

UNIVERSITY COMMITTEE ON COURSES AND CURRICULA

A MEMORANDUM

DATE:	January 5, 2022
TO:	UCCC Members
FROM:	Dr. Andy Perkins, Chair

SUBJECT: UCCC Meeting on Friday, January 14, 2022 at 1:30 p.m.

The agenda and proposals for the meeting on Friday, January 14, 2022 at 1:30 p.m. in the Trotter Room (Room 2200) of the Center for Advanced Vehicular Systems in the Research Park are enclosed. The minutes will be forwarded by a separate email. Please contact the UCCC Office if you are unable to attend the meeting.

Thank you.

Enclosures: Course/Curriculum Proposals

AGENDA UNIVERSITY COMMITTEE ON COURSES AND CURRICULA January 14, 2022

- 1. Welcome
- 2. Approval of minutes
- 3. Proposed modification of By-Laws
- 4. Election of UCCC Chair
- 5. Course proposals by college/school

AGRICULTURE AND LIFE SCIENCES

Modification	EPP 6154	General Entomology	
+Online/Distance	(split level with EPP 4154)		
Modification	EPP 8343	Advances in Insect Anatomy-Structure and Function	
+Online/Distance			
Modification	EPP 8353	Advances in Insect Physiology and Biochemistry	
+Online/Distance			
Addition	EPP 8364	Non-Thesis Master's Project in Entomology	
+Online/Distance			
Addition	EPP 8881	Entomology and Plant Pathology Colloquium	
+Online/Distance			
Modification	HDFS 4701	Internship Preparation	
Addition	HDFS 4802/6802	Grief and Bereavement: Support Systems and Practices for Children	
+Online/Distance		and Families	

ARTS AND SCIENCES

Addition	<u>CO 2512</u>	Introduction to Theatrical Design
Modification	<u>CO 3313</u>	News Writing for the Electronic Media
+Online/Distance		
Addition	<u>CO 3532</u>	Theatre for Change
Addition	<u>CO 3552</u>	Professional Practice in the Theatre
Addition	<u>CO 3573</u>	Script Analysis
Modification	PS 3193	Intergovernmental Relations
+Online/Distance		
Modification	PS 4703	Principles of Public Administration
+Online/Distance		1
Addition	<u>SJ 4993</u>	Social Justice Studies Capstone
+Meridian		-
Modification	ST 8263	Advanced Regression Analysis
+Online/Distance		

ENGINEERING

Addition	ABE 6443 (split level with ABE 4443)	Spectroscopic Sensing in Biosystems	
+Online/Distance	<u>ASE 4523</u>	Aircraft Design II (tabled at March 5, 2021 meeting)	
Addition	ECE 3244	Electronics I	
+Online/Distance			
+Gulf Coast			

Addition +Online/Distance +Gulf Coast	ECE 3253	Electronics II
Addition +Online/Distance +Gulf Coast	<u>ECE 3421</u>	Circuits I Lab
Addition +Online/Distance +Gulf Coast	ECE 3423	Circuits I
Addition +Online/Distance +Gulf Coast	<u>ECE 3433</u>	Circuits II
+Online/Distance	ECE 3614	Fundamentals of Energy Systems
+Online/Distance	ECE 3714	Digital Devices and Logic Design
+Online/Distance	ECE 3724	Microprocessors
Modification +Online/Distance	<u>ECE 4724</u> /6724	Embedded Systems

5. Degree proposals by college/school

ARTS AND SCIENCES

+Distance	MPPA	Public Policy and Administration	
Addition	Minor	Social Justice Studies	

ENGINEERING

Modification	BS	Computer Engineering (tabled at December 2, 2021 meeting)		
Modification	BS	Electrical Engineering: Electrical Engineering, Power and		
		Energy Engineering (tabled at December 2, 2021 meeting)		

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the Guide and Format for Curriculum Proposals published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Arts & Sciences	Department: Political	Science and Public Adminstration
Contact Person: Mike Potter	Mail Stop: 9561	E-mail: mp2146@msstate.edu
Nature of Change: Distance Appro	oval Date Initiated: 9/2	28/21 Effective Date: May 2022

Current Degree Program Name: Master of Public Policy and Administration Concentration: n/a Major: n/a

New Degree Program Name: n/a Major: n/a

Concentration: n/a

Summary of Proposed Changes: Offer degree via distance education

Approved:

Department Head

Date:

12/6/2021

Chair, College or School Curriculum Committee

Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

GRADUATE DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing Graduate Degree. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Please include the course prefix, number, and title in both columns. Expand rows as needed.

CURRENT Degree Description		PROPOSED Degree Description		
Degree: Master of Public Policy and Administ	tration	Degree: Master of Public Policy and Administration		
Major: n/a		Major: n/a		
Concentrations: n/a		Concentrations: n/a		
The 42-hour Master of Public Policy a	nd	The 42-hour Master of Public Policy a	nd	
Administration (M.P.P.A.) program st	rives to	Administration (M.P.P.A.) program stu	rives to	
professionalize and diversify public se	rvice.	professionalize and diversify public se	rvice.	
The program prepares persons to serve	2	The program prepares persons to serve		
offectively as public administrators at	the	effectively as public administrators at 1	the	
effectively as public administrators at	ernment	national state and local levels of gove	mment.	
national, state, and local levels of gove	SIIIIICIII.	haronal, state, and local levels of gove		
			Doguirod	
CURRENT CURRICULUM OUTLINE	Hours	PROPOSED CURRICULUM OUTLINE	Hours	
Master of Public Policy and Administration		Master of Public Policy and Administration		
(Starkville)				
PPA 8103 Seminar in Public Administration	3	PPA 8103 Seminar in Public Administration	3	
PPA 8703 Government Organization and	3	PPA 8703 Government Organization and Administrative Theory	د	
PPA 8713 Public Personnel Management	3	PPA 8713 Public Personnel Management	3	
PPA 8723 Public Budgeting and Financial	3	PPA 8723 Public Budgeting and Financial	3	
Management	3	PPA 8733 Public Program Evaluation	3	
PPA 8743 Administrative Law	3	PPA 8743 Administrative Law	3	
PPA 8803 Research Methods for Public Affairs	3	PPA 8803 Research Methods for Public Affairs	3	
PPA 8903 Public Policy		PPA 8983 Integrative Capstone	3	
PPA 8400 Public Administration Internship*	3	PPA 8400 Public Administration Internship*	3	
Electives at the 6000/8000 level	12	Electives at the 6000/8000 level (from these classes):** PPA 8133 City County Management	12	
		PPA 8193 Seminar in Intergovernmental Relations		
		PPA 8833 Systems in Public Administration		
		PPA 8990 Special Topics in Public Administration PPA 7000 Directed Individual Study in Political		
		Science and Public Administration		
		EDF 8443 Evaluation of School Programs		
		EPY 6033 Application of Learning Theories EPY 6073 Personal and Motivational Factors in		
	1	Education		
	1	EPY 6214 Educational and Psychological Statistics		
	1	Psychological Statistics		
		EPY 8253 Child & Adolescent Development &		
		Psychopathology MCT 8103 Strategic and Entrepreneurial		
		Management		
		MGT 8113 Leadership Skills for Managerial		
20 x 1 X	12	Total Hours 42		
Total Hours	42	L'unai riolata		

* Students who have worked for at least a year in a public or non-profit-oriented job may have the PPA 8400 requirement and its hours waived.

** Electives currently listed represent the courses available for Campus 5 at present. Substitutions may be approved by the program coordinator as additional courses become available.

1. Catalog Description

The 42-hour Master of Public Policy and Administration (M.P.P.A.) program strives to professionalize and diversify public service. The program prepares persons to serve effectively as public administrators at the national, state, and local levels of government.

Admission Criteria

A competitive applicant for the M.P.P.A. program must have completed the last two years of undergraduate work with a grade point average of 3.00; applicants with previous graduate work must have a grade point average of 3.00 on such coursework. Moreover, the applicant must submit three letters of recommendation, official transcript(s), and a Statement of Purpose. An applicant with a lower grade point average may be admitted provisionally if she or he has appropriate work experience.

Any international applicant whose native language is not English must submit scores that are not more than two years old from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Systems (IELTS). These applicants must have a score of 600 PBT (100 iBT) or better on the TOEFL or 7.5 on the IELTS.

A student who has not been enrolled for one regular semester (fall or spring) is required to submit a readmission form and a new statement of purpose. The readmission must be approved by the Graduate Coordinator. If a student has not been enrolled for one calendar year, the applicant must submit a new application and statement of purpose to be considered for readmission. The M.P.P.A. program accepts applications for Fall, Spring, and Summer semesters.

Provisional Admission

An applicant who has not fully met the GPA requirement stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a B). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Probation

A student whose GPA fall below 3.00 will be placed on academic probation the following semester. See the complete Academic Probation policy in this catalog.

Unsatisfactory Performance

A student in the M.P.P.A. program will be dismissed if he or she receives a second grade of C or lower. He or she will also be dismissed if found responsible for violating the Student Honor Code for a second time. See the complete Graduate School policy on Academic Dismissal in this catalog.

Tuition and Fees

For a list of online tuition, instructional support, and other distance fees, please see the Controller's website at https://www.controller.msstate.edu/accountservices/tuition/.

2. Proposed Curriculum Outline

Curriculum	Required
Outline	Hours
Core Courses	
PPA 8103 Seminar in Public Administration	3
PPA 8703 Government Organization and Administrative Theory	3
PPA 8713 Public Personnel Management	3
PPA 8723 Public Budgeting and Financial Management	3
PPA 8733 Public Program Evaluation	3
PPA 8743 Administrative Law	3
PPA 8803 Research Methods for Public Affairs	3
PPA 8903 Public Policy	3
PPA 8983 Integrative Capstone	3
PPA 8400 Public Administration Internship*	3
Electives at the 6000/8000 level (select from these classes):**	12
PPA 8133 City County Management	
PPA 8193 Seminar in Intergovernmental Relations	
PPA 8833 Systems in Public Administration	
PPA 8990 Special Topics in Public Administration	
PPA 7000 Directed Individual Study in Political Science and Public Administration	
EDF 8443 Evaluation of School Programs	
EPY 6033 Application of Learning Theories	
EPY 6073 Personal and Motivational Factors in Education	
EPY 6214 Educational and Psychological Statistics	
EPY 8214 Intermediate Educational and Psychological Statistics	
EPY 8253 Child & Adolescent Development & Psychopathology	
MGT 8103 Strategic and Entrepreneurial Management	l.
MGT 8113 Leadership Skills for Managerial Behavior	
Total Hours	42
* Students who have worked for at least a year in a public or non-profit-oriented job	
may have the PPA 8400 requirements and its hours waived.	
** Flectives currently listed represent the courses available for Campus 5 at present.	
Substitutions may be approved by the program coordinator as additional courses	
become available.	

3. Justification for Distance Learning Offering

The MPPA program prepares students to serve as effective, ethical public administrators at the national, state, and local levels of government. Working professionals interested in pursuing more advanced study do not currently have a feasible option to do so at MSU. Offering the MPPA degree online will give these professionals the opportunity to remain in their current positions while deepening their knowledge and further developing their competency in the core tenets of public administration. It will also allow the department to remain competitive with other graduate programs in public affairs across Mississippi and the Southeast.

Target Audience

The target audience for the online MPPA program will be those who currently work in the field and desire professional development and career advancement opportunities, as well as those who seek to be more competitive for executive and managerial positions in state and federal government by holding an advanced degree from a NASPAA-accredited program.

4. Learning Outcomes

The Learning Outcomes are the same for both Campus 1 and Campus 5 students.

Universal	Student Learning Goal	Course	
Competency			
To lead and manage in the public interest	Demonstrate competency in skills, tools, and procedures for managing human resources.	PPA 8713	
-	Demonstrate ability to identify, compare, and evaluate theories and methods for understanding behavior of people in organizations.	PPA 8703	
To participate in, and contribute to, the policy	Demonstrate competency in professional writing skills/written communication.	PPA 8733	
process	Demonstrate competency in oral presentation skills/communication.	PPA 8723	
	Demonstrate competency in test validity and significance/hypothesis testing.	PPA 8803	
	Understand the policy process (goals, types, criteria, problem definition).	PPA 8903	
To analyze, synthesize, think critically, solve	Demonstrate competency in information gathering, utilization, synthesis, and application.	PPA 8103	
problems, and make evidence-informed	Demonstrate competency in test validity and significance/hypothesis testing.	PPA 8803	
decisions in a complex and dynamic	Understand the policy process (goals, types, criteria, problem definition).	PPA 8983	
environment	Demonstrate ability to identify, compare, and evaluate theories and methods for understanding behavior of people in organizations.	PPA 8703	
To articulate, apply, and advance a public service	Demonstrate understanding of engaging citizens in participatory processes.	PPA 8743	
perspective	Understand the policy process (goals, types, criteria, problem definition).	PPA 8903	
To communicate and interact productively and	Demonstrate competency in skills, tools, and procedures for managing human resources.	PPA 8713	
in culturally responsive ways with a diverse and	Demonstrate competency in professional writing skills/written communication.	PPA 8733	
changing workforce and society at large	Demonstrate competency in oral presentation skills/communication.	PPA 8723	
	Demonstrate understanding of engaging citizens in participatory processes.	PPA 8743	
	Demonstrate ability to identify, compare, and evaluate theories and methods for understanding behavior of people in organizations.	PPA 8703	

5. Effective Date

May 2022

6. Contact Person

Dr. Mike Potter, Associate Professor and Graduate Coordinator 662-325-7852 • mp2146@msstate.edu

7. Letters of Support

See attachments for letters of support from PSPA, MGT, EPY,

8. IHL Form

PPA Courses

PPA 7000 Directed Individual Study in Political Science and Public Administration: 1-6 hours. Hours and credits to be arranged

PPA 8103 Seminar in Public Administration: 3 hours.

(Prerequisite: consent of instructor). Detailed examination of the major elements of the field of public administration, with particular emphasis on emerging trends in the field

PPA 8133 City and County Management: 3 hours.

Seminar focus on small town and county management in quasi-bureaucratic settings. Detailed consideration of problem solving capabilities as they relate to different forms of local government structure

PPA 8193 Seminar in Intergovernmental Relations: 3 hours.

