

From: John Halliwill <halliwil@uoregon.edu>

Date: Friday, February 7, 2020 at 9:30 AM

To: Jim Hutchison <hutch@uoregon.edu>

Cc: John Halliwill <halliwil@uoregon.edu>

Subject: Re: Due diligence: Joint Graduate Bioengineering Program with OSU

Hi Jim,

Thanks for reaching out. As you know, faculty in HPHY have been involved in much of the planning of the proposed program, so it's no surprise we are enthusiastic about this. The proposed program will not be competitive with the human physiology program. Quite the contrary, it will be highly synergistic and we see great opportunity for cross-fertilization of both programs. We have no concern about accommodating the additional graduate students in our courses. The new courses that are being proposed are likely to appeal to some of our students. This is as win-win as it gets!

Best regards,

John

John Halliwill, PhD, FAPS, FACSM | Professor and Department Head | Human Physiology | University of Oregon | Eugene, OR

He/His/Him | 1.541.600.4337 | halliwil@uoregon.edu | <http://eeplab.uoregon.edu> | **Schedule @** doodle.com/halliwill

As a **Designated Reporter**, I am required to report any incidents of prohibited discrimination and harassment including sexual violence or sexual harassment that I hear about to the university administration. I will also direct students to resources to help them.

Just because I email you in the evening, on the weekend, or on vacation, it doesn't mean I expect you to respond in kind. #worklifebalance

On Wed, Feb 5, 2020 at 10:30 PM Jim Hutchison <hutch@uoregon.edu> wrote:

John,

The Knight Campus is collaborating with Oregon State University in proposing a joint, graduate degree program in Bioengineering. The proposal for this program is attached. For the most part, this program will be distinct from others offered on the UO campus. However, there will be new courses offered through the program that might be beneficial to graduate students in your department, including:

- BIOE 511 Cellular and Molecular Bioengineering (3 credits): Biomedical applications and engineering approaches to study and manipulate cells.
- BIOE 512 Modeling of Physiological Systems (4 credits): Integration of engineering principles and human physiology in the following areas: mechanics of the musculoskeletal system; transport phenomena in the pulmonary, cardiovascular, renal and gastrointestinal systems; bioelectricity in the nervous system.
- BIOE 513 Drug and Medical Device Regulation in Technology Development (2 Credits): Advanced study of regulation of pharmaceutical products and medical devices by the Food and Drug Administration, including requirements for drug and device approval, current good manufacturing practices, current good laboratory practices, quality control and assurance, and compliance.
- BIOE 514 Innovation and Entrepreneurship (3 credits): Introduces and develops the vocabulary, technical knowledge and leadership skills necessary to successfully translate research discoveries into successful ventures. Students will identify challenges and trends that signal promising opportunities. They will practice market research skills, including the collection and analysis of primary and secondary market data. They will learn and apply the

fundamentals of competitive strategy, including intellectual property protection. They will develop business and financial models, including exploration of different sources of funding.

In addition, students in the bioengineering program may also be interested in taking electives in your department, for example in the following courses (and perhaps others):

- HPHY 513 Muscle Structure, Function, and Plasticity
- HPHY 534 Movement Disorders
- HPHY 684 Kinematics of Human Movement

Can you please respond to this message indicating that the proposed program will not be competitive with the human physiology graduate program and indicate whether you would be able to accommodate additional graduate students in your courses. For the purposes of planning, initial cohorts in this program are likely to be five per year, growing to perhaps 10 per year over the next five years. Of these incoming students, I anticipate a small fraction of the students would elect to take human physiology courses as electives.

Best regards,
Jim

Jim Hutchison
Lokey-Harrington Chair in Chemistry
Senior Associate Vice President, Knight Campus for Accelerating Scientific Impact
University of Oregon

From: Bruce Bowerman <bowerman@uoregon.edu>
Date: February 7, 2020 at 12:41:45 PM PST
To: Jim Hutchison <hutch@uoregon.edu>
Cc: Cristin Hulslander <cristinh@uoregon.edu>, Shelley Elliott <shelley1@uoregon.edu>
Subject: Re: Due diligence: Joint Graduate Bioengineering Program with OSU

hi Jim,

The proposed program will not be competitive with the Biology graduate program and we should be able to accommodate (indeed would welcome) the additional graduate students in our courses. The numbers sound reasonable and we can see how it goes over time. I would point out that some of those courses might not be available every year, but in general most are taught regularly, and of course there may be others that appear that will also appeal to bioengineering students. I am very pleased that the UO is developing this bioengineering component; fantastic possibilities for the future both for recruiting students, educating them, and promoting interesting research synergies and collaborations.

Bruce

On Feb 5, 2020, at 10:19 PM, Jim Hutchison <hutch@uoregon.edu> wrote:

Bruce,

The Knight Campus is collaborating with Oregon State University in proposing a joint, graduate degree program in Bioengineering. The proposal for this program is attached. For the most part, this program will be distinct from others offered on the UO campus. However, there will be new courses offered through the program that might be beneficial to graduate students in your department, including:

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- BIOE 513 Drug and Medical Device Regulation in Technology Development (2 Credits): Advanced study of regulation of pharmaceutical products and medical devices by the Food and Drug Administration, including requirements for drug and device approval, current good manufacturing practices, current good laboratory practices, quality control and assurance, and compliance.
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In addition, students in the bioengineering program may also be interested in taking electives in your department, for example in the following courses (and perhaps others):

- BI 523 Human Molecular Genetics
- BI 524 Advanced Molecular Genetics
- BI 526 Genetics of Cancer
- BI 527 Molecular Genetics of Human Disease
- BI 528 Developmental Genetics
- BI 563 Cellular Neuroscience
- BI 566 Developmental Neurobiology

Can you please respond to this message indicating that the proposed program will not be competitive with the biology graduate program and indicate whether you would be able to accommodate additional graduate students in your courses. For the purposes of planning, initial cohorts in this program are likely

to be five per year, growing to perhaps 10 per year over the next five years. Of these incoming students, I anticipate a small fraction of the students would elect to take biology courses as electives.

Best regards,
Jim

Jim Hutchison
Lokey-Harrington Chair in Chemistry
Senior Associate Vice President, Knight Campus for Accelerating Scientific Impact
University of Oregon

From: David Tyler <dtyler@uoregon.edu>
Date: Thursday, February 6, 2020 at 11:21 AM
To: Jim Hutchison <hutch@uoregon.edu>
Subject: RE: Due diligence: Joint Graduate Bioengineering Program with OSU

Jim,
Thanks for the email and for the document describing your proposed joint degree program with OSU in bioengineering. Based on the information you sent, the proposed program will not be competitive with the Chemistry and Biochemistry Department's graduate program. In addition, I note that we will be able to accommodate additional graduate students from your program in our courses.
Best Wishes,
David

David Tyler
Department Head
Department of Chemistry and Biochemistry
1253 University of Oregon
Eugene, OR 97403
(541) 346-4649

From: Jim Hutchison
Sent: Wednesday, February 5, 2020 10:15 PM
To: David Tyler <dtyler@uoregon.edu>
Subject: Due diligence: Joint Graduate Bioengineering Program with OSU

David,
The Knight Campus is collaborating with Oregon State University in proposing a joint, graduate degree program in Bioengineering. The proposal for this program is attached. For the most part, this program will be distinct from others offered on the UO campus. However, there will be new courses offered through the program that might be beneficial to graduate students in your department, including:

- BIOE 511 Cellular and Molecular Bioengineering (3 credits): Biomedical applications and engineering approaches to study and manipulate cells.
- BIOE 512 Modeling of Physiological Systems (4 credits): Integration of engineering principles and human physiology in the following areas: mechanics of the musculoskeletal system; transport phenomena in the pulmonary, cardiovascular, renal and gastrointestinal systems; bioelectricity in the nervous system.
- BIOE 513 Drug and Medical Device Regulation in Technology Development (2 Credits): Advanced study of regulation of pharmaceutical products and medical devices by the Food and Drug Administration, including requirements for drug and device approval, current good manufacturing practices, current good laboratory practices, quality control and assurance, and compliance.
- BIOE 514 Innovation and Entrepreneurship (3 credits): Introduces and develops the vocabulary, technical knowledge and leadership skills necessary to successfully translate research discoveries into successful ventures. Students will identify challenges and trends that signal promising opportunities. They will practice market research skills, including the collection and analysis of primary and secondary market data. They will learn and apply the fundamentals of competitive strategy, including intellectual property protection. They will develop business and financial models, including exploration of different sources of funding.

In addition, students in the bioengineering program may also be interested in taking electives in your department, for example in the following courses (and perhaps others):

- CH 561 Biochemistry
- CH 562 Biochemistry
- CH 563 Biochemistry
- CH 564 RNA Biochemistry
- CH 565 Physical Biochemistry
- CH 566 Structural Biochemistry

Can you please respond to this message indicating that the proposed program will not be competitive with the chemistry graduate program and indicate whether you would be able to accommodate additional graduate students in your courses. For the purposes of planning, initial cohorts in this program are likely to be five per year, growing to perhaps 10 per year over the next five years. Of these incoming students, I anticipate a small fraction of the students would elect to take chemistry courses as electives.

