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 existing 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 identical PDF copy 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

Contact Person: Boyd Rorabaugh Phone: 696-7289

Rationale for Request:

The application dates are being changed to April 1 (for fall matriculation) and October 1 (for spring matriculation). The previous date (July 1) was too late to accommodate international applicants who need to acquire visas and meet other immigration requirements. The additional deadline of October 1 will enable students to matriculate in either the Fall or Spring semesters.

Changes in the admissions process (two recommendation letters rather than three; GRE scores are now optional rather than an admission requirement) are intended to minimize barriers to the application process.

The change in the number of credit hours during the Spring, Year 1 semester corrects a typographical error.

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 4/14/20

Registrar _____ Date 4-15-20

College Curriculum Committee Chair _____ Date 4-15-20
(or Dean if no college curriculum committee)

Graduate Council Chair _____ Date _____

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

2. **Edits to current description**: Attach or insert 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.

See Attachment "catalog description revised 041420"

Request for Graduate Non-Curricular Changes – Page 5

Please insert below your proposed change information for the Graduate Council agenda.

Type of change request: Non curricular

Department: Pharmaceutical Sciences and Research

Degree program: Master of Science / Master of Arts in Pharmaceutical Sciencess

Effective date (fall/spring/summer, year): Fall 2020

Current Catalog Description

PHARMACEUTICAL SCIENCES, M.S.

Program Description

The Department of Pharmaceutical Sciences and Research at the Marshall University School of Pharmacy offers the Master of Science (M.S.) (thesis and non-thesis options) degree 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 applying for admission. Information about faculty may be accessed through the School of Pharmacy website (*www.marshall.edu/pharmacy/about-us/staff-directory*). 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.

The School of Pharmacy expects to be accepting matriculating students for the Fall of 2019.

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-toapply-for-admission*. Applicants are strongly encouraged to apply by the priority deadline (July 31) where applicable.

Applicants should send the following 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 (*www.marshall.edu/pharmacy/student-info/prospective-students/MSPS*).

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 coursework as noted in the following section, including the thesis. The maximum number of credits that may be earned for the thesis is 12 hours.
- Candidates must register for and participate in MSPS 542, 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 (MSPS 542) may be used to complete the M.S. program credit requirement.
- Successful completion of the master's 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.

PHARMACEUTICAL SCIENCES, M.S.

Program Description

The Department of Pharmaceutical Sciences and Research at the Marshall University School of Pharmacy offers the Master of Science (M.S.) (thesis and non-thesis options) degree 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 applying for admission. Information about faculty may be accessed through the School of Pharmacy website *(www.marshall.edu/pharmacy/about-us/staff-directory).* 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.

~~**The School of Pharmacy expects to be accepting matriculating students for the Fall of 2019.**~~

Admission Requirements

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at *www.marshall.edu/graduate/admissionsjhow-toapply-for-admission.* Applicants are strongly encouraged to apply by ~~the priority deadline (July 31) where applicable.~~ April 1 for matriculation in the Fall semester or by October 1 for matriculation in the Spring semester. However, applications will be considered on a rolling basis as long as there is capacity remaining in the program.

Applicants should request that the following materials be sent directly to the Graduate Admissions Office:

- ~~Three~~ Two letters of recommendation from academic or professional references.

-Official transcripts from degree granting institution (additional transcripts may be required, at the discretion of the program).

~~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 from an accepted, accredited institution with a degree GPA of 3.0 on a 4.0 scale. No entrance exam is required. However, Graduate Record Exam (GRE) scores may be submitted to strengthen your application. Prior to admission, prospective students must also complete an on-site or video interview.

Graduate Assistantships

A limited number of graduate assistantships are available on a competitive basis. Additional information is provided on the Graduate College Graduate Assistantship overview web page: https://www.marshall.edu/graduate/graduate-assistantship-overview/

For additional financial aid information visit Marshall University's Financial Aid website (https://www.marshall.edu/sfa/) or contact the financial aid office to speak with a representative (304-696-3162).

~~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 *(www.marshall.edu/pharmacy/student-info/prospective-students/MSPS)*.~~

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 coursework as noted in the following section, including the thesis. The maximum number of credits that may be earned for the thesis is 12 hours.

Candidates must register for and participate in MSPS 542, 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 (MSPS 542) may be used to complete the M.S. program credit requirement.

Successful completion of the master's 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.

Fall, Year 1		
PHAR 531	Biopharmaceutics I	3
PHAR 521	Fund. Med. Chem.	2
MSPS 531	Regulatory Affairs	3
MSPS 512	Medicinal Chemistry and Drug Discovery Prin. Recitation	1
MSPS 542	Seminar	1
Total		**10**

Spring, Year 1		
PHAR 532	Biopharmaceutics II	3
MSPS 513	Biopharmaceutics II Recit.	1
MSPS 542	Seminar	1
BMR 664	Res. Conduct of Res.	1
MSPS 699	Thesis	~~1~~ 3
Total		**~~10~~9**

Fall, Year 2		
PHAR 631	Pharmacometrics	3
MSPS 613	Pharmacometrics Recit.	1
MSPS 699	Thesis	4
MSPS 542	Seminar	1
Total		**9**

Spring, Year 2		
MSPS 542	Seminar	1
MSPS 699	Thesis	~~6~~5
PHAR 632	Prod.Dev.by QbD	3
Total		**~~10~~9**

M.A. Degree Requirements for Non-Thesis Option

Students must complete the required graduate coursework as noted in the following section.

Candidates must register for and participate in MSPS 542, 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 **(MSPS** 542) may be used to complete the **M.A.** program credit requirement.

Not more than 4 semester hours credit in Independent Study or Special Topics can be used to complete the elective requirements.

Successful completion of the master's 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.

Fall, Year 1		
PHAR 531	Biopharmaceutics I	3
PHAR 521	Fund. Med. Chem.	2
MSPS 531	Regulatory Affairs	3
MSPS 512	Medicinal Chemistry and Drug Discovery Prin. Recitation	1
MSPS 542	Seminar	1
Total		**10**

Spring, Year 1		
PHAR 532	Biopharmaceutics II	3
MSPS 513	Biopharmaceutics II Recit.	1
MSPS 542	Seminar	1
BMR 664	Res. Conduct of Res.	1
MSPS 585	Independent Study	3
Total		**9**

Fall, Year 2		
PHAR 631	Pharmacometrics	3
MSPS 613	Pharmacometrics Recit.	1
MSPS 612	Pharmaceutical Analysis	1
MSPS 580	Special Topics	3
MSPS 542	Seminar	1
Total		9

Spring, Year 2		
MSPS 542	Seminar	1
MSPS 581	Special Topics	3
MSPS 632	Prod.Dev.by QbD	3
MSPS 621	Mol. Bio. and Genetics	2
Total		**9**

PHARMACEUTICAL SCIENCES, M.S.

Program Description

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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 applying for admission. Information about faculty may be accessed through the School of Pharmacy website *(www.marshall.edu/pharmacy/about-us/staff-directory).* 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/admissionsjhow-toapply-for-admission.* Applicants are strongly encouraged to apply by April 1 for matriculation in the Fall semester or by October 1 for matriculation in the Spring semester. However, applications will be considered on a rolling basis as long as there is capacity remaining in the program.

Applicants should request that the following materials be sent directly to the Graduate Admissions Office:

- Two letters of recommendation from academic or professional references.

-Official transcripts from degree granting institution (additional transcripts may be required, at the discretion of the program).

Applicant must also have:

An earned baccalaureate degree from an accepted, accredited institution with a degree GPA of 3.0 on a 4.0 scale. No entrance exam is required. However, Graduate Record Exam (GRE) scores may be submitted to strengthen your application. Prior to admission, prospective students must also complete an on-site or video interview.

Graduate Assistantships

A limited number of graduate assistantships are available on a competitive basis. Additional information is provided on the Graduate College Graduate Assistantship overview web page: https://www.marshall.edu/graduate/graduate-assistantship-overview/

For additional financial aid information visit Marshall University's Financial Aid website (https://www.marshall.edu/sfa/) or contact the financial aid office to speak with a representative (304-696-3162).

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 coursework as noted in the following section, including the thesis. The maximum number of credits that may be earned for the thesis is 12 hours.

Candidates must register for and participate in MSPS 542, 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 (MSPS 542) may be used to complete the M.S. program credit requirement.

Successful completion of the master's 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.

Fall, Year 1 *Spring, Year 1*

PHAR	531	Biopharmaceutics I	3	PHAR	532	Biopharmaceutics II	3
PHAR	521	Fund. Med. Chem.	2	MSPS	513	Biopharmaceutics II Recit.	1
MSPS	531	Regulatory Affairs	3	MSPS	542	Seminar	1
MSPS	512	Medicinal Chemistry and Drug Discovery Prin. Recitation	1	BMR	664	Res. Conduct of Res.	1
				MSPS	699	Thesis	3
MSPS	542	Seminar	1	**Total**			**9**
Total			**10**				

Fall, Year 2				*Spring, Year 2*			
PHAR	631	Pharmacometrics	3	MSPS	542	Seminar	1
MSPS	613	Pharmacometrics Recit.	1	MSPS	699	Thesis	5
MSPS	699	Thesis	4	PHAR	632	Prod.Dev.by QbD	3
MSPS	542	Seminar	1	**Total**			**9**
Total			**9**				

M.A. Degree Requirements for Non-Thesis Option

Students must complete the required graduate coursework as noted in the following section.

Candidates must register for and participate in MSPS 542, 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 **(MSPS** 542) may be used to complete the **M.A.** program credit requirement.

Not more than 4 semester hours credit in Independent Study or Special Topics can be used to complete the elective requirements.

Successful completion of the master's 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.

Fall, Year 1				*Spring, Year 1*			
PHAR	531	Biopharmaceutics I	3	PHAR	532	Biopharmaceutics II	3
PHAR	521	Fund. Med. Chem.	2	MSPS	513	Biopharmaceutics II Recit.	1
MSPS	531	Regulatory Affairs	3	MSPS	542	Seminar	1
MSPS	512	Medicinal Chemistry and Drug Discovery Prin. Recitation	1	BMR	664	Res. Conduct of Res.	1
				MSPS	585	Independent Study	3
MSPS	542	Seminar	1	**Total**			**9**
Total			**10**				

Fall, Year 2				*Spring, Year 2*			
PHAR	631	Pharmacometrics	3	MSPS	542	Seminar	1
MSPS	613	Pharmacometrics Recit.	1	MSPS	581	Special Topics	3
MSPS	612	Pharmaceutical Analysis	1	MSPS	632	Prod.Dev.by QbD	3
MSPS	580	Special Topics	3	MSPS	621	Mol. Bio. and Genetics	2
MSPS	542	Seminar	1	**Total**			**9**
Total			9				

ACCELERATED MASTER'S DEGREE (AMD)
Program Proposal

Chair: Tracy Christofero | GC#10: AMD

Prepare **one** paper copy with all signatures and forward to the Graduate Council Chair. Additionally, send **one** identical ELECTRONIC COPY with all supporting documentation as an e-mail attachment by to the Graduate Council Chair for electronic distribution to the Graduate Council Curriculum Committee.

Guidelines for an AMD Proposal

Accelerated Master's Degree Programs may be developed between an undergraduate and graduate program in a single department, between two programs in a single school/college or between programs in two different schools/colleges. AMD programs enrich the opportunities of the best undergraduates at Marshall University, enabling them to earn a Bachelor's and Master's degree in much less time than it would take following the traditional path. AMD students do not double count credits. They can take up to 12 graduate credits to be applied to the master's degree in place of 12 undergraduate elective credits. They will earn the undergraduate degree with up to 12 fewer credit hours, depending on how many graduate hours they take.

Rationale: The proposal should identify the rationale or need for an AMD, and, if the undergraduate and graduate programs are in different departments, clarify how they are appropriate for the AMD.

Rationale:	Improved career prospects for graduating students and an expanded range of elective course options will arise from an AMD program linking the undergraduate Bachelor of Science in Civil Engineering (BSCE) [TE60] and the graduate Master of Science in Engineering (MSE), Civil and Environmental Engineering major [GTE0]. Increased enrollment in graduate courses is also anticipated. The AMD will allow BSCE students to take up to four graduate courses in lieu of existing undergraduate degree requirements.

Admission Requirements: The proposal should state whether admission requirements for the AMD differ from regular admission requirements (e.g. waive test scores).

Admission Requirements:	AMD applicants currently enrolled in the BSCE degree are exempt from the regular admission requirement to provide a letter of recommendation, and are permitted to begin graduate courses prior to completing the full list of "foundation courses" identified in the graduate catalog description of the Civil and Environmental Engineering major. (Note: all applicable course prerequisites still apply.) International students are not required to take additional English proficiency exams (e.g., IELTS, TOEFL, etc.).

AMD Credits: The proposal may allow an undergraduate student to earn a maximum of 12 credits in approved graduate courses to be applied to the master's degree. These 12 credits take the place of 12 undergraduate electives. Please note the maximum allowed credits.

AMD Credits:	12 credits

Curriculum: The proposal should show how a student can complete the Bachelor's degree by lowering the number of undergraduate credits (up to 12) with up to 12 graduate credits that will apply to the master's degree.

Curriculum:	The existing degree requirement for the undergraduate Bachelor of Science in Civil Engineering (BSCE) is 124 credit hours, which includes ENGR 451 (Project Management, 3 credit hours), two "Civil Engineering Electives" (6 credit hours) and one "Technical Elective" (3 credit hours). AMD students would be permitted to take the graduate level EM 660 (Project Management) in place of ENGR 451, and three graduate level elective courses in place of the Civil Engineering Electives and Technical Elective. A summary of the BSCE and MSE degree requirements accompanies this proposal.

Student Eligibility: AMD applicants must have a minimum over-all grade point average of 3.30 and 3.30 in the major. Programs may require a higher GPA. Please note your required GPA.

Student Eligibility:	Over-all GPA of 3.30 and in-major GPA of 3.30

Accelerated Master's Degree Proposal-Page 2

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):

AMD Proposal

Department:
Allowable credits:
Student eligibility requirements:

AMD Proposal

Department: Civil Engineering Department (BSCE & MSE degree)
Allowable credits: 12 credit hours
Student eligibility requirements: Over-all GPA of 3.30 and in-major GPA of 3.30

Approvals
Signatures

Undergraduate Advisor — Date 9/18/20

Graduate Studies Director — Date 9/18/20

Dean, Undergraduate College — Date 9/18/20

Graduate Council Chair — Date

Summary of Degree Requirements for the BSCE (TE60) degree

Bachelor of Science in Civil Engineering (BSCE)

Semester 1		**Semester 2**	
ENGR 103 Freshman Engr. Seminar	1	CE 102 Intro to CAD	2
ENGR 104 Engineer. Profession	1	ENGR 111 Engineering Comp.	3
MTH 229 Calculus I (CT)	5	MTH 230 Calculus II	4
ENG 101 English Composition	3	ENG 201 Adv. Composition	3
FYS 100 First Year Seminar	3	PHY 211 Physics I	4
Communications	3	PHY 202 Physics I Lab	1
	16		17
Semester 3		**Semester 4**	
ENGR 213 Statics	3	ENGR 214 Dynamics	3
CE 241 Geomatics	3	ENGR 216 Mech. of Def. Bodies	3
MTH231 Calculus III	4	ENGR 222 Engr. Cost Analysis	3
CHM 211 Chemistry I	3	CHM 212 Chemistry II	3
CHM 217 Chemistry I Lab	2	CHM 218 Chemistry II Lab	2
ENGR 217 Co-Op Prep	1	MTH 335 Differential Equations	3
	16		17
Semester 5		**Semester 6**	
ENGR 318 Fluid Mechanics	3	CE 322 Geotechnical Engr.	4
CE 319 Fluid Mechanics Lab	1	CE 331 Hydraulic Engr.	3
CE 312 Structural Analysis	3	CE 342 Transportation Engr.	3
CE 321 Civil Engr. Materials	4	CE 351 Environmental Engr.	3
STA 345 Applied Prob. & Statistics	3	CE Design Elective	3
	14		16
Semester 7		**Semester 8**	
CE Design Elective	3	CE Elective	3
CE Elective	3	CE 453 Capstone Senior Design	3
ENGR 451 Project Management	3	Technical Elective	3
CE 452 Senior Seminar for CE	1	*Fine Arts*	3
Social Science	3		
Humanities	3		
	16		12

CE Design Elective (6 hours)

- CE 413 Reinforced Concrete Design or CE 414 Steel Design
- CE 425 Foundation Design
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design or CE 443 Transportation Systems Design

CE Electives (6 hours)

Any 300-level or 400-level CE course not taken to satisfy a CE Design Elective.

