# **Cover Sheet: Request 14992**

## Materials Science and Engineering Polymer Science and Engineering Certificate

### Info

Process	AAPs/SLO New/Change Ugrad/Grad/Pro
Status	Pending at PV - Academic Assessment Committee
Submitter	Tanner Nestle tnestle@ufl.edu
Created	5/8/2020 11:25:26 AM
Updated	7/20/2020 11:16:49 PM
Description of	Approval of Polymer Science and Engineering Certificate Assessment Plan
request	

## Actions

Step	Status	Group	User	Comment	Updated	
Department	Approved	ENG - Materials	John Mecholsky		5/8/2020	
		Science and				
		Engineering				
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No document of College	Approved	ENC College of	Heidi Dublin		5/8/2020	
College	Approved	ENG - College of Engineering	neidi Dubilii		5/6/2020	
No document of	hanges	Liigiiiooiiiig				
Academic		PV - Academic	Timothy Brophy	The Academic Assessment	5/8/2020	
Assessment		Assessment		Committee will review this at		
Committee		Committee		its May 12, 2020 meeting.		
No document of						
Academic Assessment Committee	Conditionall Approved	PV - Academic Assessment Committee	Timothy Brophy	The Academic Assessment Plan reviewed this request at its May 12, 2020 meeting. They conditionally approved this plan. Here is the condition: "The assessment plan states that course grades are used as the SLO assessment. This is not permitted by SACSCOC. Please identify the specific assessment methods that are used". Once these changes are made, I will review these and proceed accordingly.	5/13/2020	
Polymer_Scien	ce and Eng	ineering.docx		Tana process accordingly:	5/8/2020	
College		ENG - College of	Heidi Dublin	See comments from	5/14/2020	
, o	Approved	Engineering		Academic Assessment		
				Committee. Resubmit when		
				all have been addressed.		
No document of					= 11 1 100 5 5	
Department	Approved	ENG - Materials Science and Engineering 011909000	John Mecholsky		5/14/2020	
No document changes						
College	Approved	ENG - College of Engineering	Heidi Dublin	Department indicates all have been addressed.	7/20/2020	
No document of						
Academic	Pending	PV - Academic			7/20/2020	
Assessment		Assessment				
Committee		Committee				

Original file: Cover sheet.pdf

Step	Status	Group	User	Comment	Updated	
No document changes						

## SLO-AAP|New for request 14992

#### Info

Request: Materials Science and Engineering Polymer Science and Engineering Certificate

Description of request: Approval of Polymer Science and Engineering Certificate Assessment Plan

Submitter: Tanner Nestle tnestle@ufl.edu

Created: 5/14/2020 12:23:05 PM

Form version: 2

#### Responses

Name of Major Materials Science and Engineering

**College** Engineering

Effective Term Earliest Available Effective Year Earliest Available

Request Type New Certificate Academic Assessment Plan

Campus Labs Planning The AAP has not been submitted into Campus Labs Planning

New SLO or SLOs Name of the certificate:

Polymer Science and Engineering

#### Program (Certificate) Mission:

The Herbert Wertheim College of Engineering is pleased to offer a Polymer Science and Engineering Certificate for engineering undergraduate students. The Certificate primarily serves students who are majoring in Materials Science and Engineering, but can be completed by students in any major. This Certificate consists of a sequence of courses in the area of Polymer Science and Engineering, offering broad and deep coverage of processing, structure, processing, and performance for these materials.

#### Program Goal

Title

PG1: Increase enrollment in the certificate program

**Evaluation Method** 

The number of students enrolled in the certificate will be tabulated each spring. This tabulation will be interpreted in light of the fact that there are 5 certificates offered (Advanced Engineering Ceramics, Biomaterials, Metallurgical Engineering, Polymer Science and Engineering, and Semiconductor Materials) that can be completed by students pursuing a major in Materials Science and Engineering with careful, but mutually-exclusive selection of electives.

#### Student Learning Outcome

Title

SLO1: Apply principles of engineering, math, and science to solve complex problems in polymeric materials

**Evaluation Method** 

Evaluation of selected problem(s) in the course indicated below using the following rubric:

- 1) No solution is proposed or minimal progress towards a solution is made
- 2) Solution is fundamentally incorrect due to inaccurate application of one or more principles
- 3) Significant progress is made to a solution, but the problem is not solved in its entirety
- 4) Only a few minor errors are found in path to solution
- 5) Solution is correct and complete

The threshold of acceptability is 80% of students scoring 3 or higher.

