

Faculty of Science

Office of the Dean St. John's, NL Canada A1B 3X7 Tel: 709 864 8154 Fax: 709 864 3316 deansci@mun.ca www.mun.ca/science

MEETING OF THE FACULTY COUNCIL OF THE FACULTY OF SCIENCE

A regular meeting of the Faculty Council of the Faculty of Science will be held on Wednesday, August 19, 2020, at 1:00 p.m. by Webex.

AGENDA

- 1. Regrets
- 2. Adoption of the Minutes of July 15, 2020
- 3. Business Arising from the Minutes
- 4. **Correspondence:** None
- **5.** Reports of Standing Committees:
 - A. Undergraduate Studies Committee:
 - **a.** Department of Biology, BIOL 4916, Special Topics in Plant Ecology and Global Change, approved by the committee and presented to Faculty Council for information only (Paper 5.A.a., pages 5-18)
 - **B.** Graduate Studies Committee: No business.
 - **C. Library Committee:** No business.
- 6. Reports of Delegates from Other Councils
- 7. Report of the Dean
- 8. Question Period
- 9. Adjournment

Travis Fridgen, Ph.D. Acting Dean of Science



Faculty of Science

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FACULTY OF SCIENCE FACULTY COUNCIL OF SCIENCE MINUTES OF MEETING OF July 15, 2020

A meeting of the Faculty Council of the Faculty of Science was held on Wednesday, July 15, 2020, at 1:00 p.m. using Webex.

FSC 2765 Present

Biochemistry

M. Berry, R. Bertolo, V. Booth, J. Brunton, S. Harding, M. Mulligan

Biology

J. Burke, T. Chapman, E. Edinger

Chemistry

C. Bottaro, E. Merschrod, S. Pansare

Computer Science

Y. Chen, C. Hyde

Earth Sciences

E. Burden, G. Dunning, G. Layne

Mathematics & Statistics

I. Booth, R. Haynes, S. Sullivan

Ocean Sciences

G. Fletcher

Physics & Physical Oceanography

S. Curnoe, M. Morrow, K. Poduska, I. Saika-Voivod

Psychology

D. Hallett, A. Swift-Gallant, C. Thorpe, C. Walsh

Dean of Science Office

S. Bungay, T. Fridgen, G. Jackson, L. Zedel

Staff

M. Bromberek, T. Mackenzie, A. Power

Graduate Students

A. Alfosool

FSC 2766 Regrets

S. Dufour, K. Fowler

FSC 2767 Adoption of Minutes

Moved: Minutes of the meeting of June 17, 2020, meeting be adopted (Merschrod/Berry). **Carried.**

FSC 2768 Business Arising: None

FSC 2769 Correspondence: None

FSC 2770 Reports of Standing Committees:

A. Undergraduate Studies Committee:

Presented by Shannon Sullivan, Chair, Undergraduate Studies Committee

a. Moved: Department of Biology, New Course: Biol 3630, Freshwater Biology. (Sullivan/Chapman). **Carried.**

B. Graduate Studies Committee

Presented by Graham Layne, Chair, Graduate Studies Committee.

- **a. Moved:** Department of Computer Science, Proposed Changes to Graduate Program (Layne/Chen). **One opposed. Carried.**
- C. Nominating Committee: None
- **D. Library Committee:** None

FSC 2771 Report of the Dean

Presented by Travis Fridgen, Acting Dean

- 1. We received permission to submit Requests to Recruit for five faculty positions at this time one for Biochemistry, two for Computer Science, one for Earth Sciences, and one for Psychology.
- 2. Ken Fowler has accepted the position of Director of the Student Wellness and Counselling Centre. On behalf of the Faculty of Science, I would like to thank Ken for his leadership in the Faculty and the Department of Psychology. An interim head will be appointed following consultation with the Psychology department, which should begin this afternoon.
- 3. At Senate last night the following motion was passed:

For the Fall semester, proctored assessment can be available to faculty, but proctored assessments should only be used if no other option is feasible. Prior to selecting proctored assessments, faculty should consider any other method to reduce the need for proctored assessments, such as restructuring course work to increase the amount of low-stakes evaluation, up to and including assigning P/F grades based on term work. Approval for a proctored assessment would be made by the Dean of the academic unit.