- CE 341 Advanced Geomatics
- CE 413 Reinforced Concrete Design
- CE 414 Steel Design
- CE 425 Foundation Design
- CE 426 Retaining Structures and Slope Stability
- CE 433 Hydrologic Engineering
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design
- CE 443 Transportation Systems Design

Technical Elective (3 hours)

- Any 300-level or higher CE course not taken to satisfy a CE Design Elective or CE Elective.
- Any 200-level or higher ENGR, ME or EE course, with advance approval from the student's advisor and Chair.

Graduate courses would replace the highlighted courses.

Graduate Catalog Description for the MSE, Civil and Environmental Engineering (GTE0) degree

MAJOR: Civil and Environmental Engineering

Each Civil and Environmental Engineering major must have completed the Foundation Courses listed below (and their associated prerequisites), or their equivalents as approved by their advisor before being fully admitted. Until this requirement is satisfied, the student can only receive Provisional admission to the program. All other admission requirements must still be satisfied.

Foundation Courses:

ENGR 318	Fluid Mechanics		
CE 312	Structural Analysis		
CE 342	Transportation Engineering		
CE 413	Reinforced Concrete	or	CE 414 Steel Design
CE 331	Hydraulic Engineering		
CE 351	Environmental Engineering		

Coursework Only Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
Elective courses		24 hrs

Project Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
TE 699	Comprehensive Project	3 hrs
Elective courses		21 hrs

Thesis Option (30 hours)

Required courses

One of: ENGR 610, ENGR 620, or ME 601		3 hrs
EM 660	Project Management	3 hrs
ENGR 682	Research	6 hrs
Elective courses		18 hrs

Elective Courses for the Civil and Environmental Engineering Major

Any CE (Civil Engineering) graduate course approved in advance by the student's advisor
Any ENVE (Environmental Engineering) graduate course approved in advance by the student's advisor.
Any EM (Engineering Management) graduate course approved in advance by the student's advisor.
Any ES (Environmental Science) graduate course approved in advance by the student's advisor.
Any ENGR (Engineering) graduate course approved in advance by the student's advisor.
Other graduate courses approved in advance by the student's advisor, up to 6 credit hours.

ACCELERATED MASTER'S DEGREE (AMD)
Program Proposal

Chair: Tracy Christofero | GC#10: AMD

Prepare **one** paper copy with all signatures and forward to the Graduate Council Chair. Additionally, send **one** identical ELECTRONIC COPY with all supporting documentation as an e-mail attachment by to the Graduate Council Chair for electronic distribution to the Graduate Council Curriculum Committee.

Guidelines for an AMD Proposal

Accelerated Master's Degree Programs may be developed between an undergraduate and graduate program in a single department, between two programs in a single school/college or between programs in two different schools/colleges. AMD programs enrich the opportunities of the best undergraduates at Marshall University, enabling them to earn a Bachelor's and Master's degree in much less time than it would take following the traditional path. AMD students do not double count credits. They can take up to 12 graduate credits to be applied to the master's degree in place of 12 undergraduate elective credits. They will earn the undergraduate degree with up to 12 fewer credit hours, depending on how many graduate hours they take.

Rationale: The proposal should identify the rationale or need for an AMD, and, if the undergraduate and graduate programs are in different departments, clarify how they are appropriate for the AMD.

Rationale: Improved career prospects for graduating students and an expanded range of elective course options will arise from an AMD program linking the undergraduate Bachelor of Science in Civil Engineering (BSCE) [TE60] and the graduate Master of Science in Engineering (MSE), Civil and Environmental Engineering major [GTE0]. Increased enrollment in graduate courses is also anticipated. The AMD will allow BSCE students to take up to four graduate courses in lieu of existing undergraduate degree requirements.

Admission Requirements: The proposal should state whether admission requirements for the AMD differ from regular admission requirements (e.g. waive test scores).

Admission Requirements: AMD applicants currently enrolled in the BSCE degree are exempt from the regular admission requirement to provide a letter of recommendation, and are permitted to begin graduate courses prior to completing the full list of "foundation courses" identified in the graduate catalog description of the Civil and Environmental Engineering major. (Note: all applicable course prerequisites still apply.) International students are not required to take additional English proficiency exams (e.g., IELTS, TOEFL, etc.).

AMD Credits: The proposal may allow an undergraduate student to earn a maximum of 12 credits in approved graduate courses to be applied to the master's degree. These 12 credits take the place of 12 undergraduate electives. Please note the maximum allowed credits.

AMD Credits: 12 credits

Curriculum: The proposal should show how a student can complete the Bachelor's degree by lowering the number of undergraduate credits (up to 12) with up to 12 graduate credits that will apply to the master's degree.

Curriculum: The existing degree requirement for the undergraduate Bachelor of Science in Civil Engineering (BSCE) is 124 credit hours, which includes ENGR 451 (Project Management, 3 credit hours), two "Civil Engineering Electives" (6 credit hours) and one "Technical Elective" (3 credit hours). AMD students would be permitted to take the graduate level EM 660 (Project Management) in place of ENGR 451, and three graduate level elective courses in place of the Civil Engineering Electives and Technical Elective.

A summary of the BSCE and MSE degree requirements accompanies this proposal.

Student Eligibility: AMD applicants must have a minimum over-all grade point average of 3.30 and 3.30 in the major. Programs may require a higher GPA. Please note your required GPA.

Student Eligibility: Over-all GPA of 3.30 and in-major GPA of 3.30

Lori Howard - 9/21/20
Lori Howard 11/4/2020 Approved.

Accelerated Master's Degree Proposal-Page 2

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):

AMD Proposal

Department:
Allowable credits:
Student eligibility requirements:

AMD Proposal

Department: Civil Engineering Department (BSCE & MSE degree)
Allowable credits: 12 credit hours
Student eligibility requirements: Over-all GPA of 3.30 and in-major GPA of 3.30

Approvals
Signatures

Undergraduate Advisor	9/18/20 Date
Graduate Studies Director	9/18/20 Date
Dean, Undergraduate College	9/18/20 Date
Graduate Council Chair	Date

Summary of Degree Requirements for the BSCE (TE60) degree

Bachelor of Science in Civil Engineering (BSCE)

Semester 1		Semester 2	
ENGR 103 Freshman Engr. Seminar	1	CE 102 Intro to CAD	2
ENGR 104 Engineer. Profession	1	ENGR 111 Engineering Comp.	3
MTH 229 Calculus I (CT)	5	MTH 230 Calculus II	4
ENG 101 English Composition	3	ENG 201 Adv. Composition	3
FYS 100 First Year Seminar	3	PHY 211 Physics I	4
Communications	3	PHY 202 Physics I Lab	1
	16		17
Semester 3		**Semester 4**	
ENGR 213 Statics	3	ENGR 214 Dynamics	3
CE 241 Geomatics	3	ENGR 216 Mech. of Def. Bodies	3
MTH231 Calculus III	4	ENGR 222 Engr. Cost Analysis	3
CHM 211 Chemistry I	3	CHM 212 Chemistry II	3
CHM 217 Chemistry I Lab	2	CHM 218 Chemistry II Lab	2
ENGR 217 Co-Op Prep	1	MTH 335 Differential Equations	3
	16		17
Semester 5		**Semester 6**	
ENGR 318 Fluid Mechanics	3	CE 322 Geotechnical Engr.	4
CE 319 Fluid Mechanics Lab	1	CE 331 Hydraulic Engr.	3
CE 312 Structural Analysis	3	CE 342 Transportation Engr.	3
CE 321 Civil Engr. Materials	4	CE 351 Environmental Engr.	3
STA 345 Applied Prob. & Statistics	3	CE Design Elective	3
	14		16
Semester 7		**Semester 8**	
CE Design Elective	3	CE Elective	3
CE Elective	3	CE 453 Capstone Senior Design	3
ENGR 451 Project Management	3	Technical Elective	3
CE 452 Senior Seminar for CE	1	*Fine Arts*	3
Social Science	3		
Humanities	3		
	16		12

CE Design Elective (6 hours)

- CE 413 Reinforced Concrete Design or CE 414 Steel Design
- CE 425 Foundation Design
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design or CE 443 Transportation Systems Design

CE Electives (6 hours)

Any 300-level or 400-level CE course not taken to satisfy a CE Design Elective.

- CE 341 Advanced Geomatics
- CE 413 Reinforced Concrete Design
- CE 414 Steel Design
- CE 425 Foundation Design
- CE 426 Retaining Structures and Slope Stability
- CE 433 Hydrologic Engineering
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design
- CE 443 Transportation Systems Design

Technical Elective (3 hours)

- Any 300-level or higher CE course not taken to satisfy a CE Design Elective or CE Elective.
- Any 200-level or higher ENGR, ME or EE course, with advance approval from the student's advisor and Chair.

Graduate courses would replace the highlighted courses.

Graduate Catalog Description for the MSE, Civil and Environmental Engineering (GTE0) degree

MAJOR: Civil and Environmental Engineering

Each Civil and Environmental Engineering major must have completed the Foundation Courses listed below (and their associated prerequisites), or their equivalents as approved by their advisor before being fully admitted. Until this requirement is satisfied, the student can only receive Provisional admission to the program. All other admission requirements must still be satisfied.

Foundation Courses:

ENGR 318	Fluid Mechanics		
CE 312	Structural Analysis		
CE 342	Transportation Engineering		
CE 413	Reinforced Concrete	or	CE 414 Steel Design
CE 331	Hydraulic Engineering		
CE 351	Environmental Engineering		

Coursework Only Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
Elective courses		24 hrs

Project Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
TE 699	Comprehensive Project	3 hrs
Elective courses		21 hrs

Thesis Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM 660	Project Management	3 hrs
ENGR 682	Research	6 hrs
Elective courses		18 hrs

Elective Courses for the Civil and Environmental Engineering Major

Any CE (Civil Engineering) graduate course approved in advance by the student's advisor
Any ENVE (Environmental Engineering) graduate course approved in advance by the student's advisor.
Any EM (Engineering Management) graduate course approved in advance by the student's advisor.
Any ES (Environmental Science) graduate course approved in advance by the student's advisor.
Any ENGR (Engineering) graduate course approved in advance by the student's advisor.
Other graduate courses approved in advance by the student's advisor, up to 6 credit hours.

ACCELERATED MASTER'S DEGREE (AMD)
Program Proposal

Chair: Tracy Christofero | GC#10: AMD

Prepare **one** paper copy with all signatures and forward to the Graduate Council Chair. Additionally, send **one** identical ELECTRONIC COPY with all supporting documentation as an e-mail attachment by to the Graduate Council Chair for electronic distribution to the Graduate Council Curriculum Committee.

Guidelines for an AMD Proposal

Accelerated Master's Degree Programs may be developed between an undergraduate and graduate program in a single department, between two programs in a single school/college or between programs in two different schools/colleges. AMD programs enrich the opportunities of the best undergraduates at Marshall University, enabling them to earn a Bachelor's and Master's degree in much less time than it would take following the traditional path. AMD students do not double count credits. They can take up to 12 graduate credits to be applied to the master's degree in place of 12 undergraduate elective credits. They will earn the undergraduate degree with up to 12 fewer credit hours, depending on how many graduate hours they take.

Rationale: The proposal should identify the rationale or need for an AMD, and, if the undergraduate and graduate programs are in different departments, clarify how they are appropriate for the AMD.

Rationale:	Improved career prospects for graduating students and an expanded range of elective course options will arise from an AMD program linking the undergraduate Bachelor of Science in Engineering (BSE) [TE20] major, Civil Engineering area of emphasis [TE21] degree and the graduate Master of Science in Engineering (MSE), Civil and Environmental Engineering major [GTE0]. Increased enrollment in graduate courses is also anticipated. The AMD will allow BSE Civil Engineering undergraduate students who are admitted to take up to four graduate courses in lieu of existing undergraduate degree requirements.

Admission Requirements: The proposal should state whether admission requirements for the AMD differ from regular admission requirements (e.g. waive test scores).

Admission Requirements:	AMD applicants currently enrolled in the BSE degree are exempt from the regular admission requirement to provide a letter of recommendation, and are permitted to begin graduate courses prior to completing the full list of "foundation courses" identified in the graduate catalog description of the Civil and Environmental Engineering major. (Note: all applicable course prerequisites still apply.) International students are not required to take additional English proficiency exams (e.g., IELTS, TOEFL, etc.).

AMD Credits: The proposal may allow an undergraduate student to earn a maximum of 12 credits in approved graduate courses to be applied to the master's degree. These 12 credits take the place of 12 undergraduate electives. Please note the maximum allowed credits.

AMD Credits:	12 credits

Curriculum: The proposal should show how a student can complete the Bachelor's degree by lowering the number of undergraduate credits (up to 12) with up to 12 graduate credits that will apply to the master's degree.

Curriculum:	The existing degree requirement for the undergraduate Bachelor of Science in Engineering (BSE) Civil Engineering area of emphasis is 124 credit hours, which includes ENGR 451 (Project Management, 3 credit hours), two "Civil Engineering Electives" (6 credit hours) and one "Technical Elective" (3 credit hours). AMD students would be permitted to take the graduate level EM 660 (Project Management) in place of ENGR 451, and three graduate level elective courses in place of the Civil Engineering Electives and Technical Elective. A summary of the BSE and MSE degree requirements accompanies this proposal.

Student Eligibility: AMD applicants must have a minimum over-all grade point average of 3.30 and 3.30 in the major. Programs may require a higher GPA. Please note your required GPA.

Student Eligibility:	Over-all GPA of 3.30 and in-major GPA of 3.30

Accelerated Master's Degree Proposal-Page 2

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):

AMD Proposal

Department:
Allowable credits:
Student eligibility requirements:

AMD Proposal

Department: Civil Engineering Department (BSE & MSE degree)
Allowable credits: 12 credit hours
Student eligibility requirements: Over-all GPA of 3.30 and in-major GPA of 3.30

Approvals
Signatures

Undergraduate Advisor — Date 9/18/20

Graduate Studies Director — Date 9/18/20

Dean, Undergraduate College — Date 9/18/20

Graduate Council Chair — Date

Pattern sheet for Bachelor of Science in Engineering (BSE) [TE20], Civil Engineering area of emphasis [TE21]

Bachelor of Science in Engineering (BSE)

Civil Engineering Emphasis

Semester 1		Semester 2	
ENGR 103 Freshman Engr. Seminar	1	CE 102 Intro to CAD	2
ENGR 104 Engineer. Profession	1	ENGR 111 Engineering Comp.	3
MTH 229 Calculus I (CT)	5	MTH 230 Calculus II	4
ENG 101 English Composition	3	ENG 201 Adv. Composition	3
FYS 100 First Year Seminar	3	PHY 211 Physics I	4
Communications	3	PHY 202 Physics I Lab	1
	16		17
Semester 3		**Semester 4**	
ENGR 213 Statics	3	ENGR 214 Dynamics	3
CE 241 Geomatics	3	ENGR 216 Mech. of Def. Bodies	3
MTH231 Calculus III	4	ENGR 222 Engr. Cost Analysis	3
CHM 211 Chemistry I	3	CHM 212 Chemistry II	3
CHM 217 Chemistry I Lab	2	CHM 218 Chemistry II Lab	2
ENGR 217 Co-Op Prep	1	MTH 335 Differential Equations	3
	16		17
Semester 5		**Semester 6**	
ENGR 318 Fluid Mechanics	3	CE 322 Geotechnical Engr.	4
CE 319 Fluid Mechanics Lab	1	CE 331 Hydraulic Engr.	3
CE 312 Structural Analysis	3	CE 342 Transportation Engr.	3
CE 321 Civil Engr. Materials	4	CE 351 Environmental Engr.	3
STA 345 Applied Prob. & Statistics	3	CE Design Elective	3
	14		16
Semester 7		**Semester 8**	
CE Design Elective	3	CE Elective	3
CE Elective	3	CE 453 Capstone Senior Design	3
ENGR 451 Project Management	3	Technical Elective	3
CE 452 Senior Seminar for CE	1	*Fine Arts*	3
Social Science	3		
Humanities	3		
	16		12

CE Design Elective (6 hours)

- CE 413 Reinforced Concrete Design or CE 414 Steel Design
- CE 425 Foundation Design
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design or CE 443 Transportation Systems Design

CE Electives (6 hours)

Any 300-level or 400-level CE course not taken to satisfy a CE Design Elective.