(Prerequisite: 9 hours of graduate work). Three hours lecture. Examines the current day functioning of the American federal system. Focuses upon national-state, national-local, interstate, state-local and interlocal relationships as well as fiscal federalism

PPA 8400 Public Administration Internship: 1-6 hours.

(Prerequisite: Consent of instructor). Hours and credits to be arranged. Individual work experience under faculty guidance in a governmental or public agency. Scholarly paper on approved topic required. Student evaluations are assigned on satisfactory/unsatisfactory basis

PPA 8703 Government Organization and Administrative Theory: 3 hours.

Detailed survey of organization theories and managerial techniques as they relate to the public sector

PPA 8713 Public Personnel Management: 3 hours.

Course considers major developments in the issues and management practices affecting personnel such as affirmative action, unions, and civil service reforms

PPA 8723 Public Budgeting and Financial Management: 3 hours.

Analysis of current financial and budgetary techniques as they apply to the public sector. Capital budgeting, debt administration, and financial management

PPA 8733 Public Program Evaluation: 3 hours.

Techniques and analytical methods of assessing governmental program success. Special emphasis will be given to program designs, data collection and quantitative applications

PPA 8743 Administrative Law: 3 hours.

(Prerequisite: <u>PS 4703</u>/6703). Three hours lecture. An environmental study of the legal nature and effect of policies and attitudes of government toward business, especially the power and limitations of regulatory agencies

PPA 8803 Research Methods for Public Affairs: 3 hours.

Stress on research designs and methods, survey research and other techniques and measuring data. Focus on applied approaches for mathematically analyzing governmental data. (Same as <u>PS 8803</u>)

PPA 8833 Systems in Public Administration: 3 hours.

(Prerequisite: BIS 1013, CS 1013, TKT 4273/6273, or equivalent). Three hours lecture. Role of automated, computer-based systems in government; their impact on the workplace, government institutions, and the governmental systems; selected topical applications

PPA 8903 Public Policy: 3 hours.

Nature, determinants, and effects of public goods and services; policy formulation and implementation; seminar emphasizes contemporary issues such as strategic planning, leadership, and managerial control. (Same as <u>PS 8903</u>)

PPA 8983 Integrative Capstone: 3 hours.

(Prerequisites: Consent of Instructor). Three hours lecture. A groups-based consulting project on an issue currently facing a governmental or nonprofit organization. (should be taken in terminal semester of degree program)

PPA 8990 Special Topics in Political Science and Public Administration: 1-9 hours.

Credit and title to be arranged. This course is to be used on a limited basis to offer developing subject matter areas not covered in existing courses. (Courses limited to two offerings under one title within two academic years)

Elective Courses

MGT 8103 Strategic and Entrepreneurial Management: 3 hours.

This course focuses on how organizations create sustained competitive advantages through environmental scanning, strategic thinking, strategic communication and a commitment to action

MGT 8113 Leadership Skills for Manugerial Behavior: 3 hours.

Three hours lecture. Survey of major behavioral skills used by managers to help them build human capital and influence behavior in an organizational setting

EDF 8443 Evaluation of School Programs: 3 hours.

Three hours lecture. The course provides an overview of evaluation as an inquiry process. Frameworks and models for planning evaluation studies are discussed and applications are demonstrated

EPY 6033 Application of Learning Theories: 3 hours.

(Prerequisite: EPY 3513 or permission of instructor). Three hours lecture. Critical review of literature on learning in applied settings

EPY 6073 Personal and Motivational Factors in Education: 3 hours.

Three hours lecture. Theories of personality development and motivation in education settings with special attention to culture and interpersonal relations

EPY 6214 Educational and Psychological Statistics: 4 hours.

Three hours lecture and three hours laboratory. A course in statistics for education and educational psychology majors. Analysis, description of and inference from various types of data

EPY 8214 Intermediate Educational and Psychological Statistics: 4 hours.

(Prerequisite: EPY 4214/6214 or its equivalent.) Three hours lecture and three hours laboratory. ANOVA techniques and regression analysis are discussed with emphasis upon the design and analysis of research problems in education and psychology

EPY 8253 Child & Adolescent Development & Psychopathology: 3 hours.

Three hours lecture. Critical survey of recent problems, methods, and research in both the normal and abnormal psychological development of children and adolescents

Appendix 10: Report of Intent to Offer an Existing Degree Program by Distance Learning (Submit Appendix 10 in PDF format with signatures)

Institution:				
Date of Initial Progr	am Approval:	Date of Implementat	tion: C	Cost to Offer by Distance Learning:
Prior to 2000		05/2022	\$	24,000
Program Title as It . Transcript:	Appears on Acad	emic Program Invento	ry, Diploma, and	Six-Digit CIP Code(s) & Four-Digit Sequence Code(s):
Master of Public Poli	cy and Administra	ation		440401 &4059
	1 A 4		CIP & Sequence	codes: IHL Active Program Inventory
Degree(s) to be Awa Master of Public Po	rded: licy and Adminis	tration	Credit Hour Requi	rements: 42
Can this program b	e completed entir	rely online? X□ Yes □] No	
Will this program re	equire separate a	dmission from those of	fered on-campus? X	🗆 Yes 🗆 No
Responsible Academ Department of Politic	nic Unit(s): cal Science and Pu	blic Administration	Institutional Conta Phone: 662-325-785 Email:mp2146@ms	ct: Dr. Mike Potter 52 sstate.edu
	512 I. S.			
Number of Students Years:	Expected to Enr	oll in First Five	Number of Gradua	tes Expected in First <mark>Five</mark> Years:
Year One	2		Year On	e 0
Year Two	6		Year Two	0 2
Year Three	6		Year Three	e 6
Year Four	10		Year Fou	r 6
Year Five	12		Year Fiv	e 10
Total	36		Tota	1 24

Program Summary:

The M.P.P.A. is a professional degree that trains students to be leaders in public and non-profit organizations. The program of graduate study is offered in the Department of Political Science and Public Administration and teaches budgeting, leadership, policy analysis, and program evaluation. The program of study of a Master of Public Policy and Administration degree includes advanced courses in Public Affairs (24 hours), Research Methods (3 hours), an internship (3 hours) and elective courses (12 hours) selected based on student's career goals and interests. Students develop their program of study in consultation with their graduate coordinator.

Chief Academic Officer Signature

Date



456 Hardy Avenue P.O. Box PC Mississippi State, MS 39762

August 1, 2021

University Committee on Courses & Curricula 218 Garner Hall Mailstop 9702 Mississippi State University

UCCC Committee,

The Department of Political Science and Public Administration faculty is seeking approval of offering the Masters of Public Policy and Administration through distance. A resolution to this effect was voted unanimously (approved) through a vote by the faculty on 2/5/2021. Distance components to all necessary course-work has been approved.

Please don't hesitate to contact me if additional information is needed.

Sincerely,

Mike Potter Graduate Coordinator Associate Professor

P.Edward French MPPA Curriculum Committee Member Professor

Sawsan Abutabenjeh

Sawsan Abutabenjeh MPPA Curriculum Committee Member Associate Professor

Juliius Nukpezah

Julius Nukpezah MPPA Curriculum Committee Member Assistant Professor Dragan

Dragan Stanisievski MPPA Curriculum Committee Member Associate Professor

Christine Rush MPPA Curriculum Committee Member Associate Professor

Tamara Markoski

Tamara Markoski MPPA Curriculum Committee Member Assistant Professor Signature: Dragan St

igan Stanisevski (Aug 6, 2021 17:31 CDT)

Email: dstanisevski@pspa.msstate.edu

Signature: Julius Nukpezah (Aug 7, 2021 10:04 CDT) Email: jnukpezah@pspa.msstate.edu

Signature:

Email: crush@pspa.msstate.edu

Signature: Tamara Markoski

Email: tamara.markoski@msstate.edu

Signature: Sawsan Abut Ibenjeh (Aug 7, 2021 22:13 EDT) Email: sawsan.abutabenjeh@msstate.edu

Signature:

Email: efrench@pspa.msstate.edu



Department of Counseling, Educational Psychology, and Foundations

> Mailstop 9727 175 President Circle 508 Allen Hall Mississippi State, MS 39762

> > P. 662.325.3426 F. 662.325.3263

cep.msstate.edu

October 7, 2021

Members of the UCCC:

The Department of Counseling, Educational Psychology, and Foundations supports the proposal to offer the Master of Public Policy and Administration via distance.

I have reviewed the proposal and support the utilization of our courses in this project. We understand that students in the MPPA distance program may enroll in the following courses as electives:

- EDF 8443 Evaluation of School Programs
- EPY 6033 Application of Learning Theories
- EPY 6073 Personal and Motivational Factors in Education
- EPY 6214 Educational and Psychological Statistics
- EPY 8214 Intermediate Educational and Psychological Statistics
- EPY 8253 Child & Adolescent Development & Psychopathology

Sincerely,

Digitally signed by Daniel Gadke,

Daniel Gadke, Ph.D. Ph.D.

Date: 2021.10.11 11:16:25 -05'00'

Dr. Daniel Gadke

Professor and Head, Department of Counseling, Educational Psychology, and Foundations Interim Associate Dean of Research, College of Education



August 1, 2021

456 Hardy Avenue P.O. Box PC Mississippi State, MS 39762

University Committee on Courses & Curricula 218 Garner Hall Mailstop 9702 Mississippi State University

UCCC Committee,

The Department of Political Science and Public Administration faculty is seeking approval of offering the Masters of Public Policy and Administration through distance. A resolution to this effect was voted unanimously (approved) through a vote by the faculty on 2/5/2021. Distance components to all necessary course-work has been approved.

Please don't hesitate to contact me if additional information is needed.

Sincerely,

Mike Potter Graduate Coordinator Associate Professor

P.Edward French MPPA Curriculum Committee Member Professor

Sawsan Abutabenjeh

Sawsan Abutabenjeh MPPA Curriculum Committee Member Associate Professor

Juliius Nukpezah

Julius Nukpezah MPPA Curriculum Committee Member Assistant Professor Dragan

Dragan Stanisievski MPPA Curriculum Committee Member Associate Professor

Christine Rush MPPA Curriculum Committee Member Associate Professor

Tamara Markoski

Tamara Markoski MPPA Curriculum Committee Member Assistant Professor Signature: Draga

Dragan Stanisevski (Aug 6, 2021 17:31 CDT)

Email: dstanisevski@pspa.msstate.edu

Signature: Julius Nukpezah (Aug 7, 2021 10:04 CDT) Email: jnukpezah@pspa.msstate.edu

Signature:

Email: crush@pspa.msstate.edu

Signature: Tamara Markoski (Aug 7, 2021 10:00 CDT)

Email: tamara.markoski@msstate.edu

Signature: Sawsan Abut, benjeh (Aug 7, 2021 22:13 EDT) Email: sawsan.abutabenjeh@msstate.edu

Signature:

Email: efrench@pspa.msstate.edu



MISSISSIPPI STATE

Department of Political Science and Public Administration

456 Hardy Avenue P.O. Box PC Mississippi State, MS 39762

August 1, 2021

University Committee on Courses & Curricula 218 Garner Hall Mailstop 9702 Mississippi State University

UCCC Committee,

The Department of Political Science and Public Administration faculty is seeking approval of offering the Masters of Public Policy and Administration through distance. A resolution to this effect was voted unanimously (approved) through a vote by the faculty on 2/5/2021. Distance components to all necessary course-work has been approved.

Please don't hesitate to contact me if additional information is needed.

Sincerely,

Mike Potter Graduate Coordinator Associate Professor

P.Edward French MPPA Curriculum Committee Member Professor

Sawsan Abutabenjeh

Sawsan Abutabenjeh MPPA Curriculum Committee Member Associate Professor

Juliius Nukpezah Julius Nukpezah MPPA Curriculum Committee Member Assistant Professor Dragan

Dragan Stanisievski MPPA Curriculum Committee Member Associate Professor

Muster

Christine Rush MPPA Curriculum Committee Member Associate Professor

Tamara Markoski

Tamara Markoski MPPA Curriculum Committee Member Assistant Professor



College of Arts & Sciences Dean's Office

P.O. Drawer AS 175 President Circle, 208 Allen Hall Mississippi State, MS 39762

> P. 662.325.1665 F. 662.325.8740 www.cas.msstate.edu

October 13 2021

Members of the UCCC:

The Department of Management & Information Systems supports the proposal to offer the Master of Public Policy and Administration via distance.

I support the utilization of our courses in this distance program. We understand that students in the MPPA distance program may enroll in the following courses as electives provided seats are available:

- MGT 8103 Strategic and Entrepreneurial Management
- MGT 8113 Leadership Skills for Managerial Behavior

Laura E. Marles

Dr. Laura Marler Department Head, Management & Information Systems Family Business Education Initiative Director Jim and Pat Coggin Endowed Professor of Management



MISSISSIPPI STATE UNIVERSITY DEPARTMENT OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

October 8, 2021

University Committee on Courses & Curricula 218 Garner Hall Mailstop 9702 Mississippi State University

UCCC Committee:

The Department of Political Science and Public Administration faculty is seeking approval of offering the Masters of Public Policy and Administration through distance. A resolution to this effect was voted unanimously (approved) through a vote by the faculty on 2/5/2021. Distance components to all necessary course-work has been approved.

I also support this curriculum change.

nave Shoup

Dr. Brian Shoup Department Head Political Science and Public Administration

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College:Arts & SciencesDepartment:Gender StudiesContact Person: Kimberly Kelly
Nature of Change: New MinorMail Stop: 9744E-mail: kk435@msstate.eduDate Initiated:07/23/21Effective Date: Summer 2022Current Degree Program Name: N/AN/ADepartment:

Major: N/A

Concentration: N/A

New Degree Program Name: Minor in Social Justice Studies

Major:

Concentration:

Summary of Proposed Changes:

Addition of an interdisciplinary minor in Social Justice Studies.

Approved:

Department Head

Chair, College or School Curriculum Committee

Dean of College or School

Date:

11/23/2021

1/5/2022

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

Proposal for Minor in Social Justice Studies

Summary of Proposed Changes

The Minor in Social Justice Studies is designed for students who seek to learn about the causes and consequences of various social problems and strategies for addressing social inequalities. The minor will allow students with various majors to engage in the inter-disciplinary study of social justice and will prepare them for personal and professional civic engagement. Students will benefit from a program of study that allows them to explore multiple social inequalities, focus on areas of particular individual interest, develop applied and community-engaged skills, and connect with communities engaged in efforts to pursue social change.