To my knowledge, the only approved proctoring platform on campus is ProctorU, which costs \$25 US per student, per assessment. Just to put it in context, 1000 student assessments will cost approximately \$35,000 CAD. Other platforms are being looked at, including the pilot that is being run by Math and Engineering. The VPA is looking for some money that will be distributed to Faculties to offset these costs. I have no idea how much money this will be, but I don't expect very much. In the next week or so, once we have more information, the Dean of Science office will circulate this information. Any requests for proctoring will need to show necessity and will require a plan to accommodate students who, for any reason, cannot participate in, or is uncomfortable with, online proctoring.

- 4. Please use your class times for synchronous activities in the Fall. If you plan to do anything synchronous outside of your scheduled class time, you will need to accommodate students who may have scheduled class times.
- 5. I urge you to read through the guidelines and recommendations brought to senate from the Academic Scenario Planning Committee and endorsed by Senate last night.
- 6. Please do not forget to look at the draft interim report on equivalencies on D2L and participate in the survey, which just reopened. We did get a lot of feedback, but more is welcome.

FSC 2772 Question Period

FSC 2773 Adjournment

The meeting adjourned at 1:26 p.m.



Office of the Registrar

St. John's, NL Canada A1C 5S7 Tel: 709 864 8260 Fax: 709 864 2337 www.mun.ca

August 10, 2020

TO: All Members of Faculty Council, Faculty of Science

FROM: Tracey Edmunds, Secretary, Committee on Undergraduate Studies

Faculty of Science

SUBJECT: Proposals for Calendar Changes

An email poll meeting held on July 22th, 2020, the Faculty of Science Committee on Undergraduate Studies approved a proposal for a New Special Topics Course from the Department of Biology, and agreed that the following items should be forwarded to Faculty Council for information:

1. Department of Biology - New Special Topics Course: Biology 4916: Special Topics in Plant Ecology and Global Change

Tracey Edmundo

Tracey Edmunds

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Cover Page

LIST OF CHANGES

Indicate the Calendar change(s) being proposed by checking and completing as appropriate:
X New course(s): BIOL 4916 Special Topics in Plant Ecology and Global Change Amended or deleted course(s): New program(s): Amended or deleted program(s): New, amended or deleted Glossary of Terms Used in the Calendar entries New, amended or deleted Admission/Readmission to the University (Undergraduate) regulations New, amended or deleted General Academic Regulations (Undergraduate) New, amended or deleted Faculty, School or Departmental regulations Other:
ADMINISTRATIVE AUTHORIZATION By signing below, you are confirming that the attached Calendar changes have obtained all necessary Faculty/School approvals, and that the costs, if any, associated with these changes can be met from within the existing budget allocation or authorized new funding for the appropriate academic unit.
Signature of Dean/Vice-President:
Date:
Date of approval by Faculty/Academic Council:

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Senate Summary Page for Courses

COURSE NUMBER AND TITLE

Biology 4916 – Special Topics in Plant Ecology and Global Change

REVISED COURSE NUMBER AND TITLE

NA

ABBREVIATED COURSE TITLE

Sp Tpcs Plant Ecol & Gl Chg.

RATIONALE

Biology 4916 will provide an in an in-depth understanding of ecological concepts and theory as they apply to plants, focusing on boreal plant assemblages, where appropriate. Terrestrial plant communities and ecosystems will be discussed in the context of ongoing global changes in climate, land-use, biogeochemical cycles, invasions by non-native species, and native biodiversity loss. The course will familiarize students with experimental techniques in plant ecology and with the primary scientific literature.

The proposed course will be a useful elective for the various programs offered by the Department of Biology, particularly for those students pursing the Applied Ecology and Conservation and Evolutionary Ecology concentrations. Currently, there is no other course offered at the St. John's campus of Memorial University that focuses on plant ecology.