- CE 341 Advanced Geomatics
- CE 413 Reinforced Concrete Design
- CE 414 Steel Design
- CE 425 Foundation Design
- CE 426 Retaining Structures and Slope Stability
- CE 433 Hydrologic Engineering
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design
- CE 443 Transportation Systems Design

Technical Elective (3 hours)

- Any 300-level or higher CE course not taken to satisfy a CE Design Elective or CE Elective.
- Any 200-level or higher ENGR, ME or EE course, with advance approval from the student's advisor and Chair.

Note: courses highlighted would be replaced with graduate courses for AMD students.

Graduate Catalog Description for the MSE, Civil and Environmental Engineering (GTE0) degree

MAJOR: Civil and Environmental Engineering

Each Civil and Environmental Engineering major must have completed the Foundation Courses listed below (and their associated prerequisites), or their equivalents as approved by their advisor before being fully admitted. Until this requirement is satisfied, the student can only receive Provisional admission to the program. All other admission requirements must still be satisfied.

Foundation Courses:

ENGR 318	Fluid Mechanics		
CE 312	Structural Analysis		
CE 342	Transportation Engineering		
CE 413	Reinforced Concrete	or	CE 414 Steel Design
CE 331	Hydraulic Engineering		
CE 351	Environmental Engineering		

Coursework Only Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
Elective courses		24 hrs

Project Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
TE 699	Comprehensive Project	3 hrs
Elective courses		21 hrs

Thesis Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM 660	Project Management	3 hrs
ENGR 682	Research	6 hrs
Elective courses		18 hrs

Elective Courses for the Civil and Environmental Engineering Major

Any CE (Civil Engineering) graduate course approved in advance by the student's advisor
Any ENVE (Environmental Engineering) graduate course approved in advance by the student's advisor.
Any EM (Engineering Management) graduate course approved in advance by the student's advisor.
Any ES (Environmental Science) graduate course approved in advance by the student's advisor.
Any ENGR (Engineering) graduate course approved in advance by the student's advisor.
Other graduate courses approved in advance by the student's advisor, up to 6 credit hours.

ACCELERATED MASTER'S DEGREE (AMD)
Program Proposal

Chair: Tracy Christofero | GC#10: AMD

Prepare **one** paper copy with all signatures and forward to the Graduate Council Chair. Additionally, send **one** identical ELECTRONIC COPY with all supporting documentation as an e-mail attachment by to the Graduate Council Chair for electronic distribution to the Graduate Council Curriculum Committee.

Guidelines for an AMD Proposal

Accelerated Master's Degree Programs may be developed between an undergraduate and graduate program in a single department, between two programs in a single school/college or between programs in two different schools/colleges. AMD programs enrich the opportunities of the best undergraduates at Marshall University, enabling them to earn a Bachelor's and Master's degree in much less time than it would take following the traditional path. AMD students do not double count credits. They can take up to 12 graduate credits to be applied to the master's degree in place of 12 undergraduate elective credits. They will earn the undergraduate degree with up to 12 fewer credit hours, depending on how many graduate hours they take.

Rationale: The proposal should identify the rationale or need for an AMD, and, if the undergraduate and graduate programs are in different departments, clarify how they are appropriate for the AMD.

Rationale:	Improved career prospects for graduating students and an expanded range of elective course options will arise from an AMD program linking the undergraduate Bachelor of Science in Engineering (BSE) [TE20] major, Civil Engineering area of emphasis [TE21] degree and the graduate Master of Science in Engineering (MSE), Civil and Environmental Engineering major [GTE0]. Increased enrollment in graduate courses is also anticipated. The AMD will allow BSE Civil Engineering undergraduate students who are admitted to take up to four graduate courses in lieu of existing undergraduate degree requirements.

Admission Requirements: The proposal should state whether admission requirements for the AMD differ from regular admission requirements (e.g. waive test scores).

Admission Requirements:	AMD applicants currently enrolled in the BSE degree are exempt from the regular admission requirement to provide a letter of recommendation, and are permitted to begin graduate courses prior to completing the full list of "foundation courses" identified in the graduate catalog description of the Civil and Environmental Engineering major. (Note: all applicable course prerequisites still apply.) International students are not required to take additional English proficiency exams (e.g., IELTS, TOEFL, etc.).

AMD Credits: The proposal may allow an undergraduate student to earn a maximum of 12 credits in approved graduate courses to be applied to the master's degree. These 12 credits take the place of 12 undergraduate electives. Please note the maximum allowed credits.

AMD Credits:	12 credits

Curriculum: The proposal should show how a student can complete the Bachelor's degree by lowering the number of undergraduate credits (up to 12) with up to 12 graduate credits that will apply to the master's degree.

Curriculum:	The existing degree requirement for the undergraduate Bachelor of Science in Engineering (BSE) Civil Engineering area of emphasis is 124 credit hours, which includes ENGR 451 (Project Management, 3 credit hours), two "Civil Engineering Electives" (6 credit hours) and one "Technical Elective" (3 credit hours). AMD students would be permitted to take the graduate level EM 660 (Project Management) in place of ENGR 451, and three graduate level elective courses in place of the Civil Engineering Electives and Technical Elective. A summary of the BSE and MSE degree requirements accompanies this proposal.

Student Eligibility: AMD applicants must have a minimum over-all grade point average of 3.30 and 3.30 in the major. Programs may require a higher GPA. Please note your required GPA.

Student Eligibility:	Over-all GPA of 3.30 and in-major GPA of 3.30

Lori Howard 9/21/20
Lori Howard 11/4/20 Approved

Accelerated Master's Degree Proposal-Page 2

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):

AMD Proposal

Department:
Allowable credits:
Student eligibility requirements:

AMD Proposal

Department: Civil Engineering Department (BSE & MSE degree)
Allowable credits: 12 credit hours
Student eligibility requirements: Over-all GPA of 3.30 and in-major GPA of 3.30

Approvals
Signatures

Undergraduate Advisor — Date 9/18/20

Graduate Studies Director — Date 9/18/20

Dean, Undergraduate College — Date 9/18/20

Graduate Council Chair — Date

Pattern sheet for Bachelor of Science in Engineering (BSE) [TE20], Civil Engineering area of emphasis [TE21]

Bachelor of Science in Engineering (BSE)

Civil Engineering Emphasis

Semester 1		Semester 2	
ENGR 103 Freshman Engr. Seminar	1	CE 102 Intro to CAD	2
ENGR 104 Engineer. Profession	1	ENGR 111 Engineering Comp.	3
MTH 229 Calculus I (CT)	5	MTH 230 Calculus II	4
ENG 101 English Composition	3	ENG 201 Adv. Composition	3
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CE 241 Geomatics	3	ENGR 216 Mech. of Def. Bodies	3
MTH231 Calculus III	4	ENGR 222 Engr. Cost Analysis	3
CHM 211 Chemistry I	3	CHM 212 Chemistry II	3
CHM 217 Chemistry I Lab	2	CHM 218 Chemistry II Lab	2
ENGR 217 Co-Op Prep	1	MTH 335 Differential Equations	3
	16		17
Semester 5		**Semester 6**	
ENGR 318 Fluid Mechanics	3	CE 322 Geotechnical Engr.	4
CE 319 Fluid Mechanics Lab	1	CE 331 Hydraulic Engr.	3
CE 312 Structural Analysis	3	CE 342 Transportation Engr.	3
CE 321 Civil Engr. Materials	4	CE 351 Environmental Engr.	3
STA 345 Applied Prob. & Statistics	3	CE Design Elective	3
	14		16
Semester 7		**Semester 8**	
CE Design Elective	3	CE Elective	3
CE Elective	3	CE 453 Capstone Senior Design	3
ENGR 451 Project Management	3	Technical Elective	3
CE 452 Senior Seminar for CE	1	*Fine Arts*	3
Social Science	3		
Humanities	3		
	16		12

CE Design Elective (6 hours)

- CE 413 Reinforced Concrete Design or CE 414 Steel Design
- CE 425 Foundation Design
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design or CE 443 Transportation Systems Design

Note: courses highlighted would be replaced with graduate courses for AMD students.

CE Electives (6 hours)

Any 300-level or 400-level CE course not taken to satisfy a CE Design Elective.

- CE 341 Advanced Geomatics
- CE 413 Reinforced Concrete Design
- CE 414 Steel Design
- CE 425 Foundation Design
- CE 426 Retaining Structures and Slope Stability
- CE 433 Hydrologic Engineering
- CE 434 Water and Wastewater Treatment Design
- CE 438 Pavement Design
- CE 443 Transportation Systems Design

Technical Elective (3 hours)

- Any 300-level or higher CE course not taken to satisfy a CE Design Elective or CE Elective.
- Any 200-level or higher ENGR, ME or EE course, with advance approval from the student's advisor and Chair.

Graduate Catalog Description for the MSE, Civil and Environmental Engineering (GTE0) degree

MAJOR: Civil and Environmental Engineering

Each Civil and Environmental Engineering major must have completed the Foundation Courses listed below (and their associated prerequisites), or their equivalents as approved by their advisor before being fully admitted. Until this requirement is satisfied, the student can only receive Provisional admission to the program. All other admission requirements must still be satisfied.

Foundation Courses:

ENGR 318	Fluid Mechanics		
CE 312	Structural Analysis		
CE 342	Transportation Engineering		
CE 413	Reinforced Concrete	or	CE 414 Steel Design
CE 331	Hydraulic Engineering		
CE 351	Environmental Engineering		

Coursework Only Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
Elective courses		24 hrs

Project Option (30 hours)

Required courses

One of:	ENGR 610, ENGR 620, or ME 601	3 hrs
EM660	Project Management	3 hrs
TE 699	Comprehensive Project	3 hrs
Elective courses		21 hrs

Thesis Option (30 hours)

Required courses

One of: ENGR 610, ENGR 620, or ME 601		3 hrs
EM 660	Project Management	3 hrs
ENGR 682	Research	6 hrs
Elective courses		18 hrs

Elective Courses for the Civil and Environmental Engineering Major

Any CE (Civil Engineering) graduate course approved in advance by the student's advisor
Any ENVE (Environmental Engineering) graduate course approved in advance by the student's advisor.
Any EM (Engineering Management) graduate course approved in advance by the student's advisor.
Any ES (Environmental Science) graduate course approved in advance by the student's advisor.
Any ENGR (Engineering) graduate course approved in advance by the student's advisor.
Other graduate courses approved in advance by the student's advisor, up to 6 credit hours.

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: COS | Dept/Division: Forensic Science | Alpha Designator/Number: CFS500 | (●) Graded ( ) CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Intro to Digital Forensics

Alpha Designator/Number: C F S 5 0 0

Title Abbreviation: Intro to Digital Forensic

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

DFIA 400 introduces students to core digital forensic concepts, including data storage, imaging, the digital forensics process, common Windows artifacts, and the fundamentals of the forensic examination of digital media using AccessData.

Co-requisite(s): N/A | First Term to be Offered: Fall 2020

Prerequisite(s): IST 264 | 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 4-3-20
Registrar	Date
College Curriculum Chair	Date 4/3/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: COS | Department/Division: Forensic Science | Alpha Designator/Number: CFS500

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.

John Sammons

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 sample syllabus.

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

See attached sample syllabus.

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

See attached sample syllabus.

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

See attached sample syllabus.

Request for Graduate Course Addition - Page 4

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

See attached sample syllabus.

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

Additional project or paper.

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

See attached bibliography.

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: Forensic Science
Course Number and Title: CFS500
Catalog Description: Intro to Digital Forensics
Prerequisites: IST 264
First Term Offered: Fall 2020
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 545 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Mobile & Web Pen Testing

Alpha Designator/Number: C F S 5 4 5

Title Abbreviation: M o b i l e & W e b P e n T e s t i n g

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

Students will learn the advanced skills and techniques required to test mobile and web applications. This advanced pen-testing course uses a combination of lecture, real-world experiences, and hands-on exercises.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 545

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.

John Sammons
Bill Gardner
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached sample syllabus.

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

See attached sample syllabus.

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

See attached sample syllabus.

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

See attached sample syllabus.

Request for Graduate Course Addition - Page 4

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

See attached sample syllabus.

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

Additional project or assignment.

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

See attached bibliography.

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: Forensic Sciences
Course Number and Title: CFS 545 Mobile & Web Pen Testing
Catalog Description: Students will learn the advanced skills and techniques required to test mobile and web applications. This advanced pen-testing course uses a combination of lecture, real-world experiences, and hands-on exercises.
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 548 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Multimedia Forensics

Alpha Designator/Number: C F S 5 4 8

Title Abbreviation: M u l t i m e d i a F o r e n s i c s

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Course will introduce principles of multimedia forensics (images, audio, & video) and their application to cyber forensics. Practical forensics enhancement, analysis, and reporting tools and techniques are covered.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 548

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.

John Sammons
Bill Gardner
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached syllabus

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

See attached syllabus

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

Lecture & lab

Request for Graduate Course Addition - Page 4

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

See attached syllabus

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

Students will be required to present their final project (Project 5)

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS 548 Multimedia Forensics
Catalog Description: Course will introduce principles of multimedia forensics (images, audio, & video) and their application to cyber forensics. Practical forensic enhancement, analysis, and reporting tools and techniques are covered.
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 561 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Cyber Warfare

Alpha Designator/Number: C F S 5 6 1

Title Abbreviation: A p p l i e d C y b e r W a r f a r e

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Latest developments and advancement in cyber warfare facing nation-state and non-nation-state actors.

Co-requisite(s): N/A | First Term to be Offered: Fall 2020

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 561

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.

John Sammons
Bill Gardner
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached sample syllabus

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

See attached sample syllabus.

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

See attached sample syllabus.

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

See attached sample syllabus.

Request for Graduate Course Addition - Page 4

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

See attached sample syllabus.

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

Additional assignment or project.

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

See attached bibliography.

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: Forensic Sciences
Course Number and Title: CFS 561 Cyber Warfare
Catalog Description: Latest developments and advancements in cyber warfare facing nation-state and non-nation-state actors
.Prerequisites: N/A
First Term Offered: Fall 2020
Credit Hours: 3

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: Science | Dept/Division: Forensic Scienc | Alpha Designator/Number: CFS 562 | (●) Graded ( ) CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Network Forensics

Alpha Designator/Number: C F S 5 6 2

Title Abbreviation: N e t w o r k F o r e n s i c s

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Examination of techniques and tools used to investigate, search, collect, analyze and report on network based breaches and events.

Co-requisite(s): N/A | First Term to be Offered: Fall 2020

Prerequisite(s): N/A | 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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 562

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.

John Sammons
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached sample syllabus.

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

See attached syllabus

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

Lecture/lab

Request for Graduate Course Addition - Page 4

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

See attached sample syllabus.

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

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS 561 Cyber Warfare
Catalog Description: Latest developments and advancements in cyber warfare facing nation-state and non-nation-state actors
.Prerequisites: N/A
First Term Offered: Fall 2020
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 564 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Network Security & Cyber Crime

Alpha Designator/Number: C F S 5 6 4

Title Abbreviation: N e t w o r k & C y b e r C r i m e

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

Examines fundamental security concepts, protocols, and procedures commonly in use today. Topics include governance, access control, cryptography, physical security, security architecture, and application development security.

Co-requisite(s): N/A | First Term to be Offered: Fall 2020

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 564

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.

Jody Ogle

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached syllabus

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

See attached syllabus

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

Case studies

Request for Graduate Course Addition - Page 4

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

Midterm and final exam

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

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS 564 Network Security & Cyber Crime
Catalog Description: Examines fundamental security concepts, protocols, and procedures commonly in use today. Topics include governance, access control, cryptography, physical security, security architecture, and application development security. .
Prerequisites: N/A
First Term Offered: Fall 2020
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 567 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Mobile Device Forensics

Alpha Designator/Number: C F S 5 6 7

Title Abbreviation: M o b i l e D e v i c e F o r e n s i c s

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Identification, preservation, collection, analysis, and reporting techniques and tools used in the forensic examination of mobile devices such as mobile phones, tablets and GPS units.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 567

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.

John Sammons
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached syllabus

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

See attached syllabus

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

Lecture/lab

Request for Graduate Course Addition - Page 4

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

Midterm examination, final examination, in-class & out-of-class hands-on activities.

