

**MEMORANDUM TO:** Ogden College of Science and Engineering Curriculum Committee

Ms. Robin Ayers  
Dr. Ting-Hui Lee  
Dr. Pat Kambesis  
Dr. Phil Lienesch  
Dr. Jeremy Maddox

Dr. Andy Mienaltowski  
Dr. Les Pesterfield  
Dr. Todd Willian  
Mr. Jason Wilson

**FROM:** Dr. Stuart Burris, Chair

**SUBJECT:** Agenda for Thursday, February 25<sup>th</sup> at 4:00 p.m.

**A. OLD BUSINESS:**

- I. Consideration of the minutes of the January 28, 2021 meeting.

**B. NEW BUSINESS:**

Type of item	Description of Item & Contact Information
Action	<b>Proposal to Revise Course Credit Hours</b> CS 371, Advanced Computational Problem Solving, 3 hrs. Contact: Huanjing Wang, <a href="mailto:Huanjing.wang@wku.edu">Huanjing.wang@wku.edu</a> , x2672
Action	<b>Proposal to Revise a Program</b> Ref. 533, Construction Management, 81 hrs. Contact: Bashar Haddad, <a href="mailto:bashar.haddad@wku.edu">bashar.haddad@wku.edu</a> , x3414

**C. OTHER BUSINESS**

- I. Appoint or reappoint reps for the following departments: Agriculture, Chemistry, EEAS, Psychological Sciences, and SKyTeach.
- II. Review and update Ogden College Curriculum Committee Standing Rules

**Members Present:**

Ms. Robin Ayers  
Dr. Ting-Hui Lee  
Dr. Pat Kambesis  
Dr. Phil Lienesch  
Dr. Jeremy Maddox  
Dr. Andy Mienaltowski  
Dr. Les Pesterfield  
Dr. Todd Willian  
Mr. Jason Wilson

**Guest:**

Dr. Scott Grubbs  
Dr. Nilesh Sharma  
Dr. Melanie Autin

**FROM:** Dr. Stuart Burris, Chair

The meeting was called to order at 4:00pm.

**OLD BUSINESS:**

Willian/Ayers moved to approve of the minutes of the November 2020 meeting. Approved as presented.

**NEW BUSINESS:**

**Action Agenda**

**Biology Department**

Willian/Ayers moved to approve Proposal to Create a New Course: BIOL 351. Motion approved with friendly amendment.

Willian/Ayers moved to approve Proposal to Revise a Program: Ref. 525, Major in Biology, 48 hrs. Motion approved with friendly amendment.

Pesterfield/Maddox moved to approve Proposal to Revise a Program: Ref. 617, Major in Biology, 36 hrs. Motion approved with friendly amendment.

**Mathematics Department**

Ayers/Maddox moved to approve Proposal to Revise a Program: Ref. 731, Mathematical Economics, 61-62 hrs. Motion Approved.

**OTHER BUSINESS:**

Need to appoint or reappoint reps for the following departments: Agriculture, Chemistry, EEAS, Psychological Sciences, and SKyTeach.

Will review and update Ogden College Curriculum Committee Standing Rules at next meeting.

**Ogden College of Science & Engineering  
SEAS  
Proposal to Revise Course Credit Hours  
(Action Item)**

Contact Person: Huanjing Wang, hungjing.wang@wku.edu, phone #5-2672

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CS 371
- 1.2 Course title: Advanced Computational Problem Solving
- 1.3 Credit hours: 3

**2. Proposed course credit hours: 4**

**3. Rationale for the revision of course credit hours:**

This course (running as CS 371 and MATH371 with exactly half the students enrolled in CS 371 and half enrolled in MATH371) has been co-taught by CS and mathematics faculty for more than a decade. It serves as a required core course in Gatton Academy curriculum and as an elective for CS and Mathematics majors. 95% of students in this class are Gatton students. This course is rigorously taught at the Honors level. A half-semester-long team project is required. The projects focus on open-ended, student-selected problems with team working on different projects. The projects (usually done in teams of two) require research into a topic, algorithmic design, and programming. They are roughly the equivalent of what is required for senior mathematics or computer science seminar projects. Both students and faculty expend tremendous effort to be successful. CS/Mathematics instructors who have previously taught this course and Gatton Academy administrators agree that the time and effort required for success in this course is far more than 3 credit hours. Therefore, we propose to change the credit hours to 4 credits. The additional credit hour will be used to ensure better individual monitoring of the projects.

**4. Proposed term for implementation: Spring 2022**

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

2/5/2021

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

### University Undergraduate Curriculum Proposal Checklist

Please complete the following checklist to ensure your proposal will proceed smoothly and efficiently. Include the checklist as a cover sheet with your proposal. Proposals without the checklist will be returned to the proponent.

