

Assessment Plan

Western Michigan University

Paper Engineering

Outcome: Criterion 3 a

Students have an ability to apply knowledge of mathematics, science and engineering [to problems in the paper and allied industries].

Track: BS Paper Science

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 1000 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes
PAPR 2040 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 3040 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		once a year	Yes
PAPR 4300 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2960 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3110 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3120 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

- * PAPR 1000 - Into Pulp/Papr Mfg
- * PAPR 2040 - Stock Prep and Papermaking
- * PAPR 3040 - Chemical Recovery
- * PAPR 4300 - Surface and Wet End Chemistry

Outcome: Criterion 3 b

Student have an ability to design and conduct experiments as well as to analyze and interpret data

Track: BS Paper Science

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 1000 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes
PAPR 2040 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 3420 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3120 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 4830 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

- * PAPR 1000 - Into Pulp/Papr Mfg
- * PAPR 2040 - Stock Prep and Papermaking
- * PAPR 3420 - Coating*

Outcome: Criterion 3 c

Students have an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability

Track: BS Paper Science

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3040 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4600 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

- * PAPR 3040 - Chemical Recovery
- * PAPR 4600 - Plant Economics & Proj Design

Outcome: Criterion 3 d

Students have an ability to function on multidisciplinary teams

Track: BS Paper Science

Outcome Status: Active

Means of Assessment

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3050 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2610 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes
CHEG 4830 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

* PAPR 3050 - Paper Physics Fundamentals

Outcome: Criterion 3 e

Students have an ability to identify, formulate, and solve paper engineering problems.

Start Date: 07/01/2009

End Date: 06/30/2010

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
Homework in PAPR3040 Assessment Method Category: Course-Embedded Measure	79 to 90%	annual	Yes
PAPR 4300 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4600 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2960 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3110 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3120 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

* PAPR 3040 - Chemical Recovery

* PAPR 4300 - Surface and Wet End Chemistry

* PAPR 4600 - Plant Economics & Proj Design

Outcome: Criterion 3 f

Students have an understanding of professional and ethical responsibility

Start Date: 07/01/2009**End Date:** 06/30/2010**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3520 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4850 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2610 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes

Related Courses

* PAPR 3520 - Recycling and Deinking

* PAPR 4850 - Research Design

Outcome: Criterion 3 g

Student have an ability to communicate effectively

Start Date: 07/01/2009**End Date:** 06/30/2010**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3050 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 3100 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes
PAPR 4600 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4850 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 3120 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

* PAPR 3050 - Paper Physics Fundamentals

- * PAPR 3100 - Work Experience/Co-Op
- * PAPR 4600 - Plant Economics & Proj Design
- * PAPR 4850 - Research Design

Outcome: Criterion 3 h

Students have the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and social context

Start Date: 07/01/2009

End Date: 06/30/2010

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3040 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 3520 Exams, quizzes, and related courses work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2610 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes

Related Courses

- * PAPR 3040 - Chemical Recovery
- * PAPR 3520 - Recycling and Deinking

Outcome: Criterion 3 i

Students have a recognition of the need for, and an ability to engage in life-long learning

Start Date: 07/01/2009

End Date: 06/30/2010

Outcome Status: Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3420 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4400 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
PAPR 4850 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes

Related Courses

- * PAPR 3420 - Coating*
- * PAPR 4400 - Seminar
- * PAPR 4850 - Research Design

Outcome: Criterion 3 j

Students have a knowledge of contemporary issues

Track: BS Paper Science**Start Date:** 07/01/2009**End Date:** 06/30/2010**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
PAPR 3420 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes
CHEG 2610 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Every semester	Yes

Related Courses

* PAPR 3420 - Coating*

Outcome: Criterion 3 k

Students have an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Start Date: 07/01/2009**End Date:** 06/30/2010**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion	Schedule	Active
CHEG 1810 Exams, quizzes, and related course work Assessment Method Category: Course-Embedded Measure		Once a year	Yes