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

Completion of 10 hour laboratory practicum to be done on-site at Marshall University Forensic Science Center Digital Forensics Laboratory

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS Mobile Device Forensics
Catalog Description: Identification, preservation, collection, analysis, and reporting techniques and tools used in the forensic examination of mobile devices such as mobile phones, tablets, and GPS units.
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 665 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Internet of Things and Industrial Control Systmes

Alpha Designator/Number: C F S 6 6 5

Title Abbreviation: C y b e r S e c I o T & I C S

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Students will learn the tools and techniques to defend IoT and ICS systems that run the Power Grid and other critical systems.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 665

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.

Bill Gardner

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached syllabus

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

See attached syllabus

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

See attached syllabus

Request for Graduate Course Addition - Page 4

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

See attached syllabus

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

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS 665 Cyber Sec IoT & ICS
Catalog Description: Students will learn the tools and techniques to defend IoT and ICS systems that run the power grid and other critical systems
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 670 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Practicum

Alpha Designator/Number: C F S 6 7 0

Title Abbreviation: P r a c t i c u m

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Students will gain experience and practical knowledge working with professionals in the field of Cyber Forensics and Security as well as gaining real-world experience.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

Prerequisite(s): N/A | Credit Hours: 3-6

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 4-2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 670

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.

John Sammons
Bill Gardner
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached documents

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

See attached documents

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

See attached documents

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

See attached documents

Request for Graduate Course Addition - Page 4

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

See attached documents

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

N/A

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

See attached documents

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: Forensic Sciences
Course Number and Title: CFS 670 Practicum
Catalog Description: Students will gain experience and practical knowledge working with professions in the field of Cyber Forensics and Security as well as gaining real-world experience.
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3-6

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: Science | Dept/Division: Forensic Sciences | Alpha Designator/Number: CFS 690 | ◯ Graded ◯ CR/NC

Contact Person: John Sammons | Phone: 304-696-7241

NEW COURSE DATA:

New Course Title: Capstone

Alpha Designator/Number: C F S 6 9 0

Title Abbreviation: C a p s t o n e

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
This capstone course is the culminating experience for the Masters Degree in Cyber Forensics and Security. This course builds on the concepts covered within the program of study.

Co-requisite(s): N/A | First Term to be Offered: Spring 2021

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 4–2-20
Registrar	Date
College Curriculum Chair	Date 4/2/2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: Science | Department/Division: Forensic Sciences | Alpha Designator/Number: CFS 690

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.

John Sammons
Bill Gardner
Josh Brunty

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.

N/A

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

N/A

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.

N/A

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.

N/A

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

See attached syllabus

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

See attached syllabus

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

See attached bibliography

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

See attached syllabus

Request for Graduate Course Addition - Page 4

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

See attached syllabus

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

Additional assignments or project

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

See attached bibliography

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: Forensic Sciences
Course Number and Title: CFS 690 Capstone
Catalog Description: This capstone course is the culminating experience for the Masters Degree is Cyber Forensics and Security. This course builds on the concepts covered within the program of study.
Prerequisites: N/A
First Term Offered: Spring 2021
Credit Hours: 3

September 23, 2020

The Graduate Council
Marshall University
One John Marshall Drive
Huntington, WV 25755

Dear Graduate Council:

This letter is to communicate our support for the transfer of the MS in Information Systems degree program from the College of Engineering and Computer Science (CECS) to the Lewis College of Business (LCOB). We have negotiated this transfer with full support from Provost Taylor to increase efficiency and reduce costs in providing the MS in Information Systems degree program. This transfer will enable the LCOB to align its undergraduate program in Management Information Systems with the Master degree in Information Systems including offering a 3 + 2 program. It will utilize the LCOB's already established expertise in teaching information systems courses and allow enhanced coordination of graduate management information systems courses that are already being taught to service the LCOB's MBA and other graduate programs.

LCOB faculty will be responsible for the IS courses pertaining to the MS in Information Systems and the IS courses pertaining to the MS in Health Informatics degree programs beginning in Spring 2021. Current and new students will receive notification in October about the program transfer. The CECS and the LCOB will hold a meeting with students that will provide updated materials regarding advising and faculty/staff contacts in the LCOB.

Sincerely,

David Dampier
Interim Dean, College of Engineering
and Computer Science

A Mukherjee

Avi Mukherjee
Dean, Lewis College of Business

Marshall University
Lewis College of Business
Brad D. Smith Schools of Business
Office of the Dean
One John Marshall Drive
Huntington, WV 25755-2300
Tel: 304-696-2316
marshall.edu

BE PROUD.
BE A SON OR DAUGHTER OF MARSHALL.

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: Liberal Arts | Dept/Division: GEO | Alpha Designator/Number: 527 | (•) Graded ( ) CR/NC

Contact Person: James Leonard | Phone: 696-4626

NEW COURSE DATA:

New Course Title: Principles of GIS 2

Alpha Designator/Number: GEO527

Title Abbreviation: Principles of GIS 2

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis.

Co-requisite(s):

First Term to be Offered: summer 2021

Prerequisite(s): GEO523 OR GEO526 OR GEO

Credit Hours: 4

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 9/9/20
Registrar 450701	Date 9-11-2020
College Curriculum Chair	Date 9/24/2020
Graduate Council Chair	Date 11/4/2020

Form updated 10/2011

Rec'd in COLA Office
Date: 9-14-2020

Request for Graduate Course Addition - Page 2

College: LIberal Arts | Department/Division: GEO | Alpha Designator/Number: 527

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.

Cordoba, Leonard, Walz

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.

n/a

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

n/a

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.

n/a

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.

n/a

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

Students will recognize and apply GIS concepts and techniques such as geodatabase management, spatial data processing and analysis.
Students will employ GIS models, python scripting, and spatial analysis techniques for research and problem solving.
Students will construct an independent GIS research project and share their data and maps on the web.

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

See attached syllabus

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

See attached bibliography at the end of the syllabus.

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

Lecture followed by lab.

Request for Graduate Course Addition - Page 4

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

See attached syllabus.

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

See attached syllabus.

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

See attached syllabus at the end of that document.

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: Geography
Course Number and Title: GEO527 Principles of GIS 2
Catalog Description: Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis. (PR: one of GEO523 OR GEO526 OR GEO529 OR GEO530 OR NRRM533 OR NRE523 or permission).
First Term Offered: Summer 2021
Credit Hours: 4

Principles of GIS 2

GEO427/527: Summer 2020, Section 401, CRN 41xx/41xx

University catalog description: Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis. 4 cr. hrs. Prerequisite: GEO423/523 or GEO426/526 or GEO429/529 or GEO430/530 or NRE423/523 or NRRM433 or permission. Recommended: Knowledge of statistics equivalent to MTH225.

Instructor welcome: Hello, and welcome to this course which further develops your foundation as a GIS professional beyond the basics. I am your instructor, James Leonard, Ph.D., from the Department of Geography in the College of Liberal Arts at Marshall University. I received my Ph.D. from the University of Cincinnati in 2001 and began working at Marshall University in fall of that year. I was previously employed for about five years by the WV Department of Environmental Protection as a Geographic Information Systems Analyst and Systems Administrator. I hope you'll post some interesting information about yourself on the Bio discussion board so that I can get to know you, too.

The course begins 17 May and ends 13 Aug. For course withdrawal deadlines see the MU academic calendar http://www.marshall.edu/calendar/academic/.

How to get help with GIS: The MU IT Service Desk handles all questions about Blackboard, but they know nothing about GIS. The instructor will handle questions about GIS. For help with GIS, call Dr. Leonard (304) 696-4626 or arrange a Teams meeting.

Course Learning Outcomes	How students will practice each outcome	How student achievement will be assessed
Students will recognize and apply GIS concepts and techniques such as geodatabase management, spatial data processing and analysis.	Discussion, readings, tutorials	Assignments, reading summaries, semester project
Students will employ GIS models, python scripting, and spatial analysis techniques for research and problem solving.	Discussion, readings, tutorials	Assignments, reading summaries, semester project
Students will construct an independent GIS research project and share their data and maps on the web.	Discussion, readings, tutorials	Assignments, reading summaries, semester project

Required materials:

- Access to ArcGIS Pro. You have two options:
  - Access the software using Remote Desktop Windows App and accessing MURemote.marshall.edu. Remote Desktop App is also available for Mac iOS. Using Remote Desktop means that all the software processing, which can be a significant use of computing resources, is done on a powerful computer on Marshall's campus.
  - Install ArcGIS Pro 2.5 or higher on your Windows home computer. I will provide instructions and help downloading and authorizing the software. Minimum specs for

running ArcGIS Pro are here: https://pro.arcgis.com/en/pro-app/get-started/arcgis-pro-system-requirements.htm. ArcGIS Pro does NOT run on Mac iOS.

- Free materials for Marshall students via ESRI.com.
- Readings and GIS data provided free to use in GEO4/527.

Time Commitment: Plan to spend about 12-15 hours a week in order to do well in this shorter summer semester. You may require more or less time. This is MORE work than a challenging three credit course!

Grading: Grades will be based on thirteen assignments/ESRI Academy courses (20 points each) for 260 points; four reading summaries (20 points each) for 80 points; and a semester project (60 points). Graduate students will have more extensive assignments and projects. Final grades will be determined by the total number of points you have earned:

- A = 400 - 364 points (100-91%)
- B = 363 - 324 (90-81%)
- C = 323- 284 (80-71%)
- D = 283 - 260 (70-65%)
- F = 259 and below (less than 65%)

There will be no extra credit and no grades will be scaled or curved. Please be aware that this is a senior-/graduate-level course. You will be expected to perform at a high level. The pace of the course is rapid. You must be thorough and complete on all exercises to receive full credit. You must master all exercises, textbook and article readings, lecture material, and ArcGIS skills and concepts to do well. Work must be submitted no later than the date on the schedule below at 11:59pm Eastern each. No late work is accepted.

Assignments: Submit assignments and ESRI Academy completion certificates as PDF or Word format attachments using the Assignment tool. For everything except ESRI Academy assignments, **you must include screen captures** to show how you got your answers. Graduate students have more difficult and extensive assignments. In the case where Blackboard will only permit a single file upload and you have multiple files, please ZIP (compress) the files and upload the .zip file.

Reading summaries: You will read research articles which present GIS techniques used to address real world issues. The structure and length of reading summaries will be provided in Blackboard. The articles will be provided as PDFs in Blackboard.

Semester project: The semester project integrates principles and techniques from the entire semester. You must consult the instructor early and often to guide you! You submit parts of the project as the semester progresses as PDF, Excel, Word, or Geodatabase format attachments. At every stage, the instructor will provide you feedback which must be incorporated into subsequent submissions. More instructions are provided in the course content. In the case where Blackboard will only permit a single file upload and you have multiple files, please ZIP the files and upload the .zip file. Graduate students have more difficult and extensive project requirements.

Discussion boards: Discussions take place with the Discussions tool. No grades are assigned for discussions.

Weekly Schedule: Assignments are due by 11:59pm Eastern USA the Monday following their assigning and are submitted using Blackboard.

- Week 1: Overview: GIS Processing, Analysis, and Applications; reading GIS research
  - Assignment #1 – Intro concepts
    - Optional: ESRI Academy *Get Started with ArcGIS Pro*
    - ESRI Academy *Getting Started with Spatial Analysis*
    - ESRI Academy *GIS for Humanitarian Mine Action: Using Vector Data in ArcMap*
    - Print five entry-level jobs in your field that have GIS skills as a primary qualification (links to job/career sites are available at https://www.marshall.edu/geography/jobs/).
  - Reading summary #1 – Kent, Joshua and Michael Leitner. 2007. Efficacy of Standard Deviational Ellipses in the Application of Criminal Geographic Profiling. *Journal of Investigative Psychology and Offender Profiling* 4: 147–165. DOI: 10.1002/jip.72
  - Submission deadline: May 28
- Week 2: Spatial queries and spatial joins
  - Assignment #2:
    - Price chapter 8 exercises
    - Price chapter 9 exercises
    - ESRI Academy *Querying Data Using ArcGIS Pro*
  - Submission deadline: June 4
- Week 3: Map Overlay and Geoprocessing
  - Assignment #3:
    - Price chapter 10 exercises
    - ESRI Academy Getting Started with Geoprocessing
    - ESRI Academy Understanding Spatial Relationships
  - Reading summary #2 – Acharya, Tri Dev, Kyung Wan Yoo, and Dong Ha Lee. 2017. GIS-based Spatio-temporal Analysis of Marine Accidents Database in the Coastal Zone of Korea. *Journal of Coastal Research* 79: 114-118.
  - Meet with Dr. Leonard to discuss semester project
  - Submission deadline: June 11
- Week 4: Cluster analysis
  - Assignment #4:
    - ESRI Academy *Mapping Clusters: Introduction to Statistical Cluster Analysis*
    - ESRI Academy *Mapping Clusters: Hot Spot and Cluster and Outlier Analysis*
    - ESRI Academy *Mapping Clusters: Optimized Hot Spot and Optimized Outlier Analysis*
  - Submission deadline: June 18
- Week 5: Cluster analysis 2; Spatial autocorrelation and GWR
  - Assignment #5:
    - Bi-variate LISA using GeoDa

        - ESRI Academy *Introduction to Regression Analysis Using ArcGIS Pro*
    - Reading summary #3 – Borden, Kevin A. and Susan L. Cutter. 2008. Spatial patterns of natural hazards mortality in the United States. *International Journal of Health Geographics* 2008, 7:64 doi:10.1186/1476-072X-7-64
    - Meet with Dr. Leonard to discuss semester project
    - Submission deadline: June 25
- Week 6: Network analysis
    - Assignment #6:
        - ESRI Academy *Preparing for Network Analysis*
        - ESRI Academy *Finding the Optimal Location of Facilities Using ArcGIS Pro*
        - ESRI Academy *Generating Service Areas Using ArcGIS Pro*
    - Reading summary #4 – Vora et al. 2015. Options for Optimal Coverage of Free C-Section Services for Poor Mothers in Indian State of Gujarat: Location Allocation Analysis Using GIS. *PLOS ONE* | DOI:10.1371/journal.pone.0137122.
    - Submission deadline: July 2
- Week 7: Model Builder
    - Assignment #7: ESRI Academy *Building Geoprocessing Models Using ArcGIS Pro*
    - Semester Project part 1
    - Submission deadline: July 9
- Week 8: GPS and data collection
    - Assignment #8:
        - GPS collection and photo georeferencing handout
        - ESRI Web Course *Finding Geographic Data in ArcGIS*
    - Meet with Dr. Leonard to discuss semester project
    - Submission deadline: July 16
- Week 9: Data management and Metadata
    - Assignment #9:
        - ESRI Academy *Creating and Editing Metadata in ArcGIS*
        - ESRI Academy *Getting Started with Data Management*
        - ESRI Academy *Integrating Data in ArcGIS Pro*
    - Semester Project part 2
    - Submission deadline: July 23
- Week 10: Coordinate systems
    - Assignment #10:
        - ESRI Academy *Working with Coordinate Systems in ArcGIS*
        - ESRI Academy *GIS for Humanitarian Mine Action: Coordinate Systems and Map Projections*
        - Optional: ESRI Academy *Referencing Data to Real-World Locations Using ArcGIS, Basics of Geographic Coordinate Systems*
    - Semester Project part 3
    - Submission deadline: July 30
- Week 11: Cartographic Design
    - Assignment #11
        - ESRI Academy *Map Design Fundamentals*

        - ESRI Academy *Symbolizing Map Layers, Getting Started with Mapping and Visualization*
    - Semester project part 4
    - Submission deadline: Aug. 7
- Week 12: Python
    - Assignment #12:
        - ESRI Academy *Python for Everyone*
        - ESRI Academy *Python Scripting for Geoprocessing Workflows*
    - Submission deadline: Aug. 14

Resources: Marshall University offers a variety of support services to students enrolled in classroom and online courses. For online students, access these support services by clicking the Help links at left in the Blackboard course.

Academic Honesty and other University policies: You must do you own work for this class. For any cheating or plagiarism, however minor, you will earn a final grade of F for the semester. Additional University sanctions apply. By enrolling in this course, you agree to the University Policies found at www.marshall.edu/academic-affairs. They are many; best read them.