- For new or revised programs, courses, or course descriptions, what departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

1/13/2021 Math, Bruce Kessler, Claus Ernst; Gatton, Lynette Breedlove

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

N/A

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

Digitally signed by Stacy Wilson  
DN: cn=Stacy Wilson, o=University of Louisville, ou=Faculty, email=stacy.wilson@louisville.edu  
**Stacy Wilson**

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Dean or Designee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**Proposal to Revise a Program:** Construction Management  
**Ogden College of Science and Engineering**  
**Department/Unit:** School of Engineering and Applied Sciences

**Section 1: Proponent Contact Information**

- 1.1 Bashar Haddad, Assistant Professor
- 1.2 Email address: Bashar.Haddad@wku.edu
- 1.3 Phone # 270.745.3414

**Section 2: Program Information**

- 2.1 Current Program reference number: 533
- 2.2 Current Program Title: Construction Management
- 2.3 Current total number of credits required in the program: 81

**Section 3: Proposed program revisions and rationales**

- 3.1 Remove CE 303.
- 3.2 Remove CM 250.
- 3.3 Add CM 250 or CE 303. This is part of the collaboration between CE and CM programs. The classes have similar content. Currently, CM students must take both classes. In order to reduce duplication of content material, CM majors can take either CM 250 or CE 303. The CE and AS students have only CE 303 in their program of study. This was coordinated with CE and AS program coordinators.
- 3.4 Remove CM 346
- 3.5 Add CM 346 or CE 410. This is part of the collaboration between CE and CM programs. The classes have similar content. Currently, CM students must take CM 346. We are proposing that CM majors can take either CM 346 or CE 410. CM students are not required to take the corequisite lab CE411. Therefore, students must obtain an override from the instructor to register for CE 410. This was coordinated with CE program coordinator.
- 3.6 Add MGT 210 as organization management course. An organization management course is very important to enhance and enrich the learning outcome of CM major. This will make our graduates better ready to enter the construction industry. The class is offered in multi sections and can take in CM majors with no capacity issues. This was coordinated with the Chair of the management program at the College of Business.

**Section 4: Consultations**

Do any of the proposed revisions in section 3 above involve or in any other way impact other departments/units? Yes

**Section 5: Proposed term for implementation:** as soon as possible

**Section 6: Approval Flow Dates:**

SEAS: **2/5/2021**

Ogden College Curriculum Committee:  
Undergraduate Curriculum Committee:  
University Senate:

**Section 7: Required Appendices: Current & proposed program descriptions:**

**7.1 Current Program Requirement: 81 hours**

Architectural Drafting	AS 163	3
Industrial Material	MFGE 217	3
Construction Methods and Materials	CM 261	3
Construction Lab	CM 262	1
Industrial Statistics	MFGE 271	3
Building Structures	CM 282	3
Building Codes	AS 305	3
Ergonomics and Safety	MFGE 310	3
Survey of Building Systems	SEAS 325	3
Quality Assurance	MFGE 371	3
Project Management	SEAS 390	3
Lean Systems	MFGE 394	3
Internship I	SEAS 398	1
Technology Mgmt./Sup./Team Blding	MFGE 430	3
Senior Research Construction Management	CM 490	3
<b>Contract Documents</b>	<b>CM 250</b>	<b>3</b>
Const. Estimating and Bidding	CM 363	3
<b>Applied Soil Mechanics/Foundations</b>	<b>CM 346</b>	<b>3</b>
Const. Scheduling	CM 462	3
Principles of Surveying	CE 160/CE 161 or AGMC170/AGMC171	3 or 4
<b>Construction Management</b>	<b>CE 303</b>	<b>3</b>
Equipment and Methods	CE 316	3
Introductory Accounting/Finance (Select One)	ACCT 200, MKT 220, MKT 325, FIN 161, FINC 161C, RE 170C, BUS 100C, BUS 102C, BUS 250C, BUS 252C, or ENT 312	3
Business Law (Select One)	MGT 301 or MGT 333	3
Intro Economics/Principles of Economics (Select One)	AGEC 360, ECON 150, ECON 202, ECON 203, ECON 375, ECON 390, ECO 150C, ECO 202C, or ECO 203C	3
<b>Additional Required Courses:</b>		
Trigonometry	MATH 117	3
Chemistry	CHEM 105/106 or CHEM 120/121	4-5
<b>Program Grand Total Hours</b>		<b>120</b>

## 7.2 Proposed Program Requirement: 84 hours

Architectural Drafting	AS 163	3
Industrial Materials	MFGE 217	3
Construction Methods and Materials	CM 261	3
Construction Lab	CM 262	1
Industrial Statistics	MFGE 271	3
Building Structures	CM 282	3
Building Codes	AS 305	3
Ergonomics and Safety	MFGE 310	3
Survey of Building Systems	SEAS 325	3
Quality Assurance	MFGE 371	3
Project Management	SEAS 390	3
Lean Systems	MFGE 394	3
Internship I	SEAS 398	1
Technology Mgmt./Sup./Team Blding	MFGE 430	3
Senior Research Construction Management	CM 490	3
<b>Contract Documents or Construction Management</b>	<b>CM 250 or CE 303</b>	<b>3</b>
Const. Estimating and Bidding	CM 363	3
<b>Applied Soil Mechanics/ Foundations or Soil Mechanics</b>	<b>CM 346 or CE 410</b>	<b>3</b>
Const. Scheduling	CM 462	3
Principles of Surveying	CE 160/CE 161 or AGMC170/AGMC171	3 or 4
Equipment and Methods	CE 316	3
Introductory Accounting/Finance (Select One)	ACCT 200, MKT 220, MKT 325, FIN 161, FINC 161C, RE 170C, BUS 100C, BUS 102C, BUS 250C, BUS 252C, or ENT 312	3
Business Law (Select One)	MGT 301 or MGT 333	3
Intro Economics/Principles of Economics (Select One)	AGEC 360, ECON 150, ECON 202, ECON 203, ECON 375, ECON 390, ECO 150C, ECO 202C, or ECO 203C	3
<b>Organizational Management</b>	<b>MGT 210</b>	<b>3</b>
<b>Additional Required Courses:</b>		
Trigonometry	MATH 117	3
Chemistry	CHEM 105/106 or CHEM 120/121	4-5
<b>Program Grand Total Hours</b>		<b>120</b>