1. Catalog Description

Social justice studies is an interdisciplinary field that examines the causes and consequences of social inequities; types and forms of social change; and applied approaches to advancing social justice and equity. Social justice studies examines both the historical roots and contemporary forms of injustice and emphasizes applied and community-engaged learning as well as more traditional academic study.

Administration

The Social Justice Studies minor is housed in the College of Arts & Sciences and administered by the Director of Gender Studies. Participating programs include Gender Studies and African American Studies, as well as the departments of Anthropology, Communication, English, Geosciences, History, Philosophy & Religion, Political Science, Psychology, and Sociology.

2. Curriculum Outline

DRODOGED M. M.	
PROPOSED New Minor	
Minor: Social Justice Studies	
Undergraduate students would earn a Social Justice Studies minor by completin	g 18 credits of course work
from a variety of fields distributed as follows; only 6 credits from any one depart	tment may count toward the
minor. No more than 6 total hours may be at the 1000 or 2000 level. The remain	ing hours must be 3000 or
4000 level.	
Proposed Curriculum Outline	Required
	Hours
GS/SO/SJ 1303 Introduction to Social Justice Studies	3
Causes and Consequences of Social Injustice:	6
AAS 1103 Introduction to African American Studies	-
AAS/HI 3013 African American History	
AAS/HI 3023 African American History since 1865	
AAS/SO/CRM 3353 Race, Crime and Justice	
AAS/HI 4363 African-American History and Culture	
AAS/AN/SO 2203 Introduction to Race and Ethnicity	
AAS 4643 Race and the Media	
AN/SO AN 4173 Environment and Society	
AN 4323 Plagues and People	
AN 4333 Anthropology of Violence	
CO 4323 Mass Media and Society	
CO/SO/AAS 4643 Race and Media	

CRM 2003 Crime Justice and Inequality	1
CPM 3363 Globalization and Crime	
CPM 2502 Violonoo in the United States	
CRIVI 5303 Violence in the United States	
CRW 4253 while Collar and Elite Deviance	
CRW/SO 4323 Law and Society	
CRM/SO 4233 Juvenile Delinquency	
CRM/SO 4243 Drugs, Crime and Control	
CRM/SO 4323 Vicimology	
UNI/SO 4343 Media, Crime and Justice	
EN/AAS 2505 Introduction to African American Literature	
EN 4355: Southern Literature	
EN/AAS 4343 Studies in African American Literature	
EN/AAS 4393 Postcolonial Literatures and Theory	
GS/AAS/HI 3/13 History of African American Women	
GS/CO 4233 Gender and Media	
GS/CO 4263 Gender Communication	
GS/SO/AN 11/3 Introduction to Gender Studies	
GS/PS 3033 Gender and Politics	
GS 3343/CRM 3343 Gender, Crime, and Justice	
GS/EN 3513 Women and Literature	
GS/SO/EN 4133 Feminist Theories	
GS 4413/SO 4403 Sociology of Gender and Sexuality	
GS/SO 4503 Gender and Work	
GS/SO/SW 4543 Gender and Food*	
GR 2013 Human Geography	
GR 4123 Urban Geography	
GR 4263 Geographies of the US South	
HI 3333 Mississippi History	
HI 4273 Women in American History	
HI 4283 History of Southern Women	
HI 4293 History of Gender and Science	
HI 4343 Immigration and Ethnicity in the United States	
HI 4393 Rural America	
PHI 3183 African American Philosophy	
PHI 3313 Environmental Ethics	
PHI 3173 Social and Political Philosophy	
PS 4523 Democracy and Inequality	
PS 4643 Ethnic Conflict	
PS 4653 Nationalism	
PSY 3203 Psychology of Gender Differences	
PSY 4223 Drug Use and Abuse	
REL 3103 Religion & U.S. Culture	
REL 3113 Religions and Environment	
REL 3143 African American Religious Experience	
SO 1103 Contemporary Social Problems	
SO 3003 Social Inequality	
SO 3503 Violence in the United States	
SO 4273 Sociology of Education	
SO 4423 Health and Society	
SO 4703 Population Problems and Processes	
SW 2303 Social Welfare Policy I	
SW 2323 Social Welfare Policy II	
SW 3003 Social Work with At-Risk Populations*	
Applied Learning and Social Change:	6
AAS/PS 3043 Modern Civil Rights Law	Ť
AAS/PS 4273 African American Politics	
AAS/HI 4373 History of the Modern Civil Rights Movement	
AAS 4383 African American Leadership in the Twentieth Century	

AAS/HI 4983 African Americans and the Law	
AN 3343 Introduction to Forensic Anthropology	
CO 42.13 Political Communication*	
CO 42.53 Elements of Persuasion*	
CO 4273 Intercultural Communication*	
CO 4283 Health Communication*	
CO 4313 Mass Media Law	
CO 4043 Communication and Leadershin*	
CO 4803 Research in Public Relations and Advertising*	
CO 4813 Public Relations in Organizations*	
CRM 4153 Mentoring for At-Risk Youths*	
GG 4543 Community Engagement in Environmental Geoscience*	
GS/SO/AAS 4143 Gender Race and Social Movements	
HI 3343 Delta History Service and Experiential Spring Break*	
PS 3013 Political Leadership	
PS 3063 Constitutional Powers	
PS 3073 Civil Liberties	
PS 3183 Law and Politics	
PS 3193 Intergovernmental Relations	
PS 4113 State Government	
PS 4163 The Chief Executive	
PS 4173 Legislative Process	
PS 4183 Judicial Process	
PS 4193 Mississippi Judicial System	
PS 4203 Political Parties and Electoral Problems	
PS 4213 Campaign Politics	
PS 4223 The Dynamics of American Democracy	
PS 4233 Interest Groups	
PS 4243 State Election Policy and Politics	
PS 4263 Mississippi Government and Politics	
PS 4293 Political Behavior	
PS 4393 The Global Context	
PS 4633 Democracy and Democratization	
PS 4464 Political Analysis*(4 hours)	
PS 4743 Environmental Policy	
PSY 2123 Perspectives on Child Maltreatment and Child Advocacy	
PSY 3123 Global Child Advocacy Issues	
PSY 4133 Multidisciplinary Responses to Child Maltreatment/Trauma*	
SW 2313. Introduction Social Work and Social Welfare	
SJ 4993 Social Justice Minor Capstone ^{*1}	3
* Indicates applied or community-engaged learning course. Students must	
take at least one community-engaged learning course in addition to the	
Capstone to fulfill minor requirements. Students may petition the minor	
advisor to count courses not on this list as appropriate	
and the use of the second of the test of uppropriate.	
Indicates course will be proposed to UCCC for approval.	
Only 6 hours from a single department may be counted toward the minor.	
At least 12 hours must be 3000-4000 level.	
T / 1 TT	
1 otal Hours	18

3. Justification and Learning Outcomes

Justification

Social justice studies offers an interdisciplinary approach to understanding the causes and consequences of unjust social institutions, theoretically rigorous explorations of belief systems and practices that contribute to inequality, and empirically informed evaluation of social change solutions and strategic interventions. Evaluating social inequalities through the lens of multiple disciplines and the commitment to applied study are core strengths of this academic discipline. Social justice studies also facilitates the exchange of ideas and critically thinking about local and global ideals of justice.

The increased focus on racial and other forms of injustice makes social justice studies an increasingly relevant field, both in terms of students' intellectual curiosity as well as employers' expectations that employees possess strong backgrounds in cultural competence and an appreciation and understanding of diversity, equity, and inclusion (DEI). Students would benefit from a program that allows them to explore numerous social inequalities, pursue in-depth study of specific forms of injustice, and helps them utilize practical skills and strategies for the pursuing social change. The Social Justice Studies minor will also connect students to a network of individual change-makers and advocacy organizations. Many of the social inequalities covered in social justice studies are especially relevant to students seeking to work and live in Mississippi or the Southeastern U.S. This minor will offer students problem-solving skills and real-world learning opportunities that encourage them to invest in their local communities.

Relation to Existing Curriculum

Mississippi State University's Gender Studies minor, African American Studies minor, Sociology major, and Sociology minor also include a number of courses included in the Social Justice Studies minor. Duplication, however, is not a concern because (1) the introductory and capstone courses (6 hours) for the Social Justice Studies minor do not count toward any other minor or major, except as a free elective; (2) students may take no more than six hours in any one discipline; and (3) none of the other minors listed above have an applied or community-engaged learning component. These two features of the Social Justice Studies minor, along with its much broader scope of topics, work to ensure students are crafting unique courses of study and not mirroring others.

The Gender Studies minor and African American Studies minor allow students to explore social inequalities with a focus on sexism and racism. In contrast, a Social Justice Studies minor will enable students to explore more sources of inequality yet develop and explore areas of personal or professional interest. Sociology majors and minors can explore a range of social problems and inequalities, yet sociology does not explicitly focus on applied or community-engaged learning. Students enrolled in this minor will examine the historical, political, social, economic, and cultural factors contributing to all forms of injustice. However, they will also learn practical and applied problem-solving skills that will help them pursue social justice in other fields of study or careers. A program that allows students to explore a broader range of social inequalities, understand these inequalities as connected, and provides students with practical skills and strategies for addressing social injustice is directly beneficial to students with various majors and career interests.

Learning Outcomes

Undergraduate students understand the causes and consequences of social injustices, processes of social change toward a more justice-oriented society, and applied practices towards alleviating social inequities.

Students who satisfy all requirements for this minor will:

- Demonstrate an understanding of major theories and methods utilized in social justice studies.
- Analyze how historical, political, social, economic, and cultural factors contribute to social inequalities and injustices.
- Demonstrate an understanding of the impact and effects of social injustices.
- Explore how social inequalities and injustices intersect and overlap.
- Apply theories and methods of social justice studies to understand differences in social problems locally and nationally.
- Demonstrate an understanding of the history and impact of social justice movements and activism.
- Explore the values and ethics that ground a commitment to social justice, diversity, and equity.
- Engage in innovative, analytical, and ethically informed problem-solving strategies that promote social justice in personal and professional settings.
- Apply social justice concepts to activism and advocacy work.
- Apply theories and methods of social justice studies to evaluate the effectiveness of different problem-solving strategies.

4. Support

Please see the attached letters of support from the directors of Gender Studies, African American Studies, and Social Work, as well as the heads from the departments of Anthropology, Communication, English, Geosciences, History, Philosophy & Religion, Political Science, Psychology, and Sociology.

5. Proposed 4-Letter Abbreviation SJST

6. Effective Date

Summer 2022



COLLEGE OF ARTS & SCIENCES

Gender Studies Program

P.O. Box 5226 208 Allen Hall Mississippi State, MS 39762

www.genderstudies.msstate.edu

October 18, 2021

Members of the UCCC:

The Gender Studies Program supports the new minor in Social Justice Studies.

I have reviewed the proposal and support the utilization of GS courses in this project. I understand that the minor in Social Justice Studies may include the following courses, which are part of the typical course rotation.

- GS 1173 Introduction to Gender Studies *cross-listed AN/SO
- GS 3033 Gender and Politics *cross-listed PS
- GS 3343 Gender, Crime and Justice *cross-listed CRM/SO
- GS 3513 Women and Literature *cross-listed EN
- GS 3713 History of African American Women *cross-listed AAS/HI
- GS 4133 Feminist Theories *cross-listed EN/SO
- GS 4143 Gender, Race and Social Movements *cross-listed AAS/SO
- GS 4233 Gender and Media *cross-listed CO
- GS 4263 Gender Communication *cross-listed CO
- GS 4413 Sociology of Gender and Sexuality *cross-listed SO 4403
- GS 4503 Gender and Work *cross-listed SO
- GS 4543 Gender and Food *cross-listed SO/SW

Dr. Kimberly Kelly Director, Gender Studies Associate Professor, Department of Sociology



MISSISSIPPI STATE

College of Arts & Sciences

Dean's Office

P.O. Drawer AS 175 President Circle, 208 Allen Hall Mississippi State, MS 39762

> P. 662.325.1665 F. 662.325.8740 www.cas.msstate.edu

September 15, 2021

Members of the UCCC:

The African American Studies Program supports the new minor in Social Justice Studies.

I have reviewed the proposal and support the utilization of AAS courses in this project. I understand that the minor in Social Justice Studies may include the following courses, which are part of the typical course rotation.

- AAS 1063 Introduction to African American Studies
- AAS 2203 Introduction to Race and Ethnicity *cross-listed AN/SO
- AAS 2363 Introduction to African American Literature *cross-listed EN
- AAS 3013 African American History *cross-listed HI
- AAS 3023 African American History since 1865 *cross-listed HI
- AAS 3043 Modern Civil Rights Law *cross-listed PS
- AAS 3353 Race, Crime and Justice *cross-listed CRM/SO
- AAS 3713 History of African American Women *cross-listed GS/HI
- AAS 4143 Gender, Race and Social Movements *cross-listed GS/SO
- AAS 4273 African American Politics *cross-listed PS
- AAS 4343 Studies in African American Literature *cross-listed EN
- AAS 4363 African American History and Culture *cross-listed HI
- AAS 4373 History of the Modern Civil Rights Movement *cross-listed HI
- AAS 4383 African American Leadership in the Twentieth Century
- AAS 4393 Postcolonial Literature and Theory *cross-listed EN
- AAS 4643 Race and the Media *cross-listed CO/SO
- AAS 4983 African Americans and the Law *cross-listed HI

Dr. Don Shaffer Director, African American Studies Associate Professor, Department of English



Social Work Program

P.O. Box C 456 Hardy Road/207 Bowen Hall Mississippi State, MS 39762

P. 662.325.2495 F. 662.325.4564 www.sociology.msstate.edu

Dear Chair, University Committee on Courses and Curriculum,

Please accept this letter of support for the Minor in Social Justice Studies. The Social Work Program offers several courses that align with this minor. We propose that the following courses be included in the curriculum.

Causes and Consequences category

- o SW 2303- Social Welfare Policy I
- SW 2323- Social Welfare Policy II)
- o SW 3003-Social Work with At-Risk Populations

Applied and Community-Engaged Learning category

o SW 2313 Introduction to Social Work and Social Welfare

We voted on this proposal at the Department of Sociology faculty meeting on Friday, November 5, 2021, and had majority support from faculty members. Please contact Dr. Kenya Cistrunk, Chair of the Social Work Program Curriculum and Policy Committee, if you have any further questions.