Bibliography

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Crampton, Jeremy W. Mapping. 2010

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Carranza, Emmanuel John M. Geochemical Anomaly and Mineral Prospectivity Mapping in GIS. 2009

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Lee, Jiyeong and Sisi Zlatanova. 3D Geo-Information Sciences. 2009

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Tijs Neutens, Philippe Maeyer. Developments in 3D Geo-Information Sciences.2010

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Kennedy, Heather. Introduction to 3D Data. 2009

Lloyd, Christopher D. Local Models for Spatial Analysis. 2011

Fu, Pinde and Jiulin Sun. Web GIS: Principles and Applications. 2011

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Ormsby, Tim. Getting to Know ArcGIS Desktop. 2010

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Ahson,Syed and Mohammad Ilyas. Location-based services handbook :applications, technologies, and security. 2011

Keranen, Kathryn and Robert Kolvoord. Making Spatial Decisions using GIS: A Workbook.2012

Price, Maribeth Hughett. Mastering ArcGIS. 2012

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Harde,r Christian and Tim Ormsby and Thomas Balstram. Understanding GIS: An ArcGIS Project Workbook. 2011

Sinton, Diana Stuart and Jennifer J. Lund. Understanding Place: GIS and Mapping Across the Curriculum. 2007

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Johnson ,Steven. The Ghost Map: A Street an Epidemic and the Hidden Power of Urban Networks. 2006

Knowles, Anne Kelly and Amy Hillier. Placing History: How Maps Spatial Data and GIS are Changing Historical Scholarship. 2008

Congalton, Russell G. and Kass Green. Assessing the Accuracy of Remotely Sensed Data. 2009

Gurdak, Jason J. et al. Estimating Prediction Uncertainty from Geographical Information System Raster Processing. Vol. 11-C3. 2009

Soergel, Uwe. Radar Remote Sensing of Urban Areas. 2010

Kogan, Felix et al. Use of Satellite and in-Situ Data to Improve Sustainability. 2011

Parker, Robert Nash and Emily K. Asencio. GIS and Spatial Analysis for the Social Sciences. 2008

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Moyer, D. David and Stephen J. Ventura and Niemann Jr J. Bernard. Citizen Planners Shaping Communities with Spatial Tools. 2010

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Nyerges, Timothy L. and Piotr Jankowski. Regional and Urban GIS. 2009

Giusti de Pacrez, Rosario C. and Ramon A. Pacrez. Analyzing Urban Poverty: GIS for the Developing World. 2008

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Pamuk, Ayse. Mapping Global Cities: GIS Methods in Urban Analysis. 2006

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: LIberal Arts Dept/Division:GEO Current Alpha Designator/Number: 529

Contact Person: James Leonard Phone: 696-4626

CURRENT COURSE DATA:

Course Title: Principles of GIS 2 - Vector Analysis

Alpha Designator/Number: G E O 5 2 9

Title Abbreviation: P r i n G I S 2 V e c t o r A n a l y s i s

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 9/9/20
Registrar	Date 9-11-2020
College Curriculum Chair	Date 9/24/2020
Graduate Council Chair	Date 11/4/2020

Rec'd In COLA Office
Date: 9-14-2020

Request for Graduate Course Change - Page 2

College: Liberal Arts | Department/Division: GEO | Alpha Designator/Number: 529

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

Change in CATALOG TITLE: ☒ YES ☐ NO

From: Prin of GIS 2 - VectorAnalysis (limited to 30 characters and spaces)

To: Location Analysis and GIS

If Yes, Rationale: Better describes the change in course emphasis.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☐ YES ☒ NO

From: ____ To: ____

If Yes, Rationale:

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

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

From: Continuation of GEO526 Principles of GIS, including additional principles like data management, cartographic design, and geocoding; and vector analyses like spatial patterns analysis, spatial autocorrelation, and network analysis. (PR: GEO526 or GEO530 or permission)

To: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS.(PR: one of GEO523, GEO526, GEO527, GEO530, NRRM533, NRE523 or perm)

If Yes Rationale: We are splitting the material from the old GEO529 into two courses. The new GEO529 course will focus on one type of vector analysis using GIS, specifically location theory, techniques, and applications.

Request for Graduate Course Change - Page 3

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: We are splitting the material from the old GEO529 into two courses. The old course was a continuation of material from GEO526 Principles of GIS, covering additional principles that are broadly applicable across disciplines with just a few exercises in vector analysis.

To: The new GEO529 course will focus on one type of vector analysis using GIS, specifically location analysis, which is a hot field in the discipline. The rest of the material from the old GEO529 will be covered in a new course GEO527. The new GEO529 will also cover location theory, a necessary building block before using GIS as a tool to perform the location analyses.

Rationale: See above.

Request for Graduate Course Change-Page 4

College: Liberal Arts

Department: Geography

Course Number/Title GEO529 Principles of GIS 2 - Vector Analysis

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.

n/a

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.

n/a

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.

n/a

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 TITLE CHANGE
Department: Geography
Current Course Number/Title: GEO529 Principles of GIS 2 - Vector Analysis
New Course Title: GEO529 Location Analysis and GIS
Rationale: We are splitting the material from the old GEO529 into two courses. This title better describes the change in course emphasis.
Catalog Description: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS. (PR: one of GEO523, GEO526, GEO527, GEO529, GEO530, NRRM533, NRE523 or permission)

COURSE DESCRIPTION CHANGE
Department: Geography
Course Number and Title: GEO529 Location Analysis and GIS
Rationale: We are splitting the material from the old GEO529 into two courses.
Course Description (old) The old course was a continuation of material from GEO526 Principles of GIS and covered additional principles that are broadly applicable across disciplines with a few exercises in vector analysis.
Course Description: (new) The new GEO529 course will focus on one type of vector analysis using GIS, specifically location intelligence, which is a new, hot field in the discipline. The new GEO529 will also cover location theory, a necessary building block before using GIS as a tool to perform the location analyses.
Catalog Description: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS. (PR: one of GEO523, GEO526, GEO527, GEO529, GEO530, NRRM533, NRE523 or permission)

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: LIberal Arts Dept/Division:GEO Current Alpha Designator/Number: 679

Contact Person: James Leonard Phone: 696-4626

CURRENT COURSE DATA:

Course Title: Applied Projects

Alpha Designator/Number: G E O 6 7 9

Title Abbreviation: A p p l i e d P r o j e c t s

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 9/9/20
Registrar Sonya McG	Date 9-11-2020
College Curriculum Chair	Date 9/24/2020
Graduate Council Chair Lani Kwant	Date 11/4/2020

Rec'd In COLA Office
Date: 9-14-2020

Request for Graduate Course Change - Page 2

College: Liberal Arts | Department/Division: GEO | Alpha Designator/Number: 679

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

Change in CATALOG TITLE: ☒ YES ☐ NO

From: Applied Project (limited to 30 characters and spaces)

To: Portfolio and Career Profile

If Yes, Rationale: Better reflects change in course emphasis.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☐ YES ☒ NO

From: ____ To: ____

If Yes, Rationale:

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

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

From: n/a

To: Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/ enhance their Career Profile.

If Yes Rationale: The course emphasis will be changed. See below.

Request for Graduate Course Change - Page 3

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: 1-3

To: 1-4; This course was previously used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree. The additional credit reflects additional expectations in the course. See below. The course is variable credit to accommodate students who don't need 4 credits and don't want to pay for credit hours they don't need. On occasion, we offer the course to such students with

Change in COURSE CONTENT: ☒ YES ☐ NO

From: This course was used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree.

To: To justify the additional credit, we will restructure the course with additional elements to include: a portfolio, one written exam project, and a career profile. The Portfolio is an organized collection of artifacts demonstrating the knowledge and skills students have developed through their coursework in the Geography MA program. The Portfolio will consist of a cover letter and a minimum of three artifacts completed during their coursework at Marshall, arranged and explained to tell a compelling story of how their education will apply to a professional career. The written Exam Project will require students to use knowledge and skills from the core GEO requirements as well as electives to demonstrate mastery of the core elements of the degree. In coordination with course instructor and the Marshall University Office of Career Education (https://www.marshall.edu/careereducation/), students will build a Career Profile which could be used for career start-up or advancement. The Career Profile will include a professional CV, social media networking such as LinkedIn, a mock interview, and career building skill courses offered through the Office of Career Education.

Rationale: We found that the previous comprehensive projects were a poor measure of student learning while in the degree program by themselves and did nothing to prepare students for a career or career advancement which is the reason why nearly all of our MA students are pursuing this degree.

We believe the new course emphasis will better prepare graduate students for a career or career advancement. Their Exam Project is a continuation of previous department practice requiring students to demonstrate mastery of the disciple. Their Career Profile will produce a polished CV, social media networking, and develop career skills in self-identified areas of weakness. Their Portfolio will serve several purposes. For the student, compiling and writing the Portfolio will help them see the value of the education and how that education can be valuable to current or future employers. For the department, it will permit a degree of assessment since one requirement of the Portfolio will be to show how their Portfolio artifacts meet departmental learning outcomes.

Request for Graduate Course Change-Page 4

College: Liberal Arts

Department: Geography

Course Number/Title GEO679 Applied Projects

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.

n/a

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.

n/a

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.

n/a

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: Geography

Course Number and Title: GEO679 Applied Projects change to Portfolio and Career Profile

Rationale: To justify the additional credit, we will restructure the course with additional elements to include: a portfolio, one written exam project, and a career profile. The Portfolio is an organized collection of artifacts demonstrating the knowledge and skills students have developed through their ork in the Geography MA program. The Portfolio will consist of a cover letter and a minimum of three artifacts completed during their coursework at Marshall, arranged and explained to tell a compelling story of how their education will apply to a professional career. The written Exam Project will require students to use knowledge and skills from the core GEO requirements as well as electives to demonstrate mastery of the core elements of the degree. In coordination with instructor and the Marshall University Office of Career Education (https://www.marshall.edu/careereducation/), students will build a Career Profile which could be used for career start-up or advancement.

Course Description (old) This course was used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree.

Course Description: (new) Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/enhance their Career Profile.

Catalog Description: Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/enhance their Career Profile.

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: Liberal Arts | Dept/Division: GEO | Alpha Designator/Number: 527 | (•) Graded ( ) CR/NC

Contact Person: James Leonard | Phone: 696-4626

NEW COURSE DATA:

New Course Title: Principles of GIS 2

Alpha Designator/Number: GEO527

Title Abbreviation: Principles of GIS 2

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)

Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis.

Co-requisite(s):

First Term to be Offered: summer 2021

Prerequisite(s): GEO523 OR GEO526 OR GEO

Credit Hours: 4

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 9/9/20
Registrar 450701	Date 9-11-2020
College Curriculum Chair	Date 9/24/2020
Graduate Council Chair	Date

Form updated 10/2011

Rec'd in COLA Office
Date: 9-14-2020

Request for Graduate Course Addition - Page 2

College: LIberal Arts | Department/Division: GEO | Alpha Designator/Number: 527

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.

Cordoba, Leonard, Walz

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.

n/a

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

n/a

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.

n/a

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.

n/a

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

Students will recognize and apply GIS concepts and techniques such as geodatabase management, spatial data processing and analysis.
Students will employ GIS models, python scripting, and spatial analysis techniques for research and problem solving.
Students will construct an independent GIS research project and share their data and maps on the web.

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

See attached syllabus

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

See attached bibliography at the end of the syllabus.

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

Lecture followed by lab.

Request for Graduate Course Addition - Page 4

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

See attached syllabus.

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

See attached syllabus.

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

See attached syllabus at the end of that document.

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: Geography
Course Number and Title: GEO527 Principles of GIS 2
Catalog Description: Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis. (PR: one of GEO523 OR GEO526 OR GEO529 OR GEO530 OR NRRM533 OR NRE523 or permission).
First Term Offered: Summer 2021
Credit Hours: 4

Principles of GIS 2

GEO427/527: Summer 2020, Section 401, CRN 41xx/41xx

University catalog description: Students apply GIS principles and techniques to geoprocess and manipulate geographic data, including topics such as geodatabase management, python scripting, model building, web mapping and data services, and spatial analysis. 4 cr. hrs. Prerequisite: GEO423/523 or GEO426/526 or GEO429/529 or GEO430/530 or NRE423/523 or NRRM433 or permission. Recommended: Knowledge of statistics equivalent to MTH225.

Instructor welcome: Hello, and welcome to this course which further develops your foundation as a GIS professional beyond the basics. I am your instructor, James Leonard, Ph.D., from the Department of Geography in the College of Liberal Arts at Marshall University. I received my Ph.D. from the University of Cincinnati in 2001 and began working at Marshall University in fall of that year. I was previously employed for about five years by the WV Department of Environmental Protection as a Geographic Information Systems Analyst and Systems Administrator. I hope you'll post some interesting information about yourself on the Bio discussion board so that I can get to know you, too.

The course begins 17 May and ends 13 Aug. For course withdrawal deadlines see the MU academic calendar http://www.marshall.edu/calendar/academic/.

How to get help with GIS: The MU IT Service Desk handles all questions about Blackboard, but they know nothing about GIS. The instructor will handle questions about GIS. For help with GIS, call Dr. Leonard (304) 696-4626 or arrange a Teams meeting.

Course Learning Outcomes	How students will practice each outcome	How student achievement will be assessed
Students will recognize and apply GIS concepts and techniques such as geodatabase management, spatial data processing and analysis.	Discussion, readings, tutorials	Assignments, reading summaries, semester project
Students will employ GIS models, python scripting, and spatial analysis techniques for research and problem solving.	Discussion, readings, tutorials	Assignments, reading summaries, semester project
Students will construct an independent GIS research project and share their data and maps on the web.	Discussion, readings, tutorials	Assignments, reading summaries, semester project

Required materials:

- Access to ArcGIS Pro. You have two options:
  - Access the software using Remote Desktop Windows App and accessing MURemote.marshall.edu. Remote Desktop App is also available for Mac iOS. Using Remote Desktop means that all the software processing, which can be a significant use of computing resources, is done on a powerful computer on Marshall's campus.
  - Install ArcGIS Pro 2.5 or higher on your Windows home computer. I will provide instructions and help downloading and authorizing the software. Minimum specs for

running ArcGIS Pro are here: https://pro.arcgis.com/en/pro-app/get-started/arcgis-pro-system-requirements.htm. ArcGIS Pro does NOT run on Mac iOS.

- Free materials for Marshall students via ESRI.com.
- Readings and GIS data provided free to use in GEO4/527.

Time Commitment: Plan to spend about 12-15 hours a week in order to do well in this shorter summer semester. You may require more or less time. This is MORE work than a challenging three credit course!

Grading: Grades will be based on thirteen assignments/ESRI Academy courses (20 points each) for 260 points; four reading summaries (20 points each) for 80 points; and a semester project (60 points). Graduate students will have more extensive assignments and projects. Final grades will be determined by the total number of points you have earned:

- A = 400 - 364 points (100-91%)
- B = 363 - 324 (90-81%)
- C = 323- 284 (80-71%)
- D = 283 - 260 (70-65%)
- F = 259 and below (less than 65%)

There will be no extra credit and no grades will be scaled or curved. Please be aware that this is a senior-/graduate-level course. You will be expected to perform at a high level. The pace of the course is rapid. You must be thorough and complete on all exercises to receive full credit. You must master all exercises, textbook and article readings, lecture material, and ArcGIS skills and concepts to do well. Work must be submitted no later than the date on the schedule below at 11:59pm Eastern each. No late work is accepted.

Assignments: Submit assignments and ESRI Academy completion certificates as PDF or Word format attachments using the Assignment tool. For everything except ESRI Academy assignments, **you must include screen captures** to show how you got your answers. Graduate students have more difficult and extensive assignments. In the case where Blackboard will only permit a single file upload and you have multiple files, please ZIP (compress) the files and upload the .zip file.

Reading summaries: You will read research articles which present GIS techniques used to address real world issues. The structure and length of reading summaries will be provided in Blackboard. The articles will be provided as PDFs in Blackboard.

Semester project: The semester project integrates principles and techniques from the entire semester. You must consult the instructor early and often to guide you! You submit parts of the project as the semester progresses as PDF, Excel, Word, or Geodatabase format attachments. At every stage, the instructor will provide you feedback which must be incorporated into subsequent submissions. More instructions are provided in the course content. In the case where Blackboard will only permit a single file upload and you have multiple files, please ZIP the files and upload the .zip file. Graduate students have more difficult and extensive project requirements.

Discussion boards: Discussions take place with the Discussions tool. No grades are assigned for discussions.

