CEAS-17- 31 CHP

REQUEST TO COLLEGE CURRICULUM COMMITTEE FOR CURRICULAR IMPROVEMENTS

DEPARTMENT: CHP **PROPOSED EFFECTIVE SEMESTER:** Spring '18 **COLLEGE:** CEAS

PROPOSED IMPROVEMENTS

Academic Program
- ☐ New degree*
- ☐ New major*
- ☐ New curriculum*
- ☐ New concentration*
- ☐ New certificate
- ☐ New minor
- ☐ Revised major
- ☐ Revised minor
- ☐ Admission requirements
- ☐ Graduation requirements
- ☐ Deletion ☐ Transfer
- X Other (explain**)

Substantive Course Changes
- ☐ New course
- X Pre or Co-requisites
- ☐ Deletion (required by others)
- ☐ Course #, different level
- ☐ Credit hours
- ☐ Enrollment restriction
- ☐ Course-level restriction
- ☐ Prefix ☐ Title and description (attach current & proposed)
- ☐ General education (select one) Not Applicable
- ☐ Other (explain**)

Misc. Course Changes
- ☐ Title
- ☐ Description (attach current & proposed)
- ☐ Deletion (not required by others)
- ☐ Course #, same level
- ☐ Variable credit
- ☐ Credit/no credit
- ☐ Cross-listing
- ☐ COGE reapproval
- ☐ Other (explain**)

*** Changing the prerequisites for PAPR 3030 by including PAPR 1000 or 2040 as additional prerequisites**

Title of degree, curriculum, major, minor, concentration, or certificate: BSE in Paper Engineering

Existing course prefix and #: PAPR 3030 **Proposed course prefix and #:** PAPR 3030 **Credit hours:** 4
Existing course title: Pulping and Bleaching
Proposed course title: Pulping and Bleaching

Existing course prerequisite & co-requisite(s): CHEG 2960 and CHEM 3750 with a C minimum in CHEG prereq.
Proposed course prerequisite(s) PAPR 1000 or 2040, CHEG 2960, and CHEM 3750 with a C minimum in CHEG and PAPR prereq
If there are multiple prerequisites, connect with "and" or "or". To remove prerequisites, enter "none."
Proposed course co-requisite(s)
If there are multiple corequisites, they are always joined by "and."
Proposed course prerequisite(s) that can also be taken concurrently:
Is there a minimum grade for the prerequisites or corequisites?
The default grades are D for undergraduates and C for graduates.
Major/minor or classification restrictions:
List the Banner 4 character codes and whether they should be included or excluded.
For 5000 level prerequisites & corequisites: Do these apply to: (circle one) undergraduates graduates both

Specifications for University Schedule of Classes:
a. Course title (maximum of 30 spaces):
b. Multi-topic course: ☐No ☐Yes
c. Repeatable for credit: ☐ No ☐ Yes
d. Mandatory credit/no credit: ☐ No ☐Yes
e. Type of class and contact hours per week (check type and indicate hours as appropriate)
1. ☐ Lecture
2. ☐ Lab or discussion
3. ☐ Lecture/lab/discussion
4. ☐ Seminar or ☐ studio
5. ☐ Independent study
6. ☐ Supervision or practicum

CIP Code (Registrar's use only):

Chair/Director _____ Date _____

Chair, College Curriculum Committee _____ Date 3/20/17

Dean _____ Date: _____ Graduate Dean: _____ Date _____

Curriculum Manager: Return to dean ☐ Date _____ Forward to: _____ Date _____

Chair, COGE/ PEB / FS President _____ Date _____

FOR PROPOSALS REQUIRING GSC/USC REVIEW:

* ☐ Approve ☐ Disapprove Chair, GSC/USC _____ Date _____

* ☐ Approve ☐ Disapprove Provost _____ Date _____

* Revised May 2007. All previous forms are obsolete and should not be used.

1. Explain briefly and clearly the proposed improvement.
Changing the prerequisites for PAPR 3030 by including PAPR 1000 or 2040 as additional prerequisites. The new set of prerequisite courses will be 'PAPR 1000 or 2040, CHEG 2960, and CHEM 3750 with a C minimum in CHEG and PAPR prefixed prerequisite courses.

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)
The lab experience obtained in PAPR 1000 or PAPR 2040 is required for the lab work in PAPR 3030. Also, the overall knowledge of pulp and paper industry covered in the earlier courses are of great relevance.

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.
None as the change involves only program courses.

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.
None

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.
None except that the students will be taking PAPR courses in proper sequence.

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?
No change

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)
No change

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.) Not Applicable

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program.
No change in learning outcomes of the program.

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities. Internal assessment of performance in labs done in groups led to this change.

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section. Not Applicable

Catalog Copy

PAPR 3030 - Pulping and Bleaching

Advanced study of the processes involved in the production of papermaking fibers. Wood anatomy, ultrastructure, and chemistry, wood yard operations, chemical, and high yield pulping, bleaching, alternate fiber sources, and pulping and bleaching chemistry. Process engineering perspective emphasizing mass and energy balances, process design and control. Lab work in wood characterization, pulping, and bleaching, and field trips.

Prerequisites & Corequisites: Prerequisites: PAPR 1000, CHEG 2960 and CHEM 3750. A minimum grade of "C" is required in PAPR and CHEG prefixed prerequisites.

Credits: 4 hours

Lecture Hours - Laboratory Hours: (3 - 3)