Sincerely, Social Work Curriculum and Policy Committee Department of Sociology, Criminology and Social Work

Laura Boltz. Kenya M. Cistrunk Iada Johnson Veronica Knowles



COLLEGE OF ARTS & SCIENCES ANTHROPOLOGY AND MIDDLE EASTERN CULTURES

> P.O. Box AR 340 Lee Blvd., Room 204 Cobb Bldg. Mississippi State, MS 39762

> > P. 662.325.2013 F. 662.325.8690 www.amec.msstate.edu

October 25, 2021

Dr. Kimberly Kelly Director of Gender Studies Mississippi State University

Dear Dr. Kelly,

I am writing on behalf of the Department of Anthropology and Middle Eastern Cultures (AMEC) to confirm that the AMEC Curriculum Committee has reviewed the Minor in Social Justice Studies proposal and has agreed to support it.

Thank you for including anthropology courses in your minor proposal and we wish you much success in your endeavor.

Should you need additional information, please do not hesitate to contact me.

Sincerely, boin Hahrane

Dr. Hsain Ilahiane Department Head, Professor

Dr. Anna Osterholtz Chair, AMEC Curriculum Committee, Assistant Professor

D. Shane Miller

Dr. Shane Miller AMEC Curriculum Committee Member, Associate Professor

Laura K. Mech

Dr. Kate McClellan AMEC Curriculum Committee Member, Assistant Professor



College of Arts & Sciences

Department of Communication

P.O. Box PF 216 President's Circle Mississippi State, MS 39762

www.comm.msstate.edu

P. 662.325.3320 F. 662.325.3210

October 26, 2021

Dear Curriculum Committees:

The curriculum committee of the Department of Communication has met and is pleased to write a support letter in favor of the proposed minor in Social Justice Studies housed by Gender Studies. We feel the Communication classes listed in the proposal are a good fit for this minor and we are happy to be involved with it.

X

X

X

Х

X

Faculty Member

Disapprove Approve Abstain

Х

Wendy Roussin, MFA Associate Professor & Chair

Kevin William, PhD Associate Professor

Melody Fisher, PhD Associate Professor

Holli Seitz, PhD Assistant Professor

Х

Matthew Webb, MFA Assistant Clinical Professor

Cheryl Chambers, MA Instructor

Chris Misun, MS Instructor



TO:	Andy Perkins Chair, University Committee on Courses and Curricula
FROM:	Ted Atkinson (Ted Atkinson Chair, Department of English Curriculum Committee
RE:	Proposed Social Justice Studies Minor

DATE: October 21, 2021

Today the Department of English Curriculum Committee voted unanimously to support the proposed minor in Social Justice Studies with the inclusion of the following courses from our department among the options for fulfilling the requirements:

AAS/EN 2363 Introduction to African American Literature AAS/EN 4343 Studies in African American Literature EN/GS 3513 Women and Literature EN/GS/SO 4133 Feminist Theories EN 4333 Southern Literature EN 4393 Postcolonial Literature and Theory

Committee members:

Shalyn (laggett Shalyn Claggett Shalyn Claggett

DE0E0560B5E4FD

Taylor Garner

Ginger Pizer Ginger Pizer

Andrea Spain Andrea Spain

Ann Spurlock



MISSISSIPPI STATE VERSITY

Department of Geosciences 108 Hilbun Hall 355 Lee Blvd. P.O. Box 5448 Mississippi State, MS 39762 Phone (662) 325-3915 FAX (662) 325-9423

October 12, 2021

Dear Curriculum Committee Chair,

The Department of Geosciences Curriculum Committee has reviewed the newly proposed Minor in Social Justice Studies, and we fully support the minor's development and integration into the curriculum. We also fully support the inclusion of some of our classes, specifically GR 2013 Human Geography, GR 4123 Urban Geography, GG 4543 Community Engagement in Environmental Geoscience, and GR 4263 Geographies of the U.S. South, within the proposed minor. We are excited about the future interactions between our departments that will result from this minor and the opportunities it will create for our students. If you have any questions or need additional information, please let us know.

Respectfully,

Williams

Andrew Mercer	Digitally signed by Andrew Mercer Date: 2021.10.14 11:56:30 -05'00'
Andrew Mercer	(Committee Chair)
Christopher Fuhrmann	Digitally signed by Christopher Fuhrmann Date: 2021.10.15 10:25:21 -05'00'
Chris Fuhrmann	(Committee Member)
Christa R. Haney	Digitally signed by Christa R. Haney Date: 2021.10.15 11:05:54 -05'00'
Christa Haney (Committee Member)
Brian Williams	Digitally signed by Brian Williams Date: 2021.10.15

Padmanava Dash	Digitally signed by Padmanava Dash Date: 2021.10.15 07:04:18 -05'00'		
Padmanava Dash (Committee Member)			
Rinat Gabitov	Digitally signed by Rinat Gabitov Date: 2021.10.16 17:52:47 -05'00'		
Rinat Gabitov (Committee Member)			
Sarah Lalk	Digitally signed by Sarah Laik DN: cn-Sarah Laik, o, ou, email-spr67@msstate.edu, c=US Date: 2021.10.15 11:21:49-05'00'		
Sarah Lalk (Committee Member)			

Brian Williams (Committee Member)

11:14:17 -05'00'

Cc: Dr. John C. Rodgers, Head, Department of Geosciences



College of Arts & Sciences

Dean's Office

P.O. Drawer AS 175 President Circle, 208 Allen Hall Mississippi State, MS 39762

> P. 662.325.1665 F. 662.325.8740 www.cas.msstate.edu

October 19, 2021

Members of the UCCC:

The Department of History supports the new minor in Social Justice Studies.

Members of the Department of History Curriculum Committee and I have reviewed the proposal and support the utilization of our courses in this project. We understand that the minor in Social Justice Studies may include the following courses, which are part of our department's typical rotation.

- HI 3013 African American History *cross-listed AAS
- HI 3023 African American History since 1865 *cross-listed AAS
- HI 3333 Mississippi History
- HI 3343 Delta History Service and Experiential Spring Break
- HI 3713 History of African American Women *cross-listed AAS/GS
- HI 4273 Women in American History
- HI 4283 History of Southern Women
- HI 4293 History of Gender and Science
- HI 4343 Immigration and Ethnicity in the United States
- HI 4363 African American History and Culture *cross-listed AAS
- HI 4373 History of the Modern Civil Rights Movement *cross-listed AAS
- HI 4393 Rural America
- HI 4983 African Americans and the Law *cross-listed AAS

Dr. Alan Marcus Professor and Head Department of History

Dr. Matthew Lavine Associate Professor of History Chair, Undergraduate Curriculum Committee (on behalf of its members)



College of Arts & Sciences

Dean's Office

P.O. Drawer AS 175 President Circle, 208 Allen Hall Mississippi State, MS 39762

> P. 662.325.1665 F. 662.325.8740 www.cas.msstate.edu

October 19, 2021

Members of the UCCC:

The Department of History supports the new minor in Social Justice Studies.

Members of the Department of History Curriculum Committee and I have reviewed the proposal and support the utilization of our courses in this project. We understand that the minor in Social Justice Studies may include the following courses, which are part of our department's typical rotation.

- HI 3013 African American History *cross-listed AAS
- HI 3023 African American History since 1865 *cross-listed AAS
- HI 3333 Mississippi History
- HI 3343 Delta History Service and Experiential Spring Break
- HI 3713 History of African American Women *cross-listed AAS/GS
- HI 4273 Women in American History
- HI 4283 History of Southern Women
- HI 4293 History of Gender and Science
- HI 4343 Immigration and Ethnicity in the United States
- HI 4363 African American History and Culture *cross-listed AAS
- HI 4373 History of the Modern Civil Rights Movement *cross-listed AAS
- HI 4393 Rural America
- HI 4983 African Americans and the Law *cross-listed AAS

Dr. Alan Marcus Professor and Head Department of History

Dr. Matthew Lavine Associate Professor of History Chair, Undergraduate Curriculum Committee (on behalf of its members)



COLLEGE OF ARTS & SCIENCES

Department of Philosophy & Religion

J. Robert Thompson, Head George Hall 1010 233 Lee Blvd P.O. Box JS Mississippi State, MS 39762

P. 662.325.2161 F. 662.325.3340 www.philosophyandreligion.msstate.edu

September 15, 2021

Members of the UCCC:

The Department of Philosophy and Religion supports the new minor in Social Justice Studies.

Members of the Department of Philosophy and Religion Curriculum Committee and I have reviewed the proposal and support the utilization of our courses in this project. We understand that the minor in Social Justice Studies may include the following courses, which are part of our department's typical rotation.

- PHI 3173 Social and Political Philosophy
- PHI 3183 African American Philosophy
- PHI 3313 Environmental Ethics
- REL 3103 Religion and U.S. Culture
- REL 3113 Religions and Environment
- REL 3143 African American Religious Experience

J. Robert Thompson, Ph.D. Head Department of Philosophy and Religion



COLLEGE OF ARTS & SCIENCES

Department of Political Science and

Public Administration

P.O. Box PC 456 Hardy Rd., 105 Bowen Hall Mississippi State, MS 39762

P. 662.325.2711 F. 662.325.2716 www.pspa.msstate.edu

October 8, 2021

Members of the UCCC:

The Department of Political Science and Public Administration supports the new minor in Social Justice Studies.

Members of the Department of Political Science and Public Administration Curriculum Committee and I have reviewed the proposal and support the utilization of our courses in this project. We understand that the minor in Social Justice Studies may include the following courses, which are part of our department's typical rotation.

- PS 3013 Political Leadership
- PS 3033 Gender and Politics *cross-listed GS
- PS 3043 Modern Civil Rights Law *cross-listed AAS
- PS 3063 Constitutional Powers
- PS 3073 Civil Liberties
- PS 3183 Law and Politics
- PS 3193 Intergovernmental Relations
- PS 4113 State Government
- PS 4163 The Chief Executive
- PS 4173 Legislative Process
- PS 4183 Judicial Process
- PS 4193 Mississippi Judicial System
- PS 4203 Political Parties and Electoral Problems
- PS 4213 Campaign Politics
- PS 4223 The Dynamics of American Democracy
- PS 4233 Interest Groups
- PS 4243 State Election Policy and Politics
- PS 4263 Mississippi Government and Politics
- PS 4273 African American Politics *cross-listed AAS
- PS 4293 Political Behavior
- PS 4393 The Global Context
- PS 4464 Political Analysis
- PS 4523 Democracy and Inequality
- PS 4633 Democracy and Democratization
- PS 4643 Ethnic Conflict
- PS 4653 Nationalism
- PS 4743 Environmental Policy

Sincerely,

Brian Shorp

Dr. Brian Shoup Associate Professor Department of Political Science and Public Administration



Department of Psychology

P.O. Box 6161 110 Magruder Hall Mississippi State, MS 39762

P. 662.325.3202 F. 662.325.7212 www.psychology.msstate.edu

October 9, 2021

Dear Members of the UCCC:

The Department of Psychology is delighted to support a proposed minor in *Social Justice Studies*.

Members of the Department of Psychology Curriculum Committee and I have reviewed the proposal for the minor and support the inclusion of our courses. We understand that the minor in *Social Justice Studies* may include the following courses, which are currently part of our department's typical rotation:

- PSY 3203 Psychology of Gender Differences
- PSY 4223 Drug Use and Abuse

We also support the inclusion of the following courses, which are currently undergoing the UCCC vetting process:

- PSY 2123 Perspectives on Child Maltreatment and Child Advocacy*
- PSY 3123 Global Child Advocacy Issues*
- PSY 4133 Multidisciplinary Responses to Child Maltreatment/Trauma*

*cross-listed with HDFS

Sincerely,

mitil Ben

Mitchell E. Berman, Ph.D. Professor and Department Head

Email: mberman@psychology.msstate.edu Telephone: 662.325.3666



Department of Sociology P.O. Box C 456 Hardy Road/207 Bowen Hall Mississippi State, MS 39762 P. 662.325.2495 F. 662.325.4564 www.sociology.msstate.edu

October 25, 2021

Dear Chair, University Committee on Courses and Curriculum,

The Department of Sociology supports the new minor in Social Justice Studies. Members of the Undergraduate Curriculum and Policies Committee and the faculty have reviewed the proposal and support the utilization of our courses in this project. We understand that the minor in Social Justice Studies may include the following courses, which are part of our department's typical rotation.

- CRM 2003 Crime, Justice and Inequality
- CRM 3363 Globalization and Crime
- SO 1103 Contemporary Social Problems
- SO 1173 Intro to Gender Studies *cross-listed AN/GS
- SO 1303 Introduction to Social Justice Studies *cross-listed GS
- SO 2203 Introduction to Race and Ethnicity *cross-listed AAS/AN
- SO 3003 Social Inequality
- SO 3343 Gender, Crime and Justice *cross-listed CRM/GS
- SO 3353 Race, Crime and Justice *cross-listed AAS/CRM
- SO 3503 Violence in the United States *cross-listed CRM
- SO 4133 Feminist Theories *cross-listed EN/GS
- SO 4143 Gender, Race, and Social Movements *cross-listed AAS/GS
- SO 4153 Mentoring for At-Risk Youths *cross-listed CRM/SLCE
- SO 4173 Environment and Society *cross-listed AN
- SO 4233 Juvenile Delinquency *cross-listed CRM
- SO 4243 Drugs, Crime and Control *cross-listed CRM
- SO 4253 White Collar Crime and Elite Deviance *cross-listed CRM
- SO 4273 Sociology of Education
- SO 4323 Victimology *cross-listed CRM
- SO 4343 Media, Crime and Justice
- SO 4403 Sociology of Gender and Sexuality *cross-listed GS 4413
- SO 4423 Health and Society
- SO 4503 Gender and Work *cross-listed GS
- SO 4523 Law and Society *cross-listed CRM
- SO 4543 Gender and Food *cross-listed GS/SW
- SO 4643 Race and Media *cross-listed AAS/CO
- SO 4703 Population Problems and Processes

• SO 4733 Community: Organization and Relationships

Please do not hesitate to contact us if I may be of further assistance.