Weekly Schedule: Assignments are due by 11:59pm Eastern USA the Monday following their assigning and are submitted using Blackboard.

- Week 1: Overview: GIS Processing, Analysis, and Applications; reading GIS research
  - Assignment #1 – Intro concepts
    - Optional: ESRI Academy *Get Started with ArcGIS Pro*
    - ESRI Academy *Getting Started with Spatial Analysis*
    - ESRI Academy *GIS for Humanitarian Mine Action: Using Vector Data in ArcMap*
    - Print five entry-level jobs in your field that have GIS skills as a primary qualification (links to job/career sites are available at https://www.marshall.edu/geography/jobs/).
  - Reading summary #1 – Kent, Joshua and Michael Leitner. 2007. Efficacy of Standard Deviational Ellipses in the Application of Criminal Geographic Profiling. *Journal of Investigative Psychology and Offender Profiling* 4: 147–165. DOI: 10.1002/jip.72
  - Submission deadline: May 28
- Week 2: Spatial queries and spatial joins
  - Assignment #2:
    - Price chapter 8 exercises
    - Price chapter 9 exercises
    - ESRI Academy *Querying Data Using ArcGIS Pro*
  - Submission deadline: June 4
- Week 3: Map Overlay and Geoprocessing
  - Assignment #3:
    - Price chapter 10 exercises
    - ESRI Academy Getting Started with Geoprocessing
    - ESRI Academy Understanding Spatial Relationships
  - Reading summary #2 – Acharya, Tri Dev, Kyung Wan Yoo, and Dong Ha Lee. 2017. GIS-based Spatio-temporal Analysis of Marine Accidents Database in the Coastal Zone of Korea. *Journal of Coastal Research* 79: 114-118.
  - Meet with Dr. Leonard to discuss semester project
  - Submission deadline: June 11
- Week 4: Cluster analysis
  - Assignment #4:
    - ESRI Academy *Mapping Clusters: Introduction to Statistical Cluster Analysis*
    - ESRI Academy *Mapping Clusters: Hot Spot and Cluster and Outlier Analysis*
    - ESRI Academy *Mapping Clusters: Optimized Hot Spot and Optimized Outlier Analysis*
  - Submission deadline: June 18
- Week 5: Cluster analysis 2; Spatial autocorrelation and GWR
  - Assignment #5:
    - Bi-variate LISA using GeoDa

        - ESRI Academy *Introduction to Regression Analysis Using ArcGIS Pro*
    - Reading summary #3 – Borden, Kevin A. and Susan L. Cutter. 2008. Spatial patterns of natural hazards mortality in the United States. *International Journal of Health Geographics* 2008, 7:64 doi:10.1186/1476-072X-7-64
    - Meet with Dr. Leonard to discuss semester project
    - Submission deadline: June 25
- Week 6: Network analysis
    - Assignment #6:
        - ESRI Academy *Preparing for Network Analysis*
        - ESRI Academy *Finding the Optimal Location of Facilities Using ArcGIS Pro*
        - ESRI Academy *Generating Service Areas Using ArcGIS Pro*
    - Reading summary #4 – Vora et al. 2015. Options for Optimal Coverage of Free C-Section Services for Poor Mothers in Indian State of Gujarat: Location Allocation Analysis Using GIS. *PLOS ONE* | DOI:10.1371/journal.pone.0137122.
    - Submission deadline: July 2
- Week 7: Model Builder
    - Assignment #7: ESRI Academy *Building Geoprocessing Models Using ArcGIS Pro*
    - Semester Project part 1
    - Submission deadline: July 9
- Week 8: GPS and data collection
    - Assignment #8:
        - GPS collection and photo georeferencing handout
        - ESRI Web Course *Finding Geographic Data in ArcGIS*
    - Meet with Dr. Leonard to discuss semester project
    - Submission deadline: July 16
- Week 9: Data management and Metadata
    - Assignment #9:
        - ESRI Academy *Creating and Editing Metadata in ArcGIS*
        - ESRI Academy *Getting Started with Data Management*
        - ESRI Academy *Integrating Data in ArcGIS Pro*
    - Semester Project part 2
    - Submission deadline: July 23
- Week 10: Coordinate systems
    - Assignment #10:
        - ESRI Academy *Working with Coordinate Systems in ArcGIS*
        - ESRI Academy *GIS for Humanitarian Mine Action: Coordinate Systems and Map Projections*
        - Optional: ESRI Academy *Referencing Data to Real-World Locations Using ArcGIS, Basics of Geographic Coordinate Systems*
    - Semester Project part 3
    - Submission deadline: July 30
- Week 11: Cartographic Design
    - Assignment #11
        - ESRI Academy *Map Design Fundamentals*

        - ESRI Academy *Symbolizing Map Layers, Getting Started with Mapping and Visualization*
    - Semester project part 4
    - Submission deadline: Aug. 7
- Week 12: Python
    - Assignment #12:
        - ESRI Academy *Python for Everyone*
        - ESRI Academy *Python Scripting for Geoprocessing Workflows*
    - Submission deadline: Aug. 14

Resources: Marshall University offers a variety of support services to students enrolled in classroom and online courses. For online students, access these support services by clicking the Help links at left in the Blackboard course.

Academic Honesty and other University policies: You must do you own work for this class. For any cheating or plagiarism, however minor, you will earn a final grade of F for the semester. Additional University sanctions apply. By enrolling in this course, you agree to the University Policies found at www.marshall.edu/academic-affairs. They are many; best read them.

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Parker, Robert Nash and Emily K. Asencio. GIS and Spatial Analysis for the Social Sciences. 2008

Kogan, Felix et al. Use of Satellite and in-Situ Data to Improve Sustainability. 2011

Butler, J. Allison. Designing Geodatabases for Transportation. 2008

Moyer, D. David and Stephen J. Ventura and Niemann Jr J. Bernard. Citizen Planners Shaping Communities with Spatial Tools. 2010

Jiang, Bin and Xiaobai Yao. Geospatial Analysis and Modelling of Urban Structure and Dynamics. Vol. 99. 2010

Nyerges, Timothy L. and Piotr Jankowski. Regional and Urban GIS. 2009

Giusti de Pacrez, Rosario C. and Ramon A. Pacrez. Analyzing Urban Poverty: GIS for the Developing World. 2008

Rodrigue,Jean-Paul. Geography of transport systems. 2009

Pamuk, Ayse. Mapping Global Cities: GIS Methods in Urban Analysis. 2006

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: LIberal Arts Dept/Division: GEO Current Alpha Designator/Number: 529

Contact Person: James Leonard Phone: 696-4626

CURRENT COURSE DATA:

Course Title: Principles of GIS 2 - Vector Analysis

Alpha Designator/Number: G E O 5 2 9

Title Abbreviation: P r i n G I S 2 V e c t o r A n a l y s i s

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 [signature]	Date 9/9/20
Registrar [signature]	Date 9-11-2020
College Curriculum Chair [signature]	Date 9/24/2020
Graduate Council Chair	Date

Form updated 10/2011

Rec'd In COLA Office
Date: 9-14-2020

Request for Graduate Course Change - Page 2

College: Liberal Arts | Department/Division: GEO | Alpha Designator/Number: 529

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

Change in CATALOG TITLE: ☒ YES ☐ NO

From: Prin of GIS 2 - VectorAnalysis (limited to 30 characters and spaces)

To: Location Analysis and GIS

If Yes, Rationale: Better describes the change in course emphasis.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☐ YES ☒ NO

From: ____ To: ____

If Yes, Rationale:

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

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

From: Continuation of GEO526 Principles of GIS, including additional principles like data management, cartographic design, and geocoding; and vector analyses like spatial patterns analysis, spatial autocorrelation, and network analysis. (PR: GEO526 or GEO530 or permission)

To: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS.(PR: one of GEO523, GEO526, GEO527, GEO530, NRRM533, NRE523 or perm)

If Yes Rationale: We are splitting the material from the old GEO529 into two courses. The new GEO529 course will focus on one type of vector analysis using GIS, specifically location theory, techniques, and applications.

Request for Graduate Course Change - Page 3

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: We are splitting the material from the old GEO529 into two courses. The old course was a continuation of material from GEO526 Principles of GIS, covering additional principles that are broadly applicable across disciplines with just a few exercises in vector analysis.

To: The new GEO529 course will focus on one type of vector analysis using GIS, specifically location analysis, which is a hot field in the discipline. The rest of the material from the old GEO529 will be covered in a new course GEO527. The new GEO529 will also cover location theory, a necessary building block before using GIS as a tool to perform the location analyses.

Rationale: See above.

Request for Graduate Course Change-Page 4

College: Liberal Arts

Department: Geography

Course Number/Title GEO529 Principles of GIS 2 - Vector Analysis

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.

n/a

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.

n/a

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.

n/a

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 TITLE CHANGE
Department: Geography
Current Course Number/Title: GEO529 Principles of GIS 2 - Vector Analysis
New Course Title: GEO529 Location Analysis and GIS
Rationale: We are splitting the material from the old GEO529 into two courses. This title better describes the change in course emphasis.
Catalog Description: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS. (PR: one of GEO523, GEO526, GEO527, GEO529, GEO530, NRRM533, NRE523 or permission)

COURSE DESCRIPTION CHANGE
Department: Geography
Course Number and Title: GEO529 Location Analysis and GIS
Rationale: We are splitting the material from the old GEO529 into two courses.
Course Description (old) The old course was a continuation of material from GEO526 Principles of GIS and covered additional principles that are broadly applicable across disciplines with a few exercises in vector analysis.
Course Description: (new) The new GEO529 course will focus on one type of vector analysis using GIS, specifically location intelligence, which is a new, hot field in the discipline. The new GEO529 will also cover location theory, a necessary building block before using GIS as a tool to perform the location analyses.
Catalog Description: Concepts, models, and methods of geographic location analysis of natural resource extraction, manufacturing, services, retail and market area analytics, and logistics using GIS. (PR: one of GEO523, GEO526, GEO527, GEO529, GEO530, NRRM533, NRE523 or permission)

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: Liberal Arts Dept/Division: GEO Current Alpha Designator/Number: 679

Contact Person: James Leonard Phone: 696-4626

CURRENT COURSE DATA:

Course Title: Applied Projects

Alpha Designator/Number: G E O 6 7 9

Title Abbreviation: A p p l i e d P r o j e c t s

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 [signature]	Date 9/9/20
Registrar [signature]	Date 9-11-2020
College Curriculum Chair [signature]	Date 9/24/2020
Graduate Council Chair	Date

Form updated 10/2011

Rec'd In COLA Office
Date: 9-14-2020

Request for Graduate Course Change - Page 2

College: Liberal Arts | Department/Division: GEO | Alpha Designator/Number: 679

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

Change in CATALOG TITLE: ☒ YES ☐ NO

From: Applied Project (limited to 30 characters and spaces)

To: Portfolio and Career Profile

If Yes, Rationale: Better reflects change in course emphasis.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☐ YES ☒ NO

From: ____ To: ____

If Yes, Rationale:

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

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

From: n/a

To: Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/ enhance their Career Profile.

If Yes Rationale: The course emphasis will be changed. See below.

Request for Graduate Course Change - Page 3

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: 1-3

To: 1-4; This course was previously used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree. The additional credit reflects additional expectations in the course. See below. The course is variable credit to accommodate students who don't need 4 credits and don't want to pay for credit hours they don't need. On occasion, we offer the course to such students with

Change in COURSE CONTENT: ☒ YES ☐ NO

From: This course was used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree.

To: To justify the additional credit, we will restructure the course with additional elements to include: a portfolio, one written exam project, and a career profile. The Portfolio is an organized collection of artifacts demonstrating the knowledge and skills students have developed through their coursework in the Geography MA program. The Portfolio will consist of a cover letter and a minimum of three artifacts completed during their coursework at Marshall, arranged and explained to tell a compelling story of how their education will apply to a professional career. The written Exam Project will require students to use knowledge and skills from the core GEO requirements as well as electives to demonstrate mastery of the core elements of the degree. In coordination with course instructor and the Marshall University Office of Career Education (https://www.marshall.edu/careereducation/), students will build a Career Profile which could be used for career start-up or advancement. The Career Profile will include a professional CV, social media networking such as LinkedIn, a mock interview, and career building skill courses offered through the Office of Career Education.

Rationale: We found that the previous comprehensive projects were a poor measure of student learning while in the degree program by themselves and did nothing to prepare students for a career or career advancement which is the reason why nearly all of our MA students are pursuing this degree.

We believe the new course emphasis will better prepare graduate students for a career or career advancement. Their Exam Project is a continuation of previous department practice requiring students to demonstrate mastery of the disciple. Their Career Profile will produce a polished CV, social media networking, and develop career skills in self-identified areas of weakness. Their Portfolio will serve several purposes. For the student, compiling and writing the Portfolio will help them see the value of the education and how that education can be valuable to current or future employers. For the department, it will permit a degree of assessment since one requirement of the Portfolio will be to show how their Portfolio artifacts meet departmental learning outcomes.

Request for Graduate Course Change-Page 4

College: Liberal Arts

Department: Geography

Course Number/Title GEO679 Applied Projects

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.

n/a

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.

n/a

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.

n/a

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: Geography

Course Number and Title: GEO679 Applied Projects change to Portfolio and Career Profile

Rationale: To justify the additional credit, we will restructure the course with additional elements to include: a portfolio, one written exam project, and a career profile. The Portfolio is an organized collection of artifacts demonstrating the knowledge and skills students have developed through their ork in the Geography MA program. The Portfolio will consist of a cover letter and a minimum of three artifacts completed during their coursework at Marshall, arranged and explained to tell a compelling story of how their education will apply to a professional career. The written Exam Project will require students to use knowledge and skills from the core GEO requirements as well as electives to demonstrate mastery of the core elements of the degree. In coordination with instructor and the Marshall University Office of Career Education (https://www.marshall.edu/careereducation/), students will build a Career Profile which could be used for career start-up or advancement.

Course Description (old) This course was used to administer comprehensive final projects for non-thesis students. As such it was a "capstone" experience where they demonstrated mastery of the core elements of the degree.

Course Description: (new) Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/enhance their Career Profile.

Catalog Description: Students compile a Portfolio of work completed during the degree program, complete a written Exam project, and create/enhance their Career Profile.

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: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 600

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: IS 600 Management Information Systems

Alpha Designator/Number: I S 6 0 0

Title Abbreviation: M g m t I n f o S y s t e m s

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 [signature]	Date
Registrar [signature] 11-4-01	Date 9/22/2020
College Curriculum Chair [signature] A Mukherjee	Date 10-9-2020
Graduate Council Chair	Date

Form updated 10/2011

Request for Graduate Course Change - Page 2

College: LCOB | Department/Division: NA | Alpha Designator/Number: IS 600

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: I S To M I S ☒ YES ☐ NO

If Yes, Rationale: Change in college from the College of Engineering and Computer Science to the Lewis College of Business. The alpha designator IS was used by the College of Enginereing and the alpha designator MIS is used by the College of Business.

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

Request for Graduate Course Change - Page 3

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: LCOB

Department: NA

Course Number/Title IS 600 Management Information Systems

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.

This course is only required for the MS in Information Systems.

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.

None

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.

No additional faculty are needed. The LCOB has three tenured faculty who teach in the MIS area and faculty from other areas who can teach MIS-related courses. A similar course is already required in the MBA program.