Pre-requisites will be BIOL 2600 and STAT 2550 or any of the courses listed in the credit restrictions of Statistics 2550.

CALENDAR CHANGES

NA

CALENDAR ENTRY AFTER CHANGES

NA

SECONDARY CALENDAR CHANGES

None.

Memorial University of Newfoundland Undergraduate Calendar Change Proposal Form Appendix Page

CONSULTATIONS SOUGHT

Academic Unit	Response
Humanities and Social Sciences	No
Business Administration	Yes
Education	No
Engineering and Applied Science	Yes
Grenfell Campus: Arts and Social Science Science and the Environment Fine Arts	No
Human Kinetics and Recreation	Yes
Marine Institute	No
Medicine	Yes
Music	Yes
Nursing	No
Pharmacy	Yes
Science	Yes
Social Work	No
Library	Yes

LIBRARY REPORT

A library report is attached.

RESOURCE IMPLICATIONS

This course will be taught by an existing faculty member in the Department of Biology with expertise in plant ecology. No additional instructional costs will be required.

ADDITIONAL INFORMATION REQUIRED FOR NEW COURSE PROPOSALS

Proposed Course Outline

Biology 4916 will provide an in an in-depth understanding of ecological concepts and theory as they apply to plants, focusing on boreal plant assemblages, where appropriate. Terrestrial plant communities and ecosystems will be discussed in the context of ongoing global changes in climate, land-use, biogeochemical cycles, invasions by non-native species, and native biodiversity loss. The course will familiarize students with experimental techniques in plant ecology and with the primary scientific literature.

Lecture Topics

- Topics
- Course Introduction
- Biomes & Distribution of Plants
- Global Environmental Change 1
- Global Environmental Change 2
- Climate template
- Plants & Light Environment
- Water Relations & Energy Balance
- Soil & Mineral Nutrition of Plants
- Plant Population Structure & Dynamics
- Plant Evolution
- Midterm 1
- Growth, Reproduction, & Dispersal
- Life History Strategies
- Community Properties
- Seed dormancy
- Germination and seedling establishment
- INTERACTIONS WITH OTHER TROPHIC LEVELS
- Natural enemies
- Mutualisms
- Breeding systems
- Midterm 2
- Competition & Coexistence
- Competitive Ability
- Coexistence & Maintenance of Diversity
- Models of Community Dynamics
- Succession & Disturbance
- Plant Invasions
- Diversity vs. Productivity and Stability

- Plant & Ecosystem Processes
- Plant Agricultural Ecology
- Final Exam

Evaluation

•	Midterm I	23%
•	Midterm II	23%
•	Research Paper	15%
•	Labs	16%
•	Final exam	23%

Labs

On Campus:

The lab will focus on a single field project in which the entire class participates in groups, with each working on a different aspect of the larger question.

Example projects may include gap/disturbance dynamics and regeneration compared to different forest age stands, changes in species composition from establishment to later stages of succession and degree of herbivory in different stages of succession

Students will determine what data to collect to address the question being examined, how that data should be collected (sampling techniques) and how the data will be analyzed.

Groups will be expected to combine their results into a final class project, which will emphasize the cooperative effort that fuels scientific research.

Modifications for Remote Offering (for Fall 2020):

Previously gathered boreal plant and lichen raw data will be shared with students to discuss, analyze and interpret using R.

Textbook

The Ecology of Plants, 2nd Edition, Gurevich, Scheiner and Fox

Instructor

Dr. Paul Marino
Associate Professor, Department of Biology
E-mail:pmarino@mun.ca

From: Rohr, Linda

To: Jody-Lynn Burke

Subject: Re: Calendar Change Proposal - BIOL Date: Monday, June 29, 2020 11:44:59 AM

Hi Jody,

No concerns from HKR with the new Special Topics course BIOL 4916.

Linda

Linda E. Rohr PhD

Dean, School of Human Kinetics & Recreation Memorial University

t: 709.864.8129 f: 709.864.7531 e: lerohr@mun.ca

PE 2027

From: Jody-Lynn Burke jrotