From: noreply@wsu.edu To: curriculum.submit

Subject: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate Certificate

Date: Friday, August 20, 2021 9:53:00 AM **Attachments:** 2021.08.20.09.47.24.93.FormData.html

2021.08.20.09.47.23.04.currentCatalogFile 2021 Supporting Documentation for Revision of .pdf

Matthew Peck has submitted a request for a major curricular change. His/her email address is: matthew.peck@wsu.edu.

Requested change: Revise or Drop Graduate Certificate

Title: Protein Biotechnology

Requested Effective Date: Fall 2022

Revise certificate requirement: Yes

Dean: Gloss, Lisa - Dean - Graduate School - MSE Graduate,

Chair: Peters, John – Director – Institute for Biological Chemistry,

Catalog Subcommittee AAC, PHSC, or GSC Faculty Senate

Approval Date Approval Date Approval Date From: Peters, John
To: curriculum.submit

Subject: Re: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate Certificate

Date: Monday, August 30, 2021 11:26:23 AM

Yes, please proceed, I approve

Get Outlook for iOS

From: curriculum.submit <curriculum.submit@wsu.edu>

Sent: Monday, August 30, 2021 11:22:37 AM

To: Peters, John <jw.peters@wsu.edu>

Subject: FW: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate

Certificate

Greetings Dr. Peters,

We received the below and attached proposal pertaining to the Protein Biology certificate. However, I do not see that we received your approval. Can we move ahead with the Faculty Senate approval process?

Thank you, Blaine

Blaine Golden, Assistant Registrar Curriculum, Graduations, Athletic Eligibility

From: noreply@wsu.edu <noreply@wsu.edu>

Sent: Friday, August 20, 2021 9:47 AM

To: curriculum.submit <curriculum.submit@wsu.edu>

Subject: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate Certificate

Matthew Peck has submitted a request for a major curricular change. His/her email address is: matthew.peck@wsu.edu.

Requested change: Revise or Drop Graduate Certificate

Title: Protein Biotechnology

Requested Effective Date: Fall 2022

Revise certificate requirement: Yes

Dean: Gloss, Lisa - Dean - Graduate School - MSE Graduate,

Chair: Peters, John – Director – Institute for Biological Chemistry,

From: Gloss, Lisa M

To: <u>curriculum.submit</u>; <u>Peters, John</u>

Subject: Re: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate Certificate

Date: Friday, August 20, 2021 11:31:45 AM

1. I approve this proposal in its current form.

Lisa

Dr. Lisa M. Gloss
Dean, Graduate School
Associate professor, School of Molecular Biosciences
Washington State University
Pullman, WA 99164-1030
TEL (509) 335-5859

From: "curriculum.submit@wsu.edu" <curriculum.submit@wsu.edu>

Date: Friday, August 20, 2021 at 9:52 AM **To:** "Peters, John" <jw.peters@wsu.edu>

Cc: Lisa Gloss < lmgloss@wsu.edu>

Subject: 663760 Interdisciplinary Courses Requirements Revise - Revise or Drop Graduate

Certificate

Peters, John – Director – Institute for Biological Chemistry,

Gloss, Lisa - Dean - Graduate School - MSE Graduate,

Matthew Peck has submitted a request for a major curricular change.

Requested change: Revise or Drop Graduate Certificate

Title: Protein Biotechnology

Requested Effective Date: Fall 2022

Revise certificate requirement: Yes

Both Chair and Dean approval is required to complete the submission process. Please indicate that you have reviewed the proposal by highlighting one of the statements below and **reply all** to this email. (<u>curriculum.submit@wsu.edu</u>.) [Details of major change requested can be found in the attached supplemental documentation]

1. I approve this proposal in its current form.

Supporting Documentation for Graduate Certificate revision August 2021

Certificate Title: Graduate Certificate in Protein Biotechnology

Department: Protein Biotechnology Training Program

A. Rationale Statement:

The Biotechnology Graduate Certificate catalyzes student training in protein chemistry and biotechnology and rigorous research practice. To better reach these goals, the program is requesting two changes to the coursework requirements for the graduate certificate. The first change is to substitute PHIL 530 with three modules from the recently introduced Topics in Biomedical Experimentation series (564, cross-listed in many departments). The three 564 modules maintain bioethics training with better coverage of experimental design (including data reproducibility) and responsible conduct in research, which are essential requirements for ethical scientific practice and continued NIGMS-NIH support for the biotech training program. Note, thought there are many modules in 564, this revision is establishing a requirement for three specific modules: Experimental Design, Responsible Conduct in Research, and Biomedical Ethics. The second change is to add CH_E 581-07 (Molecular Dynamics Simulations for Bioengineers) to the list of allowed elective courses. This class emphasizes protein chemistry and computational elements, which are both relevant to the certificate and the training program missions. Adding this elective provides students another opportunity to tailor their training for research interests without removing any existing choices.

B. Changes to Certificate requirements with deletions and changes noted:

Credit Hours: 11 credit hours total

Required Courses: must complete all of the following:

- 1. MBIOS 513 (General Biochemistry I)
- 2. MPS 574 (Protein Biotechnology)
 - i. Course is cross-listed as CH E 574 and MBIOS 574
- 3. PHIL 530 (Bioethics)
- 3. Three modules from MBIOS 564 (Topics in Biomedical Experimentation)
 - i. Required modules, 1-credit each
 - a. Biomedical Ethics (BME)
 - b. Responsible Conduct in Research (RCR)
 - c. Experimental Design (ExpD)
 - ii. Course is cross-listed as NEUROSCI 564, VET PH 564, VET PATH 564, VET MICR 564, GLANHLTH 564, and PHIL 564

Elective Courses:

- 4. Students must complete at least one of the following as a graduate student:
 - a. BIO ENGR 550
 - b. CH E 560
 - c. CH E 581 (3 credits)
 - d. CH E 581-07
 - e. CHEM 543
 - f. CHEM 572
 - g. E_MIC 586 and E_MIC 587
 - h. HORT 518
 - i. MBIOS 501
 - j. MBIOS 503
 - k. MBIOS 514
 - **I. MBIOS 540**
 - m. MBIOS 542
 - n. MBIOS 578
 - o. MPS 525
 - p. PL_P 535
 - q. VET_PH 505
 - r. VET_PH 555
- 5. Participation in Biotechnology Training Program Forum meetings and events
- 6. Industrial Internship