Sincerely,

Department of Sociology, Criminology and Social Work Undergraduate Curriculum and Policy Committee

by Vancil-Leap Ashley Vancil-Leap (Committee Chair) Robert Boyd Kenya Cistrunk Ashley Perry



MSU-MERIDIAN

Division of Arts & Sciences

College Park Campus 1000 Hwy 19 North Meridian, MS 39307

P. 601.484.0140 F. 601.484.0203 meridian.msstate.edu

11 October 2021

Dr. Andy Perkins, Chair University Committee on Courses and Curricula 281 Garner Hall P.O. Box 5268 Mississippi State, MS 39762

1

Dear Dr. Perkins,

I am pleased to provide a letter of support for the proposed interdisciplinary minor in Social Justice Studies developed by the Gender Studies program in the College of Arts & Sciences. This is a timely and important addition to the curriculum.

Given the demographic profile of the student body at the Meridian Campus (67% female, 42% non-white) and the lived experience of residents in Meridian and surrounding counties, this minor will potentially enjoy broad appeal among a range of Arts & Sciences majors.

Much of the proposed curriculum is currently offered at the Meridian Campus in the regular rotation of courses. We look forward to working with the Gender Studies program to provide access to the new introductory and capstone courses in Social Justice Studies.

Sincerely, Times

Richard V. Damms Associate Professor of History and Head Division of Arts & Sciences MSU-Meridian

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Bagley College of Engineering Department: Electrical & Computer Engineering

Contact Person: Jean Mohammadi-Aragh Mail Stop: 9571 E-mail: jean@ece.msstate.edu

Nature of Change: revise circuits/electronics sequence Date Initiated: 11/3/21 Effective Date: Fall 2022

Current Degree Program Name: Bachelor of Science in Computer Engineering

Major: Computer Engineering

Concentration:

New Degree Program Name:

Major: Computer Engineering Concentration:

Summary of Proposed Changes:

The changes proposed are as follows:

1. Shift from a three-course combined circuits/electronics sequence to two two-course circuits and two-course electronics sequences.

The degree program will require the same number of credit hours (11 credit hours) within these new sequences, but the new format will allow us to reorganize topics to be consistent with current textbooks and allow us to connect the lab experience with the first circuits course rather than the second. Further, additional flexibility added by these changes will result in the removal of a five-course sequence that will allow transfer students to complete their degree in a more timely manner.

Approved:

No Department Head

Dr. John Ball Digitally signed by Dr. John Ball Disc cu-DEC, Bull Careford and Careford Caref

Chair, College or School Curriculum Committee

Kari Babski-Reeves for Jason Keith

Dean of College or School

Date:

11/8/21

11/9/21

Digitally signed by Kari Babski-Reeves for Jason Keith Date: 2021.11.09 13:28:23 -06'00'

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

PROPOSAL FOR THE MODIFICATION OF THE B.S. IN COMPUTER ENGINEEIRNG

1. CATALOG DESCRIPTION

No changes proposed.

2. CURRICULUM OUTLINE

The changes proposed are as follows:

1. Shift from a three-course combined circuits/electronics sequence to two two-course circuits and two-course electronics sequences.

The degree program will require the same number of credit hours (11 credit hours) within these new sequences.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science in Computer Engineering	Degree: Bachelor of Science in Computer Engineering
Major: Computer Engineering	Major: Computer Engineering
Concentration: N/A	Concentration:
Alumni, employers, faculty and students participate in a	Alumni, employers, faculty and students participate in a
process used to develop educational objectives for the	process used to develop educational objectives for the
undergraduate programs in Electrical Engineering and	undergraduate programs in Electrical Engineering and
Computer Engineering. Within a few years of	Computer Engineering. Within a few years of
graduation, program graduates completing the	graduation, program graduates completing the
baccalaureate degree in Electrical or Computer	baccalaureate degree in Electrical or Computer
Engineering will:	Engineering will:
• Do man amized by their many as	• Do man an ized by their many of
• Be recognized by their peers as fundamentally sound in the application of	• Be recognized by their peers as
mathematics, science, computing, and	mathematics, science, computing, and
engineering	engineering
• Be engaged in the practice of	• Be engaged in the practice of
Flectrical or Computer Engineering as	Flectrical or Computer Engineering as
innovative problem solvers with a strong	innovative problem solvers with a strong
work ethic, by identifying and	work ethic, by identifying and
implementing solutions using the proper	implementing solutions using the proper
tools, practical approaches, and flexible	tools, practical approaches, and flexible
thinking.	thinking.
Be productive and demonstrate	• Be productive and demonstrate
leadership in the practice of Electrical or	leadership in the practice of Electrical or
Computer Engineering, both individually	Computer Engineering, both individually
and within multidisciplinary teams, using	and within multidisciplinary teams, using
effective oral and written communication	effective oral and written communication
skills when working with peers,	skills when working with peers,
supervisors, and the public.	supervisors, and the public.
• Be responsible in the practice of	• Be responsible in the practice of
Electrical or Computer Engineering,	Electrical or Computer Engineering,
relying on sound engineering ethics, a	relying on sound engineering ethics, a
commitment to lifelong learning and a	commitment to lifelong learning and a
genuine concern for society and the	genuine concern for society and the
environment.	environment.

TADIE I. COMDATISON OF CULTERIL CEL DEGLEE AND FLODOSED CEL DEGLEE FLOGTAM	Table 1.	Comr	parison	of Cur	rent CPI	E Degree	e and Pro	posed CPE	Degree Progra	ms
--	----------	------	---------	--------	----------	----------	-----------	-----------	----------------------	----

With the origin of the modern computer dating back to the late 1940's and the growth of computer hardware fueled by the availability of digital integrated circuits starting in the late 1960's, computer engineers have enjoyed a pivotal role in technology that now permeate our entire society. Whether the end product is an integrated circuit, a system of networked embedded computers, or any system that relies on digital hardware computers, or any system that relies on digital hardware or computer software, its development requires the skills of a computer engineer. While computing systems include both hardware and software, it is the optimal combination of these components that is the unique realm of the computer engineer. Today, computer engineers are a driving force in the technological and economic development of the digital age.

The curriculum requirements for computer engineering are built around a substantial engineering core curriculum and required courses in electrical engineering and computer science. The requirements in mathematics, the basic sciences, and engineering mathematics, the basic sciences, and engineering sciences provide the breadth of exposure required for all engineering disciplines. Basic electrical engineering requirements include circuit theory, electronics and requirements include circuit theory, electronics and digital devices which are supplemented by upper-level courses in computer architecture, and computer aided design of digital systems. Basic computer science courses include a coordinated sequence providing fundamental knowledge in data structures, algorithms, object oriented programming, software engineering, real-time application and software development tools. These courses are developed across multiple platforms and are based on the Python and Java language. Upperlevel courses in data communications and computer networks, algorithms and operating systems are also provided. Students wishing to gain depth of coverage in communications, parallel computing, VLSI, embedded communications, parallel computing, VLSI, embedded systems or signal processing can achieve this with the availability of technical electives selected from an approved list or in consultation with a faculty advisor. Required courses in communications skills, social sciences and humanities provide studies in nontechnical areas that are traditional in a broad-based education. A capstone senior design course requires students to apply newfound knowledge and explore entrepreneurship. Students research and identify a problem and work in teams applying a combination of hardware and software to develop a solution. Critical and Final Design Reviews enable students to develop their professional presentation skills.

Students expecting to graduate from Mississippi State University with a bachelor of science degree in computer engineering, in addition to satisfactorily completing the CPE curriculum requirements, must

With the origin of the modern computer dating back to the late 1940's and the growth of computer hardware fueled by the availability of digital integrated circuits starting in the late 1960's, computer engineers have enjoyed a pivotal role in technology that now permeates our entire society. Whether the end product is an integrated circuit, a system of networked embedded or computer software, its development requires the skills of a computer engineer. While computing systems include both hardware and software, it is the optimal combination of these components that is the unique realm of the computer engineer. Today, computer engineers are a driving force in the technological and economic development of the digital age.

The curriculum requirements for computer engineering are built around a substantial engineering core curriculum and required courses in electrical engineering and computer science. The requirements in sciences provide the breadth of exposure required for all engineering disciplines. Basic electrical engineering digital devices which are supplemented by upper-level courses in computer architecture, and computer aided design of digital systems. Basic computer science courses include a coordinated sequence providing fundamental knowledge in data structures, algorithms, object oriented programming, software engineering, real-time application and software development tools. These courses are developed across multiple platforms and are based on the Python and Java language. Upperlevel courses in data communications and computer networks, algorithms and operating systems are also provided. Students wishing to gain depth of coverage in systems or signal processing can achieve this with the availability of technical electives selected from an approved list or in consultation with a faculty advisor. Required courses in communications skills, social sciences and humanities provide studies in nontechnical areas that are traditional in a broad-based education. A capstone senior design course requires students to apply newfound knowledge and explore entrepreneurship. Students research and identify a problem and work in teams applying a combination of hardware and software to develop a solution. Critical and Final Design Reviews enable students to develop their professional presentation skills.

Students expecting to graduate from Mississippi State University with a bachelor of science degree in computer engineering, in addition to satisfactorily completing the CPE curriculum requirements, must meet the following minimum GPA requirements for graduation:

 meet the following minimum GPA requirent graduation: make an overall C average hours scheduled and reschedu institutions attended, including (2.00 or better cumulative GP. make a C average on all h scheduled and rescheduled at for better MSU GPA) earn at least a 2.5/4.0 aver hours with ECE or CSE cours scheduled and rescheduled at a institutions attended, including 	nents for e on all led at all g MSU A) nours MSU (2.00 rage on all e prefixes all g MSU edited by the ABET,	 make an overall C average hours scheduled and rescheduled institutions attended, including (2.00 or better cumulative GPA make a C average on all he scheduled and rescheduled at M or better MSU GPA) earn at least a 2.5/4.0 avera hours with ECE or CSE course scheduled and rescheduled at a institutions attended, including The computer engineering program is accreated institutions attended, including This program is offered through joint efforts in the Department of Electrical and Computer and Engineering. 	e on all ed at all MSU NSU (2.00 age on all prefixes ll MSU lited by the BET, of faculty er Science
This program is offered through joint effort in the Department of Electrical and Comput Engineering and the Department of Comput and Engineering.	s of faculty ter ter Science		
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
EN 1103 English Comp I or EN 1163 Accelerated Comp I EN 1113 English Comp II or EN 1173 Accelerated Comp II	6	EN 1103 English Comp I or EN 1104 Accelerated Comp I EN 1113 English Comp II or EN 1173 Accelerated Comp II	6
Fine Arts: see General Education courses	3	Fine Arts: see General Education courses	3
Natural Sciences see Major Core		Natural Sciences see Major Core	
Math see Major Core		Math see Major Core	
Humanities see General Education courses	6	Humanities see General Education courses	6
Social/Behavioral Sciences see General Education courses	6	Social/Behavioral Sciences see General Education courses	6
Major Core Courses Math and Basic Science (31h) MA 1713 Calculus I	3	Major Core Courses Math and Basic Science (31h) MA 1713 Calculus I	3

MA 1723 Calculus II	3	MA 1723 Calculus II	3
MA 2733 Calculus III	3	MA 2733 Calculus III	3
MA 2743 Calculus IV	3	MA 2743 Calculus IV	3
MA 3113 Introduction to Linear Algebra	3	MA 3113 Introduction to Linear Algebra	3
MA 3253 Differential Equations I	3	MA 3253 Differential Equations I	3
IE 4613 Engineering Statistics I	3	IE 4613 Engineering Statistics I	3
CH 1213 Chemistry I	3	CH 1213 Chemistry I	3
CH 1213 Chemistry I CH 1211 Investigations in Chemistry I	1	CH 1211 Investigations in Chemistry I	1
DL 2212 Druging I	2	DL 2212 Druging I	2
DH 2222 Dhysics I	3	DH 2222 Dhysics II	2
FIT 2225 FITYSICS II	5	rn 2225 rhysics n	3
Engineering Topics (70h)		Engineering Topics (70h)	
CSE 1284 Introduction to Computer	4	CSE 1284 Introduction to Computer	4
Programming		Programming	
CSE 1384 Intermediate Computer	4	CSE 1384 Intermediate Computer	4
Programming		Programming	
CSE 2383 Data Structures and Analysis of	3	CSE 2383 Data Structures and Analysis of	3
Algorithms		Algorithms	
CSE 2813 Discrete Structures	3	CSE 2813 Discrete Structures	3
CSE 3324 Distributed Client/Server	4	CSE 3324 Distributed Client/Server	4
Programming	-	Programming	-
CSE 4733 Operating Systems I	3	CSE 4733 Operating Systems I	3
CSE 4833 Intro Analysis of Algorithms	3	CSE 4833 Intro Analysis of Algorithms	3
ECE 1013 Introduction to ECE Design I	3	ECE 1013 Introduction to ECE Design I	2
ECE 1013 Introduction to ECE Design I	5	ECE 1013 Introduction to ECE Design I	5 0
ECE 1022 Introduction to ECE Design II	2	ECE 1022 Introduction to ECE Design II	2
ECE 3413 Introduction to Electronic	3	ECE 3423 Circuits I	3
Circuits		ECE 3421 Circuits I Lab	1
ECE 3424 Intermediate Electronic	4	ECE 3433 Circuits II	3
Circuits		ECE 3244 Electronics I	4
ECE 3434 Advanced Electronic Circuits	4	ECE 3443 Signals and Systems	3
ECE 3443 Signals and Systems	3	ECE 3714 Digital Devices and Logic	4
ECE 3714 Digital Devices and Logic	4	Design	
Design		ECE 3724 Microprocessors	4
ECE 3724 Microprocessors	4	ECE 4723 Embedded Systems or ECE 4263	3
ECE 4723 Embedded Systems or ECE	3	Principles of VLSI Design	
4263 Principles of VLSI Design	_	ECE 4532 CPE Design I	2
ECE 4532 CPE Design I	2	ECE 4542 CPE Design I	2
ECE 4552 CPE Design I	2	ECE 4713 Computer Architecture	2
ECE 4712 Computer Architecture	2	ECE 4713 Computer Architecture	2
ECE 4713 Computer Architecture	2	ECE 4745 Digital System Design	2
ECE 4/45 Digital System Design	2	ECE 4855 Data Communication and	3
ECE 4833 Data Communication and	3	Computer Networks	(
Computer Networks	r	CPE technical electives (6h)	6
CPE technical electives (6h)	6		
		Oral Communication Requirement	
Oral Communication Requirement		Fulfilled in ECE 1013, ECE 1022, ECE	
Fulfilled in ECE 1013, ECE 1022, ECE		4532, ECE 4542, and GE 3513	
4532, ECE 4542, and GE 3513			
		Writing Requirement	
Writing Requirement		GE 3513 Technical Writing	3
GE 3513 Technical Writing	3	6	
		Computer Literacy Fulfilled in Engineering	
Computer Literacy Fulfilled in Engineering		Topics courses	
Topics courses		Toples couldes	
1 00100 0001000			
Concentration Courses		Concentration Courses	

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

128

We are shifting from a three-course sequence of combined circuits/electronics topics to two twocourse sequences. The degree program will require the same number of credit hours (11 credit hours) within these new sequences, but the new format will allow us to reorganize topics to be consistent with current textbooks and allow us to connect the lab experience with the first circuits course rather than the second. Further, additional flexibility added by these changes will result in the removal of a fivecourse sequence that will allow transfer students to complete their degree in a more-timely manner.

- 1. Update Circuits/Electronics Sequence: The key motivations for revising and updating the Circuits and Electronics course sequence is to better prepare students to effectively solve circuits and electronics problems. The benefits of moving to two separate sequences are numerous. A few benefits include:
 - a. The merged circuits and electronics courses often cause confusion. Though circuits and electronics are closely-related topics, they are not the same. Students have trouble separating the two concepts. Moreover, most universities teach the topics separately, and it is hard for students to transfer credit to MSU that provides credit for our current sequence.
 - b. Though we are updating the sequence, we will continue to teach ECE 3413 Introduction to Electronic Circuits. ECE 3413 is required by other engineering majors but will no longer be required for ECE students. This returns us to our historical practices of offering a circuits/electronics course dedicated to non-majors. This allows us to offer a more effective curriculum for ECE and non-ECE students because course topics can be fine-tuned and offered at more appropriate levels for ECE and non-ECE students.
 - c. This update will allow us to shift a lab experience to the initial circuits course for ECE students. Currently, students are struggling in our circuits sequence. The ECE faculty think a hands-on lab experience in the first course will allow students to better grasp the material. Since circuits and electronics build on the fundamental concepts taught in the initial circuits course, it is critical for students to thoroughly understand the topics.
 - d. This reorganization and update will allow us to use the second circuits course a bridge for our signals and systems courses. We have identified signals and systems as a trouble area for student success. The signals and systems course covers numerous, complex topics. We are evaluating ways to reorganize that course, but for now, a first step is to provide some exposure to topics in earlier, related courses. This reorganization provides the opportunity to do that.
 - e. This reorganization will remove a five-course prerequisite chain that is currently in the program due to the three-course combined circuits/electronics sequence (ECE 3413 ECE 3424 ECE 3434) which is followed by a two-course senior design sequence (ECE 4512 ECE 4522). Now transfer students will be able to enroll in senior design by their third semester and can finish their degree in four semesters instead of five semesters.

To provide clarity for circuits/electronics change. The below summaries are provided.

<u>Current required courses</u> impacted by this change (11 credit hours for EE and CPE):

- ECE 3413 currently required for EE, CPE, AE, IE, and ME. Will continue offering and in the future work with AE, IE, and ME faculty to revise topics, if needed, for their students.
- ECE 3424 currently required for EE and CPE; will phase out
- ECE 3434 currently required for EE and CPE; will phase out
- Several courses will need prerequisite updates after new sequence is approved; these will be processed as technical changes when new courses are approved.

<u>New required</u> courses proposed (11 credit hours for EE and CPE):

- ECE 3423 Circuits I required for EE and CPE. Equivalent to ECE 3413 but requires co-registration in lab.
- ECE 3421 Circuits I Lab new standalone lab for introductory circuits topics. (Students who take ECE 3413 can take this lab to continue in ECE circuits and electronics courses.)
- ECE 3433 Circuits II required for EE and CPE. New course to bridge circuits and signals and systems. Additional applications for circuits topics.
- ECE 3244 Electronics I required for EE and CPE. Equivalent to ECE 3424

New elective courses proposed:

• ECE 3253 Electronics II (elective) – advanced electronics topics from current ECE 3434; can be taken as a technical elective.

As a result of this degree program modification, there are no changes to the student learning outcomes. The CPE student learning outcomes are as follows:

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- 2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- 3. an ability to communicate effectively with a range of audiences
- 4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- 5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- 6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- 7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
- Will this program change meet local, state, regional, and national educational and cultural needs? Yes

- Will this program change result in duplication in the System? No
- Will this program change/advance student diversity within the discipline? No
- Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.? **No**
- Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.? **No**

4. SUPPORT

See the attached letter from the ECE Undergraduate Committee. Changes in this degree program were discussed multiple times throughout the 2020-2021 academic year. Changes were recommended by the ECE Undergraduate Committee by unanimous vote in their March 22, 2021 meeting and approved by a vote of the ECE faculty on March 26, 2021.

See letter of support from CSE Department.

5. PROPOSED 4-LETTER ABBREVIATION

No changes

6. EFFECTIVE DATE Fall 2022



March 26, 2021

TO: James W. Bagley College of Engineering Committee on Courses and Curricula & Mississippi State University University Committee on Courses and Curricula

FROM: Undergraduate Program Committee, Department of Electrical & Computer Engineering

RE: EE and CPE Degree Program Modifications

The CPE and EE degree program modifications submitted herein, including accompanying course revisions, were unanimously recommended by the ECE Undergraduate Committee on 3/22/2021 and approved by final vote of the ECE faculty on 3/26/2021.

Digitally signed by Dr John Ball DN: cn=Dr John Ball, o=MSU, Dr John Ball email=jeball@ece.msstate.edu, c Date: 2021.03.23 10:51:35 -05'00

John Ball ECE Undergraduate Committee Chair

J. Patrick Donohoe

Digitally signed by J. Patrick Donohoe DN: cn=J. Patrick Donohoe, o=Mssissippi State University, ou=Department of Electrical and Computer Engineering, email=donohoe@ce.msstate.edu, c=US Date: 2021.03.23 11:32:09 -05'00'

itally signed by Umar Iqbal : cn=Umar Iqbal, o=Mississippi versity, ou=Electrical & Compu

Pat Donohoe Professor and Paul B. Jacob Chair

reen

Ryan Green Assistant Professor



email=umar@ece.msstate.edu, c=US Date: 2021.03.23 15:48:47 -05'00' Umar Iqbal

Assistant Clinical Professor Digitally signed by Khalid

Khalid Miah Date: 2021.03.24 08:45:10 -05'00'

Khalid Miah Assistant Clinical Professor

al in

Jean Mohammadi-Aragh ECE Undergraduate Committee Vice-Chair

Digitally signed by Ali

Digitally signed by Randolph F. Follet Date: 2021.03.23 15:37:08 -05'00'

Randy Follett Associate Professor

Ali Cafer Gurbuz

Cafer Gurbuz Date: 2021 03 23 15:41:03 -05'00'

Ali Gurbuz Assistant Professor

Masoud Karimi

Masoud Karimi-Ghartemani Associate Professor

Jane N

Digitally signed by Jane N Moorhead Date: 2021.03.25 Moorhead 15:52:54 -05'00'

Digitally signed by

Masoud Karimi Date: 2021.03.23

22:24:12 -05'00'

Jane Moorhead Instructor



Andy D. Perkins, Ph.D. Professor and Associate Department Head perkins@cse.msstate.edu

September 14, 2021

Dear Dr. Mohammadi-Aragh:

The Department of Computer Science and Engineering supports the proposed changes to circuits/electronics sequence required for the BS in Computer Engineering.

Andy D. Perkins, PhD Professor and Associate Department Head

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Bagley College of Engineering Department: Electrical & Computer Engineering

Contact Person: Jean Mohammadi-Aragh Mail Stop: 9571 E-mail: jean@ece.msstate.edu

Nature of Change: Update EE GPA requirement modifications, add flexibility through technical elective options, revise circuits/electronics sequence, add concentration

Date Initiated: 11/3/21 **Effective Date:** Fall 2022

Current Degree Program Name: Bachelor of Science in Electrical Engineering

Major: Electrical Engineering	Concentration:
New Degree Program Name:	
Major: Electrical Engineering	Concentration: Electrical Engineering, Power and Energy Engineering

Summary of Proposed Changes:

A summary of proposed changes follows:

- 1. Update the GPA requirements for EE
- 2. Remove ECE 3213 Solid State course from degree program and replace with an ECE technical elective option to increase flexibility.
- 3. Shift from a three-course combined circuits/electronics sequence to two two-course circuits and twocourse electronics sequences. The degree program will require the same number of credit hours (11 credit hours) within these new sequences.
- 4. Add language for Power and Energy Engineering concentration

Approved:

Date:

Department Head

Dr. John Bal Digitally signed by Dr. John Ball DN: cn=Dr. John Ball, o=ECE, ou=ECE, email=jeball@ece.msstate.edu, c=US Date: 2021.11.09 08:24:46 -06'00' 11/9/21

11/8/21

Chair, College or School Curriculum Committee

Kari Babski-Reeves for Jason Keith Digitally signed by Kari Babski-Reeves for Jason Keith Date: 2021.11.09 13:27:21 -06'00'

Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

PROPOSAL FOR THE MODIFICATION OF THE B.S. IN ELECTRICAL ENGINEEIRNG

1. CATALOG DESCRIPTION

No changes proposed.

2. CURRICULUM OUTLINE

The changes proposed are as follows:

- 1. Update the GPA requirements for EE
 - a. EOP 21 was mistakenly removed in a previous change. The following language from EOP 21 will be added: earn at least a 2.00 cumulative grade point average on all courses scheduled and rescheduled (average on all attempts) at MSU that are applied toward meeting degree requirements.
 - b. Remove "scheduled and rescheduled" for 2.5/4.0 GPA average requirement: Replace "earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes scheduled and rescheduled at all institutions attended, including MSU." with "earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes at all institutions attended, including MSU, that are applied toward meeting degree requirements."
- 2. Remove ECE 3213 Solid State course from degree program and replace with an ECE technical elective option to increase flexibility.
- 3. Shift from a three-course combined circuits/electronics sequence to two two-course circuits and twocourse electronics sequences. The degree program will require the same number of credit hours (11 credit hours) within these new sequences.
- 4. Add Power and Energy Engineering concentration.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science in Electrical Engineering	Degree: Bachelor of Science in Electrical Engineering
Major: Electrical Engineering	Major: Electrical Engineering
Concentration: N/A	Concentration: Electrical Engineering
Alumni, employers, faculty and students participate in a process used to develop educational objectives for the undergraduate programs in Electrical Engineering and Computer Engineering. Within a few years of graduation, program graduates completing the baccalaureate degree in Electrical or Computer Engineering will:	Alumni, employers, faculty and students participate in a process used to develop educational objectives for the undergraduate programs in Electrical Engineering and Computer Engineering. Within a few years of graduation, program graduates completing the baccalaureate degree in Electrical or Computer Engineering will:
 Be recognized by their peers as fundamentally sound in the application of mathematics, science, computing, and engineering. Be engaged in the practice of Electrical or Computer Engineering as innovative problem solvers with a strong work ethic, by identifying and implementing solutions using the proper tools, practical approaches, and flexible thinking. Be productive and demonstrate leadership in the practice of Electrical or Computer Engineering, both individually and within multidisciplinary teams, using effective oral 	 Be recognized by their peers as fundamentally sound in the application of mathematics, science, computing, and engineering. Be engaged in the practice of Electrical or Computer Engineering as innovative problem solvers with a strong work ethic, by identifying and implementing solutions using the proper tools, practical approaches, and flexible thinking. Be productive and demonstrate leadership in the practice of Electrical or Computer Engineering, both individually and within multidisciplinary teams, using effective oral

and written communication skills when working with peers, supervisors, and the public.

• Be responsible in the practice of Electrical or Computer Engineering, relying on sound engineering ethics, a commitment to lifelong learning and a genuine concern for society and the environment.

The electrical engineer is a principal contributor to the modern technological age in which we live today. Following in the footsteps of inventors such as Thomas Edison and Alexander Graham Bell, the electrical engineer is developing technology that improves the quality of life. Developments in microelectronics, telecommunications, and power systems have had a profound effect on each of us. Electrical engineers have affected all segments of our society such as transportation, medicine, and the entertainment industry, to name only a few. Indeed, the electrical engineer has principally been responsible for the advent of the computer age in which we live today as well as the computer's miniaturization and rapid expansion in computational power.

The curriculum in electrical engineering has a foundation based on the principles of the electrical and physical sciences and uses mathematics as a common language to facilitate the solution of engineering problems. The core curriculum consists of a sequence of courses in digital devices, circuits and electronics, electromagnetic field theory, and modern energy conversion. In the senior year, students have the opportunity to take additional course work in one or more technical areas that include: telecommunications, electromagnetics, power systems, high voltage, feedback control systems, microelectronics, signal processing, and computer systems. Supporting course work outside electrical engineering consists of a strong background in mathematics, physical sciences, computer programming, social sciences, fine arts, humanities, and personal communication skills. Computers are used extensively throughout the curriculum, and students are expected to become proficient in higher-order programming languages and several application software tools. Although the concept of design is stressed throughout the program so as to emphasize the problem-solving skills of the engineer, the senior year includes a capstone design experience where much of the previous study is culminated. Through this two-semester design course sequence, students are required to integrate design and analytical problem-solving skills together with communication skills in a team environment. Students expecting to graduate from Mississippi State University with a bachelor of science degree in electrical engineering, in addition to satisfactorily completing the EE curriculum requirements, must meet the following minimum GPA requirements for graduation:

and written communication skills when working with peers, supervisors, and the public.

• Be responsible in the practice of Electrical or Computer Engineering, relying on sound engineering ethics, a commitment to lifelong learning and a genuine concern for society and the environment.

The electrical engineer is a principal contributor to the modern technological age in which we live today. Following in the footsteps of inventors such as Thomas Edison and Alexander Graham Bell, the electrical engineer is developing technology that improves the quality of life. Developments in microelectronics, telecommunications, and power systems have had a profound effect on each of us. Electrical engineers have affected all segments of our society such as transportation, medicine, and the entertainment industry, to name only a few. Indeed, the electrical engineer has principally been responsible for the advent of the computer age in which we live today as well as the computer's miniaturization and rapid expansion in computational power.

