MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Ms. Robin Ayers
Dr. Nahid Gani
Dr. Scott Grubbs
Dr. Ting-Hui Lee
Dr. Jeremy Maddox
Dr. Andy Mienaltowski
Dr. Les Pesterfield
Dr. Todd Willian
Mr. Jason Wilson

FROM: Dr. Stuart Burris, Chair

SUBJECT: Agenda for <u>Thursday, September 2nd at 4:00 p.m.</u>

A. OLD BUSINESS:

I. Consideration of the minutes of the April 2021 meeting.

B. NEW BUSINESS:

Type of item	Description of Item & Contact Information
Consent	**Proposal to Revise Course Prereq/Coreq** CE 462, Hydraulic Engineering Systems, 3 hrs. Contact: Jason Wilson, Jason.wilson@wku.edu, x2322

C. **OTHER BUSINESS**

Minutes – OCSE Curriculum Committee **April 22, 2021**

Members Present:
Dr. Ting-Hui Lee
Dr. Jeremy Maddox
Dr. Pat Kambesis
Dr. Andy Mienaltowski
Dr. Les Pesterfield
Dr. Todd Willian
Mr. Jason Wilson

Guest Present:
Dr. Nicholas Fortune
Dr. John Khouryieh

FROM: Dr. Stuart Burris, Chair

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

OLD BUSINESS:
Minutes from March 25th meeting were approved.

NEW BUSINESS:

Consent Agenda
All AERO consent items were moved to the action agenda.

Action Agenda

Office of the Dean
Maddox/Pesterfield moved to bundle and approve all AERO Proposals to Revise Course Catalog Listings. Motion Approved.

Mathematics Department
Mienaltowski/Willian motioned to approve Proposal to Create a New Course: Math 270. Four voted to affirm and three abstained. Motion approved.

School of Engineering & Applied Sciences
Mienaltowski/William motioned to approve Proposal to Make Multiple Revisions to a Course. Motion approved.

Other Business:
Reminder to submit 2021-2022 AY committee reappointments. We will also need a new UCC representative.

CIM Report Aug 27, 2021 1:51pm

Course Changes Pending Approval from SC Curriculum Committee

Code	Field	Old Value	New Value
CE 462	Review Type	Expedited	Full Review
	Term for implementation	Fall 2021	Spring 2022
	Prerequisites	| | MATH 331 | D | UG | | No And | | CE 342 | D | UG | | No	| | MATH 331 | D | UG | | No And | | CE 342 | D | UG | | No And | (| CE 305 | D | UG | | Yes Or | | STAT 301 | D | UG |) | Yes
	Reason for changing the course	It was determined that prerequisites of CE 461 (Hydrology) is not the appropriate prerequisite for this course. CE 342 (Fluid Mechanics) is the appropriate prerequisite course.	Add the same requirements as CE 461. Students will be required to know material covered in either statistics course.
	Learning outcomes	1 |	1 | Determine pressure forces on submerged surfaces. 2 | Be able to calculate losses, discharge in pipe flows, and size pipes to carry a given discharge. 3 | Be able to calculate friction losses, minor losses, and valve losses in pipe flow. 4 | Be able to derive equations for pipe networks and be able to solve for flows and pressure.
	Content outline	1 |	1 | Buoyancy and Archimedes principle 2 | Forces in moving fluids 3 | Pipe flow and fluid resistance 4 | Laminar and turbulent flow in pipe
	Is this course part of a program that leads to teacher certificate?		No

CE 462: HYDRAULIC ENGINEERING SYSTEMS

In Workflow

1. EAS Approval (stacy.wilson@wku.edu)
2. SC Dean (cathleen.webb@wku.edu;%20stuart.burris@wku.edu;%20david.brown@wku.edu)
3. SC Curriculum Committee (cathleen.webb@wku.edu;%20lisa.wood@wku.edu;%20stuart.burris@wku.edu; %20jennifer.anderson@wku.edu;%20david.brown@wku.edu)
4. Undergraduate Curriculum Committee (liz.sturgeon@wku.edu;andrew.mienaltowski@wku.edu)
5. University Senate (julie.lee@wku.edu;janet.applin@wku.edu)
6. Provost (rheanna.plemons@wku.edu;%20beth.laves@wku.edu)
7. Course Inventory (jennifer.hammonds@wku.edu;%20jessica.dorris@wku.edu)

Approval Path

1. Thu, 26 Aug 2021 19:44:55 GMT
   Stacy Wilson (stacy.wilson): Approved for EAS Approval
2. Thu, 26 Aug 2021 20:21:40 GMT
   Stuart Burris (stuart.burris): Approved for SC Dean

History

1. Jul 14, 2021 by Jennifer Hammonds (jennifer.hammonds)

Date Submitted: Tue, 10 Aug 2021 15:21:49 GMT

Viewing: CE 462 : Hydraulic Engineering Systems

Last approved: Wed, 14 Jul 2021 08:13:16 GMT

Last revision: Tue, 10 Aug 2021 15:21:49 GMT

Changes proposed by: jsn97026

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Jason Wilson	jason.wilson@wku.edu	270-745-2322

Review Type

Full Review

Term for implementation

Spring 2022

Academic Level

Undergraduate

Course prefix (subject area)

CE - Civil Engineering

Course number

462

Department

Engineering & Applied Sciences, School of

College

Science and Engineering

Course title

Hydraulic Engineering Systems

Abbreviated course title

HYDRAULIC ENGINEERING SYSTEMS

Course description
This class deals with the application of hydraulics in Civil Engineering design. The topics include flow in pipelines and open channels, design of culvert systems, flow measurement, hydraulic structures, and computational methods and models.

Credit hours
3

Repeatable
Yes

Number of repeats
2

For maximum credits
3

Default grade type
Standard Letter

Is this course intended to span more than one term?
No

Schedule type
Lecture

CIP Code
140801 - Civil Engineering, General.

Does this course have prerequisites
Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		MATH 331	D	UG		No
And		CE 342	D	UG		No
And	(	CE 305	D	UG		Yes
Or		STAT 301	D	UG	)	Yes

Restrictions:

College restriction?
No

Field of study restriction/major?
No

Classification restriction?
No

Reason for changing the course
Add the same requirements as CE 461. Students will be required to know material covered in either statistics course.

Is this related to other courses at WKU?
No

Are you seeking Colonnade approval for this course?
No

Is this course part of a program that leads to teacher certificate?
No

Learning outcomes

#	Learning outcomes
1	Determine pressure forces on submerged surfaces.
2	Be able to calculate losses, discharge in pipe flows, and size pipes to carry a given discharge.
3	Be able to calculate friction losses, minor losses, and valve losses in pipe flow.
4	Be able to derive equations for pipe networks and be able to solve for flows and pressure.

Content outline

#	Topic
1	Buoyancy and Archimedes principle
2	Forces in moving fluids
3	Pipe flow and fluid resistance
4	Laminar and turbulent flow in pipe

Supporting documentation

Course_revise_pre_corequisites CE 462.pdf

Key: 1543