Best regards,
Jim

Jim Hutchison
Lokey-Harrington Chair in Chemistry
Senior Associate Vice President, Knight Campus for Accelerating Scientific Impact
University of Oregon

From: Daniel Dugger <ddugger@uoregon.edu>
Date: Thursday, February 6, 2020 at 12:19 PM

To: Jim Hutchison <hutch@uoregon.edu>

Subject: Re: Due diligence: Joint Graduate Bioengineering Program with OSU

Dear Jim,

I have reviewed the materials you sent, and can confirm that the proposed graduate program will not be in competition with the UO graduate program in Math. We will have no problem accommodating the increased demand for math courses coming from students in your program.

Good luck!

Dan Dugger
Professor and Head
Department of Mathematics

From: Jim Hutchison <hutch@uoregon.edu>

Sent: Wednesday, February 5, 2020 10:28 PM

To: Daniel Dugger <ddugger@uoregon.edu>

Subject: Due diligence: Joint Graduate Bioengineering Program with OSU

Daniel,

The Knight Campus is collaborating with Oregon State University in proposing a joint, graduate degree program in Bioengineering. The proposal for this program is attached. For the most part, this program will be distinct from others offered on the UO campus. Students in the bioengineering program may be interested in taking electives in your department, for example in the following courses (and perhaps others):

- MATH 521M Partial Differential Equations: Fourier Analysis I
- MATH 522 Partial Differential Equations: Fourier Analysis II
- MATH 561 Introduction to Mathematical Models of Statistics I

Can you please respond to this message indicating that the proposed program will not be competitive with the mathematics graduate program and indicate whether you would be able to accommodate additional graduate students in your courses. For the purposes of planning, initial cohorts in this program are likely to be five per year, growing to perhaps 10 per year over the next five years. Of these incoming students, I anticipate a small fraction of the students would elect to take these mathematics courses as electives.

Best regards,
Jim

Jim Hutchison
Lokey-Harrington Chair in Chemistry

Senior Associate Vice President, Knight Campus for Accelerating Scientific Impact
University of Oregon

Hi Jim

The physics department enthusiastically supports the Knight Campus Graduate Degree Program. There are no conflicts with our program and we look forward to teaching the physics requirements for the program

Best wishes Richard

Sent from my iPhone

On Feb 6, 2020, at 5:30 PM, Jim Hutchison <hutch@uoregon.edu> wrote:

Richard,

The Knight Campus is collaborating with Oregon State University in proposing a joint, graduate degree program in Bioengineering. The proposal for this program is attached. For the most part, this program will be distinct from others offered on the UO campus. Students in the bioengineering program may be interested in taking electives in your department, for example in the following courses (and perhaps others):

- PHYS 581 Design of Experiments
- PHYS 611 Theoretical Mechanics
- PHYS 612 Theoretical Mechanics
- PHYS 613 Statistical Physics
- PHYS 614 Statistical Physics

Can you please respond to this message indicating that the proposed program will not be competitive with the physics graduate program and indicate whether you would be able to accommodate additional graduate students in your courses. For the purposes of planning, initial cohorts in this program are likely to be five per year, growing to perhaps 10 per year over the next five years. Of these incoming students, I anticipate a small fraction of the students would elect to take these physics courses as electives.

Best regards,
Jim

Jim Hutchison
Lokey-Harrington Chair in Chemistry
Senior Associate Vice President, Knight Campus for Accelerating Scientific Impact
University of Oregon

On 2/10/20, 1:42 AM, "Hal Sadofsky" <sadofsky@uoregon.edu> wrote:

Thanks Jim,

That's very helpful. In answer to your question in the other email the two most obvious potential impacts would be:

1. If the program was planning to draw on Natural Science faculty to teach some of the required courses. Of course I wouldn't object to that, but I'd want to know that. Though it looks like you aren't planning on that.

2. If the students recruiting into this program (it looks like you are talking in the range of 10-20 per year?) would be taking courses in Natural Science departments in sufficient numbers so as to require extra resources. Again, if that were the case, it would be fine, we'd just want to plan for it. But it doesn't look likely to be the case.

yours, Hal

> On Feb 7, 2020, at 19:41, Jim Hutchison <hutch@uoregon.edu> wrote:

>

> Hal,

> Here is the proposal and most of the due diligence documentation. We've answered a number of questions already. If you have any concerns or questions, we are happy to answer those. We are also preparing documents for the Provost Council and a document that describes how OSU and UO will jointly operate the degree.

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> Best,

> Jim

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> On 2/7/20, 5:20 PM, "Hal Sadofsky" <sadofsky@uoregon.edu> wrote:

>

> Dear Jim,

>

> Would you mind sharing the bioengineering PhD program proposal with me? Besides being curious, I'd like to understand the impact on CAS faculty and programs.

>

> Obviously we want and need to do this, but since there is likely to be an impact we need to plan/be aware of it.

>

> Thanks, Hal

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> <Bioengineering_Graduate_New_Program_Proposal.docx><Due diligence BIOE Grad_020720.docx>