The curriculum in electrical engineering has a foundation based on the principles of the electrical and physical sciences and uses mathematics as a common language to facilitate the solution of engineering problems. The core curriculum consists of a sequence of courses in digital devices, circuits and electronics, electromagnetic field theory, and modern energy conversion. In the senior year, students have the opportunity to take additional course work in one or more technical areas that include: telecommunications, electromagnetics, power systems, high voltage, feedback control systems, microelectronics, signal processing, and computer systems. Supporting course work outside electrical engineering consists of a strong background in mathematics, physical sciences, computer programming, social sciences, fine arts, humanities, and personal communication skills. Computers are used extensively throughout the curriculum, and students are expected to become proficient in higher-order programming languages and several application software tools. Although the concept of design is stressed throughout the program so as to emphasize the problem-solving skills of the engineer, the senior year includes a capstone design experience where much of the previous study is culminated. Through this two-semester design course sequence, students are required to integrate design and analytical problem-solving skills together with communication skills in a team environment. Students expecting to graduate from Mississippi State University with a bachelor of science degree in electrical engineering, in addition to satisfactorily completing the EE curriculum requirements, must meet the following minimum GPA requirements for graduation:

 make an overall C average on all hours scheduled and rescheduled at all institutions attended, including MSU (2.00 or better cumulative GPA) make a C average on all hours scheduled and rescheduled at MSU (2.00 or better MSU GPA) earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes scheduled and rescheduled at all institutions attended, including MSU The electrical engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. "[Click here and type old concentration description]" 		 make an overall C average on all hours scheduled and rescheduled at all institutions attended, including MSU (2.00 or better cumulative GPA) make a C average on all hours scheduled and rescheduled at MSU (2.00 or better MSU GPA) earn at least a 2.00 cumulative grade point average on all courses scheduled and rescheduled (average on all attempts) at MSU that are applied toward meeting degree requirements earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes at all institutions attended, including MSU, that are applied toward meeting degree requirements The electrical engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The electrical engineering concentration allows students the flexibility to take a broad range of course in a minimum of two topic areas. Students may take a variety of courses that fit their individual 	
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
EN 1103 English Comp I or EN 1163 Accelerated Comp I EN 1113 English Comp II or EN 1173 Accelerated Comp II	6	EN 1103 English Comp I or EN 1104 Accelerated Comp I EN 1113 English Comp II or EN 1173 Accelerated Comp II	6
Fine Arts: see General Education courses	3	Fine Arts: see General Education courses	3
Natural Sciences see Major Core		Natural Sciences see Major Core	
Math see Major Core		Math see Major Core	
Humanities see General Education courses	6	Humanities see General Education courses	6
Social/Behavioral Sciences see General Education courses	6	Social/Behavioral Sciences see General Education courses	6
Major Core Courses Math and Basic Science (31h) MA 1713 Calculus I MA 1723 Calculus II MA 2733 Calculus III	3 3 3	Major Core Courses Math and Basic Science (31h) MA 1713 Calculus I MA 1723 Calculus II MA 2733 Calculus III	3 3 3
MA 2743 Calculus IV MA 3113 Introduction to Linear Algebra	3 3	MA 2743 Calculus IV MA 3113 Introduction to Linear Algebra	3 3

MA 3253 Differential Equations I	3	MA 3253 Differential Equations I	3
IE 4613 Engineering Statistics I	3	IE 4613 Engineering Statistics I	3
CH 1213 Chemistry I	3	CH 1213 Chemistry I	3
CH 1211 Investigations in Chemistry I	1	CH 1211 Investigations in Chemistry I	1
PH 2213 Physics I	3	PH 2213 Physics I	3
PH 2223 Physics II	3	PH 2223 Physics II	3
Engineering Topics (70h)		Engineering Topics (61h)	
CSE 1284 Introduction to Computer	4	CSE 1284 Introduction to Computer	4
Programming		Programming	
CSE 1384 Intermediate Computer	4	CSE 1384 Intermediate Computer	4
Programming		Programming	
CSE 2383 Data Structures and Analysis of	3	CSE 2383 Data Structures and Analysis of	3
Algorithms		Algorithms	
ECE 1013 Introduction to ECE Design I	3	ECE 1013 Introduction to ECE Design I	3
ECE 1022 Introduction to ECE Design II	2	ECE 1022 Introduction to ECE Design II	2
ECE 3213 Introduction to Solid State	3	ECE 3423 Circuits I	3
Electronics	-	ECE 3421 Circuits I Lab	1
ECE 3413 Introduction to Electronic	3	ECE 3433 Circuits II	3
Circuits	-	ECE 3244 Electronics I	4
ECE 3424 Intermediate Electronic Circuits	4	ECE 3443 Signals and Systems	3
ECE 3434 Advanced Electronic Circuits	4	ECE 3313 Electromagnetics I	3
FCE 3443 Signals and Systems	3	FCE 3323 Electromagnetics II	3
FCE 3313 Electromagnetics I	3	FCE 3614 Fundamentals of Energy Systems	4
ECE 3323 Electromagnetics II	3	ECE 4512 FE Design I	2
ECE 3614 Fundamentals of Energy Systems	4	ECE 4572 EE Design I	2
ECE 4512 FF Design I	2	FCF 3714 Digital Devices and Logic Design	4
FCE 4522 FE Design I	2	ECE 3724 Microprocessors	4
FCE 3714 Digital Devices and Logic	4	EM 2413 Engineering Mechanics Lor ME	3
Design	•	3513 Thermodynamics I	5
FCE 3724 Microprocessors	4	Engineering Science elective (3h)	3
EM 2413 Engineering Mechanics I or ME	3	Professional Enrichment elective (3h)	3
3513 Thermodynamics I	5		0
<i>EE technical electives (9h)</i>	9	Oral Communication Requirement	
Engineering Science elective (3h)	3	Fulfilled in ECE 1013. ECE 1022. ECE	
Professional Enrichment elective (3h)	3	4512. ECE 4522. and GE 3513	
	-	,,,,	
Oral Communication Requirement		Writing Requirement	
Fulfilled in ECE 1013, ECE 1022, ECE		GE 3513 Technical Writing	3
4512, ECE 4522, and GE 3513		5	
		Computer Literacy Fulfilled in Engineering	
Writing Requirement		Topics courses	
GE 3513 Technical Writing			
	3		
Computer Literacy Fulfilled in Engineering	-		
Topics courses			
Concentration Courses		Concentration Courses	
		EE technical electives	12
		(see advisor for list of approved elective	
		courses)	

Total Hours 128 Total Hours 128				
	Total Hours	128	Total Hours	128

CURRENT Degree Description	PROPOSED Degree Description	
Degree: Bachelor of Science in Electrical Engineering	Degree: Bachelor of Science in Electrical Engineering	
Major: Electrical Engineering	Major: Electrical Engineering	
Concentration: N/A	Concentration: Power and Energy Engineering	
Alumni, employers, faculty and students participate in a process used to develop educational objectives for the undergraduate programs in Electrical Engineering and Computer Engineering. Within a few years of graduation, program graduates completing the baccalaureate degree in Electrical or Computer Engineering will:	Alumni, employers, faculty and students participate in a process used to develop educational objectives for the undergraduate programs in Electrical Engineering and Computer Engineering. Within a few years of graduation, program graduates completing the baccalaureate degree in Electrical or Computer Engineering will:	
 Be recognized by their peers as fundamentally sound in the application of mathematics, science, computing, and engineering. Be engaged in the practice of Electrical or Computer Engineering as innovative problem solvers with a strong work ethic, by identifying and implementing solutions using the proper tools, practical approaches, and flexible thinking. Be productive and demonstrate leadership in the practice of Electrical or Computer Engineering, both individually and within multidisciplinary teams, using effective oral and written communication skills when working with peers, supervisors, and the public. Be responsible in the practice of Electrical or Computer Engineering, relying on sound engineering ethics, a commitment to lifelong learning and a genuine concern for society and the environment. 	 Be recognized by their peers as fundamentally sound in the application of mathematics, science, computing, and engineering. Be engaged in the practice of Electrical or Computer Engineering as innovative problem solvers with a strong work ethic, by identifying and implementing solutions using the proper tools, practical approaches, and flexible thinking. Be productive and demonstrate leadership in the practice of Electrical or Computer Engineering, both individually and within multidisciplinary teams, using effective oral and written communication skills when working with peers, supervisors, and the public. Be responsible in the practice of Electrical or Computer Engineering, relying on sound engineering ethics, a commitment to lifelong learning and a genuine concern for society and the environment. 	
The electrical engineer is a principal contributor to the modern technological age in which we live today. Following in the footsteps of inventors such as Thomas Edison and Alexander Graham Bell, the electrical engineer is developing technology that improves the quality of life. Developments in microelectronics, telecommunications, and power systems have had a profound effect on each of us. Electrical engineers have affected all segments of our society such as transportation, medicine, and the entertainment industry, to name only a few. Indeed, the electrical engineer has principally been responsible for the advent of the computer age in which we live today as well as the computer's miniaturization and rapid expansion in computational power.	The electrical engineer is a principal contributor to the modern technological age in which we live today. Following in the footsteps of inventors such as Thomas Edison and Alexander Graham Bell, the electrical engineer is developing technology that improves the quality of life. Developments in microelectronics, telecommunications, and power systems have had a profound effect on each of us. Electrical engineers have affected all segments of our society such as transportation, medicine, and the entertainment industry, to name only a few. Indeed, the electrical engineer has principally been responsible for the advent of the computer age in which we live today as well as the computer's miniaturization and rapid expansion in computational power.	
The curriculum in electrical engineering has a foundation based on the principles of the electrical and physical sciences and uses mathematics as a common	The curriculum in electrical engineering has a foundation based on the principles of the electrical and physical sciences and uses mathematics as a common	

language to facilitate the solution of engineering problems. The core curriculum consists of a sequence of courses in digital devices, circuits and electronics, electromagnetic field theory, and modern energy conversion. In the senior year, students have the opportunity to take additional course work in one or more technical areas that include: telecommunications, electromagnetics, power systems, high voltage, feedback control systems, microelectronics, signal processing, and computer systems. Supporting course work outside electrical engineering consists of a strong background in mathematics, physical sciences, computer programming, social sciences, fine arts, humanities, and personal communication skills. Computers are used extensively throughout the curriculum, and students are expected to become proficient in higher-order programming languages and several application software tools. Although the concept of design is stressed throughout the program so as to emphasize the problem-solving skills of the engineer, the senior year includes a capstone design experience where much of the previous study is culminated. Through this two-semester design course sequence, students are required to integrate design and analytical problem-solving skills together with communication skills in a team environment. Students expecting to graduate from Mississippi State University with a bachelor of science degree in electrical engineering, in addition to satisfactorily completing the EE curriculum requirements, must meet the following minimum GPA requirements for graduation:

- make an overall C average on all hours scheduled and rescheduled at all institutions attended, including MSU (2.00 or better cumulative GPA)
- make a C average on all hours scheduled and rescheduled at MSU (2.00 or better MSU GPA)
- earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes scheduled and rescheduled at all institutions attended, including MSU

The electrical engineering program is accredited by the Engineering Accreditation Commission of ABET, <u>http://www.abet.org</u>.

"[Click here and type old concentration description]"

language to facilitate the solution of engineering problems. The core curriculum consists of a sequence of courses in digital devices, circuits and electronics, electromagnetic field theory, and modern energy conversion. In the senior year, students have the opportunity to take additional course work in one or more technical areas that include: telecommunications, electromagnetics, power systems, high voltage, feedback control systems, microelectronics, signal processing, and computer systems. Supporting course work outside electrical engineering consists of a strong background in mathematics, physical sciences, computer programming, social sciences, fine arts, humanities, and personal communication skills. Computers are used extensively throughout the curriculum, and students are expected to become proficient in higher-order programming languages and several application software tools. Although the concept of design is stressed throughout the program so as to emphasize the problem-solving skills of the engineer, the senior year includes a capstone design experience where much of the previous study is culminated. Through this two-semester design course sequence, students are required to integrate design and analytical problem-solving skills together with communication skills in a team environment. Students expecting to graduate from Mississippi State University with a bachelor of science degree in electrical engineering, in addition to satisfactorily completing the EE curriculum requirements, must meet the following minimum GPA requirements for graduation:

- make an overall C average on all hours scheduled and rescheduled at all institutions attended, including MSU (2.00 or better cumulative GPA)
- make a C average on all hours scheduled and rescheduled at MSU (2.00 or better MSU GPA)
- earn at least a 2.00 cumulative grade point average on all courses scheduled and rescheduled (average on all attempts) at MSU that are applied toward meeting degree requirements
 earn at least a 2.5/4.0 average on all hours
 - with ECE or CSE course prefixes at all institutions attended, including MSU, that are applied toward meeting degree requirements