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator/Number/Title: IS 600 / Management Information Systems
New Course Alpha Designator/Number/Title: MIS 600 / Management Information Systems
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: The course examines personal, work group, and enterprise information systems with respect to their value, their components, and the processes of developing them
Credit Hours: 3 credit hours

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: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 605

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: IS 605 Systems Analysis and Design

Alpha Designator/Number: I S 6 0 5

Title Abbreviation: S y s t e m s A n a l y & D e s i g n

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 [signature]	Date
Registrar Sonja GCJ 110401	Date 9/22/2020
College Curriculum Chair	Date
Graduate Council Chair	Date

Request for Graduate Course Change - Page 2

College: LCOB | Department/Division: NA | Alpha Designator/Number: IS 605

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: I S To: M I S ☒ YES ☐ NO

If Yes, Rationale

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

Request for Graduate Course Change - Page 3

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: LCOB

Department: NA

Course Number/Title IS 605 / Systems Analysis and Design

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator/Number/Title: IS 605 / Systems Analysis and Design
New Course Alpha Designator/Number/Title: MIS 605 / Systems Analysis and Design
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: This course focuses on analysis and design of information systems. Topics include system development approaches, UML design, system integration, service-oriented architecture information foundation. (PR: Admission to program)
Credit Hours: 3 credit hours

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.
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College: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 621

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: IS 621 Information Structures I

Alpha Designator/Number: I S 6 2 1

Title Abbreviation: I n f o S t r u c t u r e s I

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

Dept. Chair/Division Head	Date
Registrar 110401	Date 9/22/2020
College Curriculum Chair	Date
Graduate Council Chair	Date

Request for Graduate Course Change - Page 2

College: LCOB Department/Division: NA Alpha Designator/Number: IS 621

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: I S To: M I S ☒ YES ☐ NO

If Yes, Rationale

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

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: LCOB

Department: NA

Course Number/Title IS 621 / Information Structures I

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator/Number/Title: IS 621 / Information Structures I
New Course Alpha Designator/Number/Title: MIS 621 / Information Structures I
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: Representation and manipulation of numeric and non-numeric information, linear lists, strings, multilinked structures; sorting and searching; storage management; data structures in programming languages. Relevant aspects of discrete mathematics.
Credit Hours: 3 credit hours

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: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 623

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: Database Management

Alpha Designator/Number: I S 6 2 3

Title Abbreviation: D a t a b a s e M g m t

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
Registrar	Date 9/24/2020
College Curriculum Chair A Mukherjee	Date 10-9-2020 9/25/2020
Graduate Council Chair	Date

SEP 24 2020 11:37

Form updated 10/2011

Request for Graduate Course Change - Page 2

College: LCOB | Department/Division: NA | Alpha Designator/Number: IS 623

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: I S To: M I S ☒ YES ☐ NO

If Yes, Rationale: Change in college from the College of Engineering and Computer Science to the Lewis College of Business. The alpha designator IS was used by the College of Enginereing and the alpha designator MIS is used by the College of Business.

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

Request for Graduate Course Change - Page 3

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: LCOB

Department: NA

Course Number/Title IS 623 Database Management

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.

This course is required for the Graduate Certificate in Online Data Analytics in Health Care and for the Graduate Certificate in Nursing Informatics and for the HEALTH INFORMATICS, M.S. all of which are in the College of Business.
this course can also be used as an elective in the College of Engineering. Interim Dean Dampier has approved the change--see attached email and letter.

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.

None

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.

No additional faculty are needed. The LCOB has three tenured faculty who teach in the MIS area and faculty from other areas who can teach MIS and Health Informatics related courses.

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator Number/Title: IS 623 Database Management
New Course Alpha Desigator Number/Title: MIS 623 Database Management
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: Review of information structures and of relationships among data elements and objects. Relational database theory; design and organization of databases, retrieval structures, and query mechanisms.
Credit hours: 3 credit hours

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: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 647

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: IS 647 IS Disaster Planning and Recovery

Alpha Designator/Number: I S 6 4 7

Title Abbreviation: I S D i s a s t e r P l a n & R e c o v

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
Registrar 11/04/01	Date 9/22/2020
College Curriculum Chair A. Mukherjee	Date 10-9-2020
Graduate Council Chair	Date

Request for Graduate Course Change - Page 2

College: LCOB | Department/Division: NA | Alpha Designator/Number: IS 647

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: I S To: M I S ☒ YES ☐ NO

If Yes, Rationale: Change in college from the College of Engineering and Computer Science to the Lewis College of Business. The alpha designator IS was used by the College of Engineering and the alpha designator MIS is used by the College of Business.

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

Request for Graduate Course Change - Page 3

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: LCOB

Department: NA

Course Number/Title IS 647 Disaster Planning and Recovery

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.

This course is required for the MS in Information Systems degree program and is required in the MS Cyber Security Security Management Emphasis and an elective in the TM Information Security and Information Technology programs.. Dean Dampier has given his approval to move this course and TM and other engineering students will be able to take the course with the changed alpha designator.

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.

None

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.

No additional faculty are needed. The LCOB has three tenured faculty who teach in the MIS area and faculty from other areas who can teach MIS-related courses.

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator/Number/Title: IS 647 / IS Disaster Planning and Recovery
New Course Alpha Designator/Number/Title: MIS 647 / Disaster Planning and Recovery
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: This course provides the skills necessary to manage IT disaster recovery planning. The course focuses on the protection of information. Students will analyze risk, design a plan and explore available technologies. (PR: Instructor permission)
Credit Hours: 3 credit hours

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: LCOB Dept/Division: NA Current Alpha Designator/Number: IS 665

Contact Person: Nancy Lankton Phone: 304-696-2656

CURRENT COURSE DATA:

Course Title: Health Care Enterprise Information Systems

Alpha Designator/Number: I S 6 6 5

Title Abbreviation: H e a l t h C a r e E I S

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
Registrar	Date 9/24/2020
College Curriculum Chair A. Mukherjee	Date 10-9-2020 9/28/2020
Graduate Council Chair	Date

SEP 24 2020 AM 11:27

Form updated 10/2011

Request for Graduate Course Change - Page 2

College: LCOB | Department/Division: NA | Alpha Designator/Number: IS 665

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

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: IS To HIN ☒ YES ☐ NO

If Yes, Rationale: Change in college from the College of Engineering and Computer Science to the Lewis College of Business. The alpha designator IS was used by the College of Engineering and the alpha designator HIN is used by the College of Business.

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

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

From

To

If Yes Rationale

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: LCOB

Department: NA

Course Number/Title IS 665 Health Care Enterprise Information Systems

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.

This course is required for the HEALTH INFORMATICS, M.S. which is in the College of Business.
this course can also be used as an elective in the College of Engineering. Interim Dean Dampier has approved the change--see attached email and letter.

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.

None

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.

No additional faculty are needed. The LCOB has three tenured faculty who teach in the Health Care area and faculty from other areas who can teach MIS and Health Informatics related courses.

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
Department:
Course Number and Title:
Rationale:
Course Description (old)
Course Description: (new)
Catalog Description:

COURSE NUMBER CHANGE
Department:
Current Course Number/Title:
New Course Number:
Rationale:
Catalog Description:
Credit hours:

COURSE TITLE CHANGE
Department:
Current Course Number/Title:
New Course Title:
Rationale:
Catalog Description:

COURSE ALPHA DESIGNATOR CHANGE
Department: LCOB
Current Course Alpha Designator Number/Title: IS 665 Health Care Enterprise Information Systems
New Course Alpha Desigator Number/Title: HIN 665 Health Care Enterprise Information Systems
Rationale: Change in College from the College of Engineering and Computer Science to the Lewis College of Business (LCOB)
Catalog Description: A hands-on introduction to using a health care enterprise information system providing students opportunity to work with elements of an EIS.
Credit hours: 3 credit hours

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 existing 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 identical PDF copy 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: College of engineering and Computer Science and Lewis College of Business

Contact Person: _Dean Dampier (6-3066) and Dean Mukherjee (6-2659)_____ Phone: _____

Rationale for Request:

See attached.

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 _____

Registrar _____ Date 9/22/2020

College Curriculum Committee Chair A. Mukherjee Date 9/23/2020
(or Dean if no college curriculum committee)

Graduate Council Chair _____ Date 11/4/2020

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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
Information Systems, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Human Resource Management, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(pages 131-134) Current placement of degree program descriptions including the Health Informatics, M.S., the Graduate Certificate in Online Data Analytics in Health Care, and the Graduate Certificate in Nursing Data Analytics.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

Request for Graduate Non-Curricular Changes – Page 3

2. Edits to current description: Attach or insert 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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
~~Information Systems, M.S.~~
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Health Informatics, M.S.
Human Resource Management, M.S.
Information Systems, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(current pages 170-171) Change in page numbers only, needs to be put under College of Business.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Health Informatics, M.S.
Human Resource Management, M.S.
Information Systems, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(current pages 170-171) Change in page numbers only, needs to be put under College of Business.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

Request for Graduate Non-Curricular Changes – Page 5

Please insert below your proposed change information for the Graduate Council agenda.

Type of change request:

Change in College offering the degree program.

Department:

Change from College of Engineering and Computer Science to Lewis College of Business, Department of Marketing, MIS, and Entrepreneurship

Degree program:

INFORMATION SYSTEMS, M.S.

Effective date (fall/spring/summer, year):

Spring 2021

Rationale for Request:

This non-curricular change form is to change the Information Systems, MS degree program from the College of Engineering and Computer Science (COECS) to the Lewis College of Business (LCOB).

This change will increase efficiency and save costs in providing a MS in Information Systems degree program. There will be a concerted effort to increase enrollment and create synergy with the college's Management Information Systems undergraduate major, e.g., a 3 + 2 offering in the future. This change is in the best interests of each college, and the University as a whole, for the following reasons:

1. The LCOB already has an undergraduate major in Management Information Systems (MIS). The major is part of the Department of Marketing, MIS, and Entrepreneurship, which is one of the four departments of the college. It has three tenured faculty in this program:
   - Dr. Rick Weible, Full Professor
   - Dr. Anil Gurung, Full Professor
   - Dr. Dale Shao, Full Professor

2. The LCOB has numerous faculty with expertise in information systems and related areas (see lists below). Associate Dean Nancy Lankton actively publishes in the information systems field.

   Faculty teaching other information systems courses across the LCOB:
   - Dr. Stivason, Associate Professor, Accounting
   - Dr. Zhang, Assistant Professor, Management
   - Dr. Fnu, Assistant Professor, Marketing
   - Dr. Ha, Professor, Management
   - Dr. Sollosy, Associate Professor, Management

SEP 22 2020 AM11:06

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: BUSINESS Dept/Division: MANAGEMENT Alpha Designator/Number: MGT 578 (•) Graded ( ) CR/NC

Contact Person: UYI LAWANI Phone: 304 696 5441

NEW COURSE DATA:

New Course Title: IMPORT EXPORT MANAGEMENT

Alpha Designator/Number: M G T 5 7 8

Title Abbreviation: I M P O R T E X P O R T M A N A G E M E N T

(Limit of 25 characters and spaces)

Course Catalog Description: (Limit of 30 words)
Students will learn the general and specific information relevant to conducting import/export business to/from the United States to different parts of the world.

Co-requisite(s): None First Term to be Offered: Spring 2021

Prerequisite(s): None Credit Hours: 3 hours

Course(s) being deleted in place of this addition (*must submit course deletion form*): None

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

Dept. Chair/Division Head	Date 9/11/2020
Registrar 5 20 20	Date 9/11/2020
College Curriculum Chair	Date 9-18-2020
Graduate Council Chair	Date

Request for Graduate Course Addition - Page 2

College: BUSINESS | Department/Division: MANAGEMENT | Alpha Designator/Number: MGT 578

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.

Uyi Lawani, Ralph McKinney

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.

This course is open to all graduate students in the Lewis College of Business

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.

TECI Classroom (with capacity for video conferencing)

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

Please refer to attached course syllabus

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

Pleaser refer to attached syllabus

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

Please refer to attached Bibliography

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

Lecturs, seminars, group interactions

Request for Graduate Course Addition - Page 4

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

Quizzes, Projects, Proposal, Journal

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

Journaling

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

Please refer to attached Bibliography

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:	Management
Course Number and Title:	MGT 578, Import Export Management
Catalog Description:	Students will learn the general and specific information relevant to conducting import/export business to/from the United States to different parts of the world.
Prerequisites:	None
First Term Offered:	Spring 2021
Credit Hours:	3 hours

Marshall University
College of Business
Division of Management and HealthCare Administration

MGT 578 Import Export Management

Semester:	Spring 2021	**Class Time:**	F 7-9pm, S 9am-5pm
Instructor:	Dr. Uyi Lawani/ Dr. Ralph McKinney	**Classroom:**	Corbly Hall 106

Dr. Uyi Lawani: CH 413/ (304) 696-5441/ lawani@marshall.edu
Office Hours T 11a–2p; W 11a–1p
Dr. Ralph McKinney: KANGC 340/ (304) 539-3162/ mckinney23@marshall.edu
Off. Hours: T 2-3:30p (Huntington) Th 3-6:30 (South Charleston)

Course Description:
This course is designed to provide a pragmatic approach on how-to establish a profitable import export business and to promote importing and exporting in West Virginia. A panel of several guest speakers from different areas (such as US Department of Commerce, US Small Business Administration, West Virginia Development Office, freight forwarders, financial institutions, law firms, travel agencies etc.) will lecture on the different steps of exporting.
This course is perfect for students who want to eventually start their own global business and managers who are looking for ways to cut costs and improve profits through global sourcing and selling.

Course Objectives: The general/broad learning objectives of this course follow. Students will:

1. Be able to list reasons for import/export, evaluate pros and cons, describe obstacles, and list organizational requirements to import/export;
2. Be able to assess the export/import potential of a given product/service for specific market(s);
3. Be able to research international markets and utilize these data in importing or exporting business decisions;
4. Be able to identify and utilize the available sources of private and public import/export advice and assistance;
5. Be able to locate and contact potential buyers/sellers in foreign markets.
6. Be able to research, develop and implement specific import/export plan of their choice.

Catalog Description: Students will learn the general and specific information relevant to conducting export business from the United States to different parts of the world.

Required Text: Pierre A. David (2013). *International Logistics: The Management of International Trade Operation* (4th ed.). Cicero Books LLC. (ISBN# 0989490602)

Supplemental Materials: Class handouts and/or other supplemental materials will be distributed in class or posted on blackboard.

The overall goal of this class is to equip you with the skills useful for conducting and managing export business. By the time you finish this course, you will have expertise in using three skills related to Export Management. Those skills are:

- **Management of exports**
- **International market research and analysis**
- **Compiling and writing export proposals**

In this class, you will dig in and master this three skills during the semester:

Learning Outcome	**How you will practice the outcome in this course**	**How your achievement of the outcome will be assessed**
Management of Exports: You will - be able to list reasons for import/export, evaluate pros and cons, describe obstacles, and list organizational requirements to import/export - be able to identify and utilize the available sources of private and public import/export advice and assistance	• Study of required text chapters • Class discussions facilitated by Industry experts • Class discussions facilitated by LCOB faculty	• Quizzes • Participation • Export Proposal Report • Journaling
International Market Research and Analysis: You will - be able to assess the export/import potential of a given product/service for specific market(s) - be able to research international markets and utilize these data in importing or exporting business decisions - Be able to locate and contact potential buyers/sellers in foreign markets	• Study of required text chapters • Class discussions facilitated by Industry experts • Class discussions facilitated by LCOB faculty	• Quizzes • Participation • Export Proposal Report • Journaling
Compiling and Writing Export Proposals: You will - be able to research, develop, articulate into an export proposal report, and implement specific import/export plan of your choice	• Study of required text chapters • Class discussions facilitated by Industry experts • Class discussions facilitated by LCOB faculty	• Quizzes • Participation • Export Proposal Report • Journaling

Evaluation Methods:
This course requirements your attendance and participation. Students involved with the course will be expected to engage with participating organizations to address real life applications of export/logistics/supply chain issues.

There will be 1 Export Proposal and presentation with multiple milestones spread throughout and culminating in a final document due at the end the semester. There will be minor assignments that will be due each of the final 4 weekend meetings. The major work for this course will be the experiential activities. You will also be doing some journaling. The guidelines for the journaling will be provided in a separate document.

The experiential activities will be performed in a group and will be assigned on the first Saturday based on the number of students and number of organizations participating.

Grading Scheme

Course Journaling	– 10%
Participation	– 10%
Quizzes	– 20%
Export Proposal and Presentation	– 40%
Group Work/Experiential Learning	– 20%

A=>90%
B=>80%
C=>70%
D=>60%
F=<59%

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

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

1. ADA Compliance - 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.

2. Academic Misconduct - All students should be familiar with the university's policy concerning academic dishonesty. This policy can be found on pp. 47-49 of the graduate catalog. http://www.marshall.edu/catalog/graduate/S2011/GrSp11_published.pdf

Acceptable Student Behavior
Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students engaging in unacceptable behavior may be instructed to leave the classroom. Inappropriate behavior may result in disciplinary action or referral to the University's Behavioral Intervention Team. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc.

Attendance Policy
Regular attendance in this class is crucial to your success as a student. The only way to benefit from class discussions and hands-on learning activities is to be here. Being present and on time for all class meetings is expected. Period.

