recent Developments
24-Mar	**Laboratories**			
	all	Sismondo	S-10	Laboratories
	3	Latour	pdf	Give Me a Laboratory and I Will Raise the World
	4	Doing	H-12	Give Me a Laboratory and I Will Raise the Discipline: The Past, Present, and Future Politics of Laboratory Studies in STS
	5	Henke & Gieryn	H-15	Sites of Scientific Practice: The Enduring Importance of Place
26-Mar	**Controversies**			
	all	Sismondo	S-11	Controversies
	6	Gieryn	pdf	Introduction: Contesting Credibility Cartographically
31-Mar	**Standardization and Objectivity**			
	all	Sismondo	S-12	Standardization and Objectivity
	7	Porter	pdf	Quantification and the Accounting Ideal in Science
2-Apr	**Rhetoric and Discourse**			
	all	Sismondo	S-13	Rhetoric and Discourse
	8	Gilbert & Mulkay	pdf	Opening Pandora's Box: A Sociological Analysis of Scientists' Discourse
	9	Keith & Rehg	H-9	Argumentation in Science: The Cross-Fertilization of Argumentation Theory and Science Studies
4-Apr	**The Unnaturalness of Science and Technology**			
	all	Sismondo	S-14	The Unnaturalness of Science and Technology
	10	Yearley	H-36	Nature and the Environment in Science and Technology Studies
6-Apr				**The Public Understanding of Science**
	all	Sismondo	S-15	The Public Understanding of Science
	9	Bucchi & Neresini	H-19	Science and Public Participation
11-Apr	**Expertise and Public Participation**			
	all	Sismondo	S-16	Expertise and Public Participation
	1	Barnes	pdf	Authority & Expertise in Society
13-Apr	**Political Economies of Knowledge**			
	all	Sismondo	S-17	Political Economies of Knowledge
	2	Mirowski & Sent	H-26	The Commercialization of Science and the Response of STS

20-Apr	Science & Technology Issues			
	3	Kleinman	1	Science is Political/Technology is Social
	4		2	Ceding Debate: Biotechnology and Agriculture
	5		3	Rethinking Information Technology: Caught in the World Wide Web
	6		4	Owning Technoscience: Understanding the New Intellectual Property Battles
	7		5	Technoscience in the Third World: The Politics of Indigenous Resources
	8		6	Gender and the Ideology of Merit: Women, Men, Science, and Engineering
	9		7	Democracy and Expertise: Citizenship in a High Tech Age

Bibliography for SOC551 Science, Knowledge, and Technology

Barnes, B. 1985. *About Science*. Blackwell

Berger, P & Luckmann, T. 1967. *The Social Construction of Reality*. Anchor.

Bloor, D. 1991. *Knowledge and Social Imagery*. University of Chicago Press.

Callon, D. 1986. "Some Elements of a Sociology of Translation." Pps 196-233 in *Power, Action, and Belief*, ed J. Law. Routledge

Chalmers, A.F. 1999. *What is this Thing Called Science?* Hackett Publishing.

Gieryn, T.F. 1999. *Cultural Boundaries of Science*. University of Chicago Press.

Gilbert, G.N. & Mulkay, M. 1984. *Opening Pandora's Box: A Sociological Analysis of Scientists' Discourse*. Cambridge University Press.

Goode, E. 1999. *Paranormal Beliefs: A Sociological Introduction*. Waveland Press.

Hackett, E.J., Amsterdamska, O., Lynch M.E. and Wajcman, J. 2007. *The Handbook of Science and Technology Studies* (3rd edition). MIT Press.

Hacking, I. 2000. *The Social Construction of What?* Harvard Press.

Haraway, D. 1991. *Simians, Cyborgs, and Women*. Routledge.

Harding, S. 1991. *Whose Science? Whose Knowledge? Thinking from Women's Lives*. Cornell University Press.

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