**BACHELOR of SCIENCE in CONSTRUCTION MANAGEMENT (#533)**

School of Engineering & Applied Sciences  
 Ogden College of Science and Engineering  
 Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.

**CM - Four Year Plan**

FIRST YEAR			
Fall Semester		Spring Semester	
AS 163 Architectural Drafting	3	CHEM 105/106 or 120/121: (E-NS, LS)	4-5
MATH 117 –Trigonometry or higher math class (Foundations)(F-QR)	3	Natural & Physical Sciences (E-NS)	3
ENG 100 Intro to College Writing (Foundation) (F-W1)	3	HIST 101 World History I OR HIST 102 World II (F-SB)	3
Arts & Humanities (E-AH)	3	Human Communication (F-OC)	3
Economics Elective* (E-SB)	3	Literary Studies (F-AH)	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16-17</b>

SECOND YEAR			
Fall Semester		Spring Semester	
CM 282 Building Structures	3	World Language	3
MFGE 310 Ergonomics and Safety	3	MFGE 271: Industrial Statistics	3
CE 160/161 Surveying 1 (with a Lab)	4	CM 261/262	4
MFGE 217: Industrial Materials	3	MGT 210 Organization Management	3
Accounting/Finance Elective*	3	General Elective	1-2
<b>TOTAL CREDIT HOURS</b>	<b>16</b>	<b>TOTAL CREDIT HOURS</b>	<b>14-15</b>

THIRD YEAR			
Fall Semester		Spring Semester	
CM 363 Construction Estimating and Bidding	3	CE 316 Equipment & Methods	3
AS 305 Building Codes	3	CM 462 Construction Scheduling	3
CM 250 Contract Documents or CE 303 Construction Management	3	Business Law Elective*	3
MFGE 394 Lean Systems	3	Connections: Social and Cultural (K-SC)	3
ENG 300 Writing in the Disciplines (F-W2)	3	Connections: Local to Global Course (K-LG)	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>

FOURTH YEAR			
Fall Semester		Spring Semester	
MFGE 430 Technology Mgt/Supervision	3	CM 490 Senior Research	3
MFGE 325 Survey of Building Systems	3	MFGE 371 Quality Assurance	3



CE 410 Soil Mechanics or CM 346: Applied Soil Mechanics	3	SEAS 398 Internship	1
SEAS 390 Project Management	3	Connections: Systems (K-SY)	3
General Elective	3	General Elective	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>13</b>

**Total Credit Hours: 120**

For more details and courses offered in the Colonnade General Education program visit the [website](#).

**World Language Requirement:** Language Proficiency of novice-high before completing 60 credit hours is required (or completion of 2nd level of a language). Two credits (or equivalent) of a single world language in High School satisfies this WKU requirement.

1. Accounting/Financial Elective: Choose one course from: ACCT 200, MKT 220, MKT 325, MKT 390, FIN 161, RE170C, BUS 100C, BUS 102C, BUS 110C BUS 250C, BUS 252C, ENT 312
2. Business Law Elective: Choose one course from: MGT 301, MGT 333, MGT 365
3. Economics Elective: Choose one course from: ECON 150, ECON 202, ECON 203, ECON 375, ECON 390, AGE 360, BUS 160C, BUS 212C

**PLEASE NOTE:** Prerequisites, Course Numbers, and Course Titles are subject to change. Consult your advisor each semester.

**For more Information:**

**School of Engineering and Applied Sciences**

**Website:** [www.wku.edu/seas](http://www.wku.edu/seas)

**Phone:** 270-745-3251

**Email:** [seas@wku.edu](mailto:seas@wku.edu)

**Course Descriptions:** <http://www.wku.edu/undergraduatecatalog/>

### University Undergraduate Curriculum Proposal Checklist

Please complete the following checklist to ensure your proposal will proceed smoothly and efficiently. Include the checklist as a cover sheet with your proposal. Proposals without the checklist will be returned to the proponent.

- For new or revised programs, courses, or course descriptions, what departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

Civil Engineering (CE) / Mr. Jason Wilson. Architectural Science (AS) /Dr. Aly Shahn

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

No budget implications

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

Stacy Wilson

Digitally signed by Stacy Wilson  
Date: 2021.02.08 10:22:08  
-0500

Department Head

Dean or Designee

Date

Date