The electrical engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

CONCENTRATION DESCRIPTION

Power and Energy Engineering Concentration. Engineers employed in the power and energy systems workforce need a fundamental knowledgebase in power distribution and power transmission plus a working knowledge of high voltage, power

		electronics, relays, or insulation. This concentration prepares students for jobs in power and energy industries, especially utilities.	
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
EN 1103 English Comp I or EN 1163	6	EN 1103 English Comp I or EN 1104	6
Accelerated Comp I		Accelerated Comp I	
EN 1113 English Comp II or EN 1173		EN 1113 English Comp II or EN 1173	
Accelerated Comp II		Accelerated Comp II	
Fine Arts:	3	Fine Arts:	3
see General Education courses		see General Education courses	
Natural Sciences		Natural Sciences	
see Major Core		see Major Core	
Math		Math	
see Major Core		see Major Core	
Humanities	6	Humanities	6
see General Education courses		see General Education courses	
Social/Behavioral Sciences	6	Social/Behavioral Sciences	6
see General Education courses		see General Education courses	
Major Core Courses		Major Core Courses	
Math and Basic Science (31h)		Math and Basic Science (31h)	
MA 1713 Calculus I	3	MA 1713 Calculus I	3
MA 1723 Calculus II	3	MA 1723 Calculus II	3
MA 2733 Calculus III	3	MA 2733 Calculus III	3
MA 2743 Calculus IV	3	MA 2743 Calculus IV	3
MA 3113 Introduction to Linear Algebra	3	MA 3113 Introduction to Linear Algebra	3
MA 3253 Differential Equations I	3	MA 3253 Differential Equations I	3
IE 4613 Engineering Statistics I	3	IE 4613 Engineering Statistics I	3
CH 1213 Chemistry I	3	CH 1213 Chemistry I	3
CH 1211 Investigations in Chemistry I	1	CH 1211 Investigations in Chemistry I	1
PH 2213 Physics I	3	PH 2213 Physics I	3
PH 2223 Physics II	3	PH 2223 Physics II	3
Engineering Topics (70h)		Engineering Topics (61h)	
CSE 1284 Introduction to Computer	4	CSE 1284 Introduction to Computer	4
Programming		Programming	
CSE 1384 Intermediate Computer	4	CSE 1384 Intermediate Computer	4
Programming CSE 2383 Data Structures and Analysis of	3	Programming CSE 2383 Data Structures and Analysis of	3
Algorithms	-	Algorithms	-
ECE 1013 Introduction to ECE Design I	3	ECE 1013 Introduction to ECE Design I	3
ECE 1022 Introduction to ECE Design II	2	ECE 1022 Introduction to ECE Design II	2
ECE 3213 Introduction to Solid State	3	ECE 3423 Circuits I	3
Electronics		ECE 3421 Circuits I Lab	1
ECE 3413 Introduction to Electronic	3	ECE 3433 Circuits II	3
Circuits		ECE 3244 Electronics I	4

ECE 3424 Intermediate Electronic Circuits	4	ECE 3443 Signals and Systems	3
ECE 3434 Advanced Electronic Circuits	4	ECE 3313 Electromagnetics I	3
ECE 3443 Signals and Systems	3	ECE 3323 Electromagnetics II	3
ECE 3313 Electromagnetics I	3	ECE 3614 Fundamentals of Energy Systems	4
ECE 3323 Electromagnetics II	3	ECE 4512 EE Design I	2
ECE 3614 Fundamentals of Energy Systems	4	ECE 4522 EE Design II	2
ECE 4512 EE Design I	2	ECE 3714 Digital Devices and Logic Design	4
ECE 4522 EE Design II	2	ECE 3724 Microprocessors	4
ECE 3714 Digital Devices and Logic	4	EM 2413 Engineering Mechanics I or ME	3
Design		3513 Thermodynamics I	
ECE 3724 Microprocessors	4	Engineering Science elective (3h)	3
EM 2413 Engineering Mechanics I or ME	3	Professional Enrichment elective (3h)	3
3513 Thermodynamics I			
<i>EE technical electives (9h)</i>	9	Oral Communication Requirement	
Engineering Science elective (3h)	3	Fulfilled in ECE 1013, ECE 1022, ECE	
Professional Enrichment elective (3h)	3	4512, ECE 4522, and GE 3513	
	-	,,,	
Oral Communication Requirement		Writing Requirement	
Fulfilled in ECE 1013. ECE 1022. ECE		GE 3513 Technical Writing	3
4512, ECE 4522, and GE 3513			-
,,,		Computer Literacy Fulfilled in Engineering	
Writing Requirement		Topics courses	
GE 3513 Technical Writing	3		
	0		
Computer Literacy Fulfilled in Engineering			
Topics courses			
Concentration Courses		Concentration Courses	
		Power and Energy Engineering	
		ECE 4613 Power Transmission Systems	3
		ECE 4633 Power Distribution Systems	3
		Power and Energy Electives (6h)	6
		Choose from:	
		ECE 4643 Power Systems Relaying &	
		Control	
		ECE 4653 Power Electronics	
		ECE 4663 Insulation Coordination in	
		Electric Power Systems	
		ECE 4673 Fundamentals of High Voltage	
		Engineering	
		(see advisor for list of additional approved	
		elective courses)	
	120	T / 111	120
I otal Hours	128	I otal Hours	128

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

This modification is being made in order to provide a more flexible curriculum for students in our department. These changes are supported by a longitudinal analysis of departmental student exit surveys and interviews, updates to the ABET accreditation criteria following our accreditation visit in Fall 2017, and a comparison of MSU's EE degree program with other EE programs nationwide. These changes enable some EE students to choose an area of concentration and complete a series of courses to build depth of knowledge within that concentration, The proposed changes in this modification form will, in the future, enable us to propose additional concentrations within electrical engineering so that students' concentrations are noted on their transcript. This modification will add an initial concentration in Power and Energy with subsequent concentrations forthcoming.

Additionally, we will shift from a three-course sequence of combined circuits/electronics topics to two two-course sequences. The degree program will require the same number of credit hours (11 credit hours) within these new sequences, but the new format will allow us to reorganize topics to be consistent with current textbooks and allow us to connect the lab experience with the first circuits course rather than the second. Further, additional flexibility added by these changes will result in the removal of a five-course sequence that will allow transfer students to complete their degree in a more-timely manner.

In sum, these changes are very positive for our students.

- 1. **EE Degree Program GPA Updates:** A degree program change initiated on Feb 1, 2018 and discussed at the March 23, 2018 UCCC meeting modified the EE degree program GPA requirements. Prior to the change, EE had four requirements: Cumulative GPA, MSU GPA, MSU Degree Program GPA, and Engineering Topics GPA.
 - The change removed the **MSU Degree Program GPA** requirement, which we have since learned is required by EOP 21. The MSU Degree Program GPA must be included in the list of GPA requirements to clearly state all GPA requirements and avoid student confusion. This degree modification will correct that omission.
 - The change modified the **Engineering Topics GPA** requirement by increasing the GPA requirement from a 2.0 to a 2.5. However, the faculty intent was to simultaneously strike "scheduled and rescheduled" from the requirement. During advising and graduation audits, we realized the original degree modification did not strike that language. After a review of historical meeting minutes, the ECE Undergraduate Committee reviewed this concern and reaffirmed the original intent of the GPA modification. The ECE faculty voted to reaffirm the recommendation to strike the "scheduled and rescheduled" in the Engineering Topics GPA requirements and to specify that the 2.5 GPA requirement threshold apply only to ECE and CSE courses used in a student's final program of study. The change is "earn at least a 2.5/4.0 average on all hours with ECE or CSE course prefixes scheduled and rescheduled at all institutions attended, including MSU, that are applied toward meeting degree requirements." This modification is to ensure the 2.5 Engineering Topics GPA requirement is consistent with the original intention of the ECE faculty. If applied to all courses scheduled and rescheduled, the faculty view a threshold of 2.5 as excessive.

- 2. **Remove ECE 3213 Solid State course from degree program requirements:** The faculty wish to replace ECE 3213 with a technical elective option. By replacing the course with a technical elective option, we are allowing students more flexibility to choose an upper-level ECE course that is more relevant to their individual career plans. ECE 3213 is not part of our ABET EE degree program accreditation requirements.
- 3. Update Circuits/Electronics Sequence: The key motivations for revising and updating the Circuits and Electronics course sequence is to better prepare students to effectively solve circuits and electronics problems. The benefits of moving to two separate sequences are numerous. A few benefits include:
 - The merged circuits and electronics courses often cause confusion. Though circuits and electronics are closely-related topics, they are not the same. Students have trouble separating the two concepts. Moreover, most universities teach the topics separately, and it is hard for students to transfer credit to MSU that provides credit for our current sequence.
 - Though we are updating the sequence, we will continue to teach ECE 3413 Introduction to Electronic Circuits. ECE 3413 is required by other engineering majors but will no longer be required for ECE students. This returns us to our historical practices of offering a circuits/electronics course dedicated to non-majors. This allows us to offer a more effective curriculum for ECE and non-ECE students because course topics can be fine-tuned and offered at more appropriate levels for ECE and non-ECE students.
 - This update will allow us to shift a lab experience to the initial circuits course for ECE students. Currently, students are struggling in our circuits sequence. The ECE faculty think a hands-on lab experience in the first course will allow students to better grasp the material. Since circuits and electronics build on the fundamental concepts taught in the initial circuits course, it is critical for students to thoroughly understand the topics.
 - This reorganization and update will allow us to use the second circuits course a bridge for our signals and systems courses. We have identified signals and systems as a trouble area for student success. The signals and systems course covers numerous, complex topics. We are evaluating ways to reorganize that course, but for now, a first step is to provide some exposure to topics in earlier, related courses. This reorganization provides the opportunity to do that.
 - This reorganization will remove a five-course prerequisite chain that is currently in the program due to the three-course combined circuits/electronics sequence (ECE 3413 ECE 3424 ECE 3434) which is followed by a two-course senior design sequence (ECE 4512 ECE 4522). Now transfer students will be able to enroll in senior design by their third semester and can finish their degree in four semesters instead of five semesters. This change will allow the current five-semester EE program on the Coast campus to transition to a four-semester program similar to other Coast campus programs.

To provide clarity for circuits/electronics change. The below summaries are provided.

<u>**Current required courses**</u> impacted by this change (11 credit hours for EE and CPE):

- ECE 3413 currently required for EE, CPE, AE, IE, and ME. Will continue offering and in the future work with AE, IE, and ME faculty to revise topics, if needed, for their students.
- ECE 3424 currently required for EE and CPE; will phase out

- ECE 3434 currently required for EE and CPE; will phase out
- Several courses will need prerequisite updates after new sequence is approved; these will be processed as technical changes when new courses are approved.

<u>New required</u> courses proposed (11 credit hours for EE and CPE):

- ECE 3423 Circuits I required for EE and CPE. Equivalent to ECE 3413 but requires co-registration in lab.
- ECE 3421 Circuits I Lab new standalone lab for introductory circuits topics. (Students who take ECE 3413 can take this lab to continue in ECE circuits and electronics courses.)
- ECE 3433 Circuits II required for EE and CPE. New course to bridge circuits and signals and systems. Additional applications for circuits topics.
- ECE 3244 Electronics I required for EE and CPE. Equivalent to ECE 3424

<u>New elective</u> courses proposed:

- ECE 3253 Electronics II (elective) advanced electronics topics from current ECE 3434; can be taken as a technical elective.
- 4. Add "Power and Energy Engineering" concentration: This modification is being made in order to create the first concentration in electrical engineering. In the future, we plan to propose additional concentrations within electrical engineering. The vision is that ECE students will be able to choose an area of concentration and then choose a series of courses to build depth of knowledge within that concentration. The benefits of formal concentration areas are related to transcript endorsement, tracking of students, and improved advising practices. For this proposed Power and Energy Engineering Concentration, all seven faculty within the Power and Energy Emphasis Area in ECE unanimously stated that they are already offering this concentration without it being acknowledged. They regularly offer the courses that form the proposed concentration and students regularly complete them. We can begin to offer this concentration immediately without any additional effort or reorganization.

As a result of this degree program modification, there are no changes to the student learning outcomes. The EE student learning outcomes are as follows:

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- 2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- 3. an ability to communicate effectively with a range of audiences
- 4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- 5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- 6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

- 7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
- Will this program change meet local, state, regional, and national educational and cultural needs? Yes
- Will this program change result in duplication in the System? No
- Will this program change/advance student diversity within the discipline? **Yes**, the added flexibility through technical electives will enable students to take courses in a variety of areas both inside and outside of ECE. We anticipate this will be viewed favorably by all students, but particularly for women who often struggle to connect electrical engineering to societal impact. Interdisciplinary engineering projects and courses can help address societal impact. The ability to enroll in interdisciplinary courses that will count towards their degree program through the flexibility of technical electives should aid departmental efforts to advance diversity. For more information on department diversity efforts see: www.ece.msstate.edu/bp-ece-plan/
- Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.? **Yes**, the visibility of the Power and Energy Engineering concentration via transcript endorsement should improve potential placement within power and energy industries.
- Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.? **No**

4. SUPPORT

See the attached letter from the ECE Undergraduate Committee. All the changes in this degree program were discussed multiple times throughout the 2020-2021 academic year. All these changes were recommended by the ECE Undergraduate Committee by unanimous vote in their March 22, 2021 meeting and approved by a vote of the ECE faculty on March 26, 2021.

5. PROPOSED 4-LETTER ABBREVIATION

No changes

6. EFFECTIVE DATE Fall 2022



March 26, 2021

TO: James W. Bagley College of Engineering Committee on Courses and Curricula & Mississippi State University University Committee on Courses and Curricula

FROM: Undergraduate Program Committee, Department of Electrical & Computer Engineering

RE: EE and CPE Degree Program Modifications

The CPE and EE degree program modifications submitted herein, including accompanying course revisions, were unanimously recommended by the ECE Undergraduate Committee on 3/22/2021 and approved by final vote of the ECE faculty on 3/26/2021.

Digitally signed by Dr John Ball DN: cn=Dr John Ball, o=MSU, Dr John Ball email=jeball@ece.msstate.edu, c Date: 2021.03.23 10:51:35 -05'00

John Ball ECE Undergraduate Committee Chair

J. Patrick Donohoe

Digitally signed by J. Patrick Donohoe DN: cn=J. Patrick Donohoe, o=Mississippi State University, ou=Department of Electrical and Computer Engineering, email=donohee@ece.msstate.edu, c=US Date: 2021.03.23 11:32:09 -05'00'

Pat Donohoe Professor and Paul B. Jacob Chair

reen

Ryan Green Assistant Professor



Umar Iqbal Assistant Clinical Professor

Khalid Miah Date: 2021.03.24

itally signed by Umar Iqbal : cn=Umar Iqbal, o=Mississippi versity, ou=Electrical & Compu

Khalid Miah Assistant Clinical Professor

al in

Jean Mohammadi-Aragh ECE Undergraduate Committee Vice-Chair

Digitally signed by Ali

KTHUR Digitally signed by Randolph F. Follett Date: 2021.03.23 15:37:08 -05'00'

Randy Follett Associate Professor

Ali Cafer Gurbuz

ICI Cafer Gurbuz Date: 2021.03.23 15:41:03 -05'00'

Ali Gurbuz Assistant Professor

Masoud Karimi

Date: 2021.03.23 22:24:12 -05'00'

Masoud Karimi-Ghartemani Associate Professor

Jane N Moorhead

Digitally signed by Jane N Moorhead Date: 2021.03.25 15:52:54 -05'00'

Digitally signed by

Masoud Karimi

Jane Moorhead Instructor