Excused Absences
1. University-sponsored academic activities (performing arts, debate and individual events, honors classes, ROTC); official athletic events; other university activities (student government).
2. Student Illness or Critical Illness/Death in the Immediate Family: "Immediate Family" is defined as a spouse/life partner, child, parent, legal guardian, sibling, grandparent or grand-child. ***Routine doctor appointments are not excused. Appointments should be scheduled around your classes.**
3. Short-Term Military Obligation
4. Jury Duty or Subpoena for Court Appearance
5. Religious Holidays

Student's Responsibility
- Provide appropriate documentation to Dean of Student Affairs for excused absence. Learn how the process works here: http://www.marshall.edu/catalog/undergraduate/ug_10-11_published.pdf
- Request opportunity to complete missed work **immediately upon return to class.**
- Be aware that excessive absences—whether excused or unexcused—may affect your ability to earn a passing grade.
- Regardless of the nature of the excused absence, you are responsible for completing all coursework **prior to the end of the semester**.

Unexcused Absences
- If you miss two classes, we will issue a warning.
- If you miss a third class:
    - You will receive an automatic one letter grade deduction in the course.
    - We will conference to discuss your standing and develop a plan of improvement. If you meet its criteria, you may have the chance to earn back the letter grade deduction.
- If you miss a fourth class, the previous letter grade deduction stands, regardless of improvement plan results.
- Subsequent missed classes will result in an additional letter grade deduction for each absence.

Schedule of Activities*, **

Date	Topic	Readings
Jan. 29	Introduction, Export Services Offered	
Jan. 30		
Feb. 12	Exporter Experiences, stories, culture items, etc.	
Feb. 13		
Mar. 5	Logistics, Travel, Homeland Security, Marketing	
Mar. 6		
Apr. 2	Legal, Payments (different types), Insurance of Payables	
Apr. 3		
Apr. 23	Presentations	
Apr. 24		

*schedule subject to change as class needs demand and based on feedback from WV District Export Council
** it is the student's responsibility to keep up with any changes announced in class

Bibliography for Import/Export Management Course Creation

Articles on Import and Export Management. Retrieved from https://www.managementstudyguide.com/import-and-export-management-articles.htm

Bartlett, C. A. & Beamish, P. W. 2018. Transnational Management: Text and Cases in Cross-Border Management, 8th ed. Cambridge University Press.

Cook, T., Alston, R. & Raia, K. 2017. Mastering Import and Export Management, 3rd ed. AMACOM: American Management Association.

Pierre, D. A. 2013. International Logistics: The Management of International Trade Operation (4th ed.). Cicero Books LLC.

Import Export Management Course. Retrieved from https://www.educba.com/course/import-export-management-course/

equest 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.

College: College of Business Dept/Division: NA

6-3066/Contact Person: Dean David Dampier/Dean Avi Mukherjee Phone: 6-3066/6-2659

Degree Program: MS Information Systems

Check action requested: ☐ Addition ☐ Deletion ☒ Change

Effective Term/Year Fall 20 ☐ Spring 20 ☒ 21 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 9/21/2020

College Dean _____ Date 9/21/2020

College Curriculum Chair A. Mukherjee Date 9/23/2020

Graduate Council Chair _____ Date 11/4/2020

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)

See attached.

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)

NONE

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.

NONE – One IS professor from the College of Engineering and Computer Science may transfer to the Lewis College of Business.

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.

See attached.

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)

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Health Informatics, M.S.
Human Resource Management, M.S.
Information Systems, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(current pages 170-171) Change in page numbers only, needs to be put under College of Business.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

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: Lewis College of Business

Major or Degree: MS Information Systems

Type of Change: Addition

Rationale: This change will increase efficiency and save costs in providing a MS in Information Systems degree program. There will be a concerted effort to increase enrollment and create synergy with the college's Management Information Systems undergraduate major, e.g., a 3 + 2 offering in the future. This change is in the best interests of each college, and the University as a whole. The LCOB already has an undergraduate major in Management Information Systems (MIS). The major is part of the Department of Marketing, MIS, and Entrepreneurship, which is one of the four departments of the college. It has three tenured faculty in this program. The LCOB also has numerous faculty with expertise in information systems and related areas (see lists below). Some faculty teach information systems-related courses across the college and Associate Dean Nancy Lankton actively publishes in the information systems field.

Rationale for addition, deletion, change

This non-curricular change form is to change the Information Systems, MS degree program from the College of Engineering and Computer Science (COECS) to the Lewis College of Business (LCOB).

This change will increase efficiency and save costs in providing a MS in Information Systems. There will be a concerted effort to increase enrollment and create synergy with the college's Management Information Systems undergraduate major, e.g., a 3 + 2 offering in the future. This change is in the best interests of each college, and the University as a whole, for the following reasons:

1. The LCOB already has an undergraduate major in Management Information Systems (MIS). The major is part of the Department of Marketing, MIS, and Entrepreneurship, which is one of the four departments of the college. It has three tenured faculty in this program:
   - Dr. Rick Weible, Full Professor
   - Dr. Anil Gurung, Full Professor
   - Dr. Dale Shao, Full Professor

2. The LCOB has numerous faculty with expertise in information systems and related areas (see lists below). Associate Dean Nancy Lankton actively publishes in the information systems field.

   Faculty teaching other information systems courses across the LCOB:
   - Dr. Stivason, Associate Professor, Accounting
   - Dr. Zhang, Assistant Professor, Management
   - Dr. Fnu, Assistant Professor, Marketing
   - Dr. Ha, Professor, Management
   - Dr. Sollosy, Associate Professor, Management

3. Current Catalog Description Insert the current catalog description and page number from the latest catalog for entries you would like to change.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
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Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
Information Systems, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Human Resource Management, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(pages 131-134) Current placement of degree program descriptions including the Health Informatics, M.S., the Graduate Certificate in Online Data Analytics in Health Care, and the Graduate Certificate in Nursing Data Analytics.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

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~~Information Systems, M.S.~~
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Technology Management, M.S.

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(page 81)

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Health Informatics, M.S.
Human Resource Management, M.S.
Information Systems, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(current pages 170-171) Change in page numbers only, needs to be put under College of Business.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

SEP 22 2020 AM11:06

October 6, 2020

Dear Graduate Council:

This letter is to convey my support for the transfer of the MS in Information Systems program from the College of Engineering and Computer Science (CECS)to the Lewis College of Business (LCOB). Interim Dean Dampier (CECS) and Dean Mukherjee (LCOB) are negotiating this transfer to make more efficient use of resources in providing the degree program. This transfer will enable the LCOB to increase enrollment and create synergy with the college's undergraduate Management Information Systems major including new recruiting and 3 + 2 program initiatives. The LCOB has three tenured faculty who serve this undergraduate program and faculty throughout the college with teaching and research expertise in information systems and related areas. Students enrolled in the program will receive advising support from the LCOB Associate Director of Graduate Programs and faculty mentoring support from the MIS faculty and other administrators.

The LCOB will be responsible for a portion of the MS Information Systems courses in Spring 2021 and the remaining courses by Fall 2021. Current and new students will receive notification this month about the program transfer and a meeting will be held with them that will provide updated materials regarding advising and faculty/staff contacts in the LCOB.

Sincerely.

Jaime R. Taylor, PhD
Provost and Senior Vice President for Academic Affairs

Marshall University
Office of Academic Affairs

Old Main 200
One John Marshall Drive
Huntington, WV 25755
Tel: 304-696-6690
Fax: 304-696-6612
marshall.edu

BE PROUD.
BE A SON OR DAUGHTER OF MARSHALL.

September 23, 2020

The Graduate Council
Marshall University
One John Marshall Drive
Huntington, WV 25755

Dear Graduate Council:

This letter is to communicate our support for the transfer of the MS in Information Systems degree program from the College of Engineering and Computer Science (CECS) to the Lewis College of Business (LCOB). We have negotiated this transfer with full support from Provost Taylor to increase efficiency and reduce costs in providing the MS in Information Systems degree program. This transfer will enable the LCOB to align its undergraduate program in Management Information Systems with the Master degree in Information Systems including offering a 3 + 2 program. It will utilize the LCOB's already established expertise in teaching information systems courses and allow enhanced coordination of graduate management information systems courses that are already being taught to service the LCOB's MBA and other graduate programs.

LCOB faculty will be responsible for the IS courses pertaining to the MS in Information Systems and the IS courses pertaining to the MS in Health Informatics degree programs beginning in Spring 2021. Current and new students will receive notification in October about the program transfer. The CECS and the LCOB will hold a meeting with students that will provide updated materials regarding advising and faculty/staff contacts in the LCOB.

Sincerely,

David Dampier
Interim Dean, College of Engineering
and Computer Science

A Mukherjee

Avi Mukherjee
Dean, Lewis College of Business

Marshall University
Lewis College of Business
Brad D. Smith Schools of Business
Office of the Dean
One John Marshall Drive
Huntington, WV 25755-2300
Tel: 304-696-2316
marshall.edu

BE PROUD.
BE A SON OR DAUGHTER OF MARSHALL.

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: Health Professions Dept/Division: Physical Therapy Current Alpha Designator/Number: PT 710

Contact Person: Gretchen R. Pfost Phone: 304-696-5608

CURRENT COURSE DATA:

Course Title: Introduction to Human Movement

Alpha Designator/Number: P T 7 1 0

Title Abbreviation: I n t r o t o H u m a n M o v e m e n t

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 D S Davis	Date 7-7-20
Registrar	Date
College Curriculum Chair	Date
Graduate Council Chair	Date

Request for Graduate Course Change - Page 2

College: Health Professions | Department/Division: Physical Therapy | Alpha Designator/Number: PT 710

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

Change in CATALOG TITLE: ☒ YES ☐ NO

From: Introduction to Human Movement (limited to 30 characters and spaces)

To: Clinical Skills I

If Yes, Rationale: The change in course title will better reflect course content and the intent of the course, and improve the curricular alignment with other clinical skill courses.

Change in COURSE ALPHA DESIGNATOR:

From: ____ To: ____ ☐ YES ☒ NO

If Yes, Rationale:

Change in COURSE NUMBER: ☐ YES ☒ NO

From: ____ To: ____

If Yes, Rationale:

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale:

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

From: Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpations skills, goniometry and manual muscle testing.

To: Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpation, goniometry, and manual muscle testing.

If Yes Rationale: Editorial change for grammar only

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: Health Professions

Department: Physical Therapy

Course Number/Title PT 710 Clinical Skills I

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 TITLE CHANGE
Department: Physical Therapy
Current Course Number/Title: PT 710 Introduction to Human Movement
New Course Title: Clinical Skills I
Rationale: Change in course title will better reflect content and intent of course.
Catalog Description: (changed) Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpation skills, goniometry and manual muscle testing.

COURSE DESCRIPTION CHANGE
Department: Physical Therapy
Course Number and Title: PT 710 Clinical Skills I
Rationale: correction of minor grammatical error ("palpations" to "palpation")
Course Description (old): Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpations skills, goniometry and manual muscle testing.
Course Description (new): Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpation skills, goniometry and manual muscle testing.

equest 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.

College: College of Business Dept/Division: NA

6-3066/Contact Person: Dean David Dampier/Dean Avi Mukherjee Phone: 6-3066/6-2659

Degree Program: MS Information Systems

Check action requested: ☐ Addition ☐ Deletion ☒ Change

Effective Term/Year Fall 20 ☐ Spring 20 21 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 9/21/2020

College Dean _____ Date 9/21/2020

College Curriculum Chair A. Mukherjee Date 9/23/2020

Graduate Council Chair _____ Date _____

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)

See attached.

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)

NONE

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.

NONE – One IS professor from the College of Engineering and Computer Science may transfer to the Lewis College of Business.

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.

See attached.

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)

(page 84)

College of Information Technology and Engineering
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Computer Science, M.S.
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Environmental Science, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
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www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Health Informatics, M.S.
Human Resource Management, M.S.
Information Systems, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(current pages 170-171) Change in page numbers only, needs to be put under College of Business.

** Note the College of Information Technology and Engineering is now named the College of Engineering and Computer Science with Interim Dean, David Dampier.

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: Lewis College of Business

Major or Degree: MS Information Systems

Type of Change: Addition

Rationale: This change will increase efficiency and save costs in providing a MS in Information Systems degree program. There will be a concerted effort to increase enrollment and create synergy with the college's Management Information Systems undergraduate major, e.g., a 3 + 2 offering in the future. This change is in the best interests of each college, and the University as a whole. The LCOB already has an undergraduate major in Management Information Systems (MIS). The major is part of the Department of Marketing, MIS, and Entrepreneurship, which is one of the four departments of the college. It has three tenured faculty in this program. The LCOB also has numerous faculty with expertise in information systems and related areas (see lists below). Some faculty teach information systems-related courses across the college and Associate Dean Nancy Lankton actively publishes in the information systems field.

Rationale for addition, deletion, change

This non-curricular change form is to change the Information Systems, MS degree program from the College of Engineering and Computer Science (COECS) to the Lewis College of Business (LCOB).

This change will increase efficiency and save costs in providing a MS in Information Systems. There will be a concerted effort to increase enrollment and create synergy with the college's Management Information Systems undergraduate major, e.g., a 3 + 2 offering in the future. This change is in the best interests of each college, and the University as a whole, for the following reasons:

1. The LCOB already has an undergraduate major in Management Information Systems (MIS). The major is part of the Department of Marketing, MIS, and Entrepreneurship, which is one of the four departments of the college. It has three tenured faculty in this program:
   - Dr. Rick Weible, Full Professor
   - Dr. Anil Gurung, Full Professor
   - Dr. Dale Shao, Full Professor

2. The LCOB has numerous faculty with expertise in information systems and related areas (see lists below). Associate Dean Nancy Lankton actively publishes in the information systems field.

   Faculty teaching other information systems courses across the LCOB:
   - Dr. Stivason, Associate Professor, Accounting
   - Dr. Zhang, Assistant Professor, Management
   - Dr. Fnu, Assistant Professor, Marketing
   - Dr. Ha, Professor, Management
   - Dr. Sollosy, Associate Professor, Management

3. Current Catalog Description Insert the current catalog description and page number from the latest catalog for entries you would like to change.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
Environmental Science, M.S.
Information Systems, M.S.
Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

Accountancy, M.S.
Business Administration, M.B.A.
Health Care Administration, M.S.
Human Resource Management, M.S.
Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

(pages 131-134) Current placement of degree program descriptions including the Health Informatics, M.S., the Graduate Certificate in Online Data Analytics in Health Care, and the Graduate Certificate in Nursing Data Analytics.

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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.

(page 84)

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Human Resource Management, M.S.
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Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

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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 existing 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 identical PDF copy 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: College of engineering and Computer Science and Lewis College of Business

Contact Person: _Dean Dampier (6-3066) and Dean Mukherjee (6-2659)_____ Phone: _____

Rationale for Request:

See attached.

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 _____

Registrar _____ Date 9/22/2020

College Curriculum Committee Chair A. Mukherjee Date 9/23/2020
(or Dean if no college curriculum committee)

Graduate Council Chair _____ Date _____

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

Form updated 1/2017

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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
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Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

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(page 81)

College of Business
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2. Edits to current description: Attach or insert 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.

(page 84)

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Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

Other programs: Business Foundations, Graduate Certificate in Management Foundations

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Request for Graduate 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.

(page 84)

College of Information Technology and Engineering
Dr. Wael Zatar, Dean
www.marshall.edu/cite

Computer Science, M.S.
Cybersecurity, M.S.
Electrical and Computer Engineering, M.S.
Engineering, M.S.E.
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Mechanical Engineering, M.S.
Safety, M.S.
Technology Management, M.S.

Other programs: minor in Environmental Science, graduate certificates in Bioinformatics, Information Security

(page 81)

College of Business
Dr. Avinandan Mukherjee, Dean
www.marshall.edu/cob

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Doctor of Management Practice in Nurse Anesthesia, D.M.P.N.A.

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Request for Graduate Non-Curricular Changes – Page 5

Please insert below your proposed change information for the Graduate Council agenda.

Type of change request:

Change in College offering the degree program.

Department:

Change from College of Engineering and Computer Science to Lewis College of Business, Department of Marketing, MIS, and Entrepreneurship

Degree program:

INFORMATION SYSTEMS, M.S.

Effective date (fall/spring/summer, year):

Spring 2021

Rationale for Request:

This non-curricular change form is to change the Information Systems, MS degree program from the College of Engineering and Computer Science (COECS) to the Lewis College of Business (LCOB).

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