Assessment Timeline for Polymer Science and Engineering

Key: Introduced Reinforced

Assessed

Courses SLOs EMA 3066 EMA 4161 EMA 4462 Content Knowledge #1 I R A

Assessment Cycle

Year

SLOs 18-19 19-20 20-21 21-22 22-23 23-24

Content Knowledge

#1 X X X X

Assessment Oversight

Name Department Affiliation Email Address Phone Number

Hans van Oostrom HWCOE oostrom@ufl.edu 352-392-1345

**Program Type** Undergraduate

Indicate the areas of the SLOs (undergraduate) Content

Indicate the areas of the SLOs (graduate and professional) N/A request is Undergraduate What types of assessments will be used? Other

**Describe other type of assessment:** SLO1: Apply principles of engineering, math, and science to solve complex problems in polymeric materials

**Evaluation Method** 

Evaluation of selected problem(s) in the course indicated below using the following rubric:

- 1) No solution is proposed or minimal progress towards a solution is made
- 2) Solution is fundamentally incorrect due to inaccurate application of one or more principles
- 3) Significant progress is made to a solution, but the problem is not solved in its entirety
- 4) Only a few minor errors are found in path to solution
- 5) Solution is correct and complete

What assessment methods will be used? Other

**Describe other type of assessment:** The threshold of acceptability is 80% of students scoring 3 or higher.

Who applies the method? Faculty Committee

**Academic Learning Compact Statement** The Herbert Wertheim College of Engineering is pleased to offer a Polymer Science and Engineering Certificate for engineering undergraduate students. The Certificate primarily serves

students who are majoring in Materials Science and Engineering, but can be completed by students in any major. This Certificate consists of a sequence of courses in the area of Polymer Science and Engineering, offering broad and deep coverage of processing, structure, processing, and performance for these materials.

**ALC Graduation Requirement Statement** Student must have taken 4 required courses with a grade of C or better and have a GPA > 2.0.

#### **ALC Standard Learning Outcomes** Content Knowledge

EMA3066 - Introduced

EMA4161 - Reinforced

EMA4462 - Assessed

ALC Types of Assessment Exams, Projects, Reports

## New Undergraduate Certificate Academic Assessment Plan

Name of the certificate:

Polymer Science and Engineering

### Program (Certificate) Mission:

The Herbert Wertheim College of Engineering is pleased to offer a Polymer Science and Engineering Certificate for engineering undergraduate students. The Certificate primarily serves students who are majoring in Materials Science and Engineering, but can be completed by students in any major. This Certificate consists of a sequence of courses in the area of Polymer Science and Engineering, offering broad and deep coverage of processing, structure, processing, and performance for these materials.

Program Goal

Title

PG1: Increase enrollment in the certificate program

**Evaluation Method** 

The number of students enrolled in the certificate will be tabulated each spring. This tabulation will be interpreted in light of the fact that there are 5 certificates offered (Advanced Engineering Ceramics, Biomaterials, Metallurgical Engineering, Polymer Science and Engineering, and Semiconductor Materials) that can be completed by students pursuing a major in Materials Science and Engineering with careful, but mutually-exclusive selection of electives.

## Student Learning Outcome

Title

SLO1: Apply principles of engineering, math, and science to solve complex problems in polymeric materials Evaluation Method

Evaluation of selected problem(s) in the course indicated below using the following rubric:

- 1) No solution is proposed or minimal progress towards a solution is made
- 2) Solution is fundamentally incorrect due to inaccurate application of one or more principles
- 3) Significant progress is made to a solution, but the problem is not solved in its entirety
- 4) Only a few minor errors are found in path to solution
- 5) Solution is correct and complete

The threshold of acceptability is 80% of students scoring 3 or higher.

### Assessment Timeline for Polymer Science and Engineering

Key: Introduced R einforced

**A** ssessed

Course	EMA	EMA	EMA
SLOs	3066	4161	4462
Content Knowledge			
#1	I	R	А

Assessment Cycle

Year	18-19	19-20	20-21	21-22	22-23	23-24
SLOs						
Content Knowledge						
#1		Х	Х	Χ	Χ	Χ

### Assessment Oversight

Name	Department Affiliation	Email Address	Phone Number
Hans van Oostrom	HWCOE	oostrom@ufl.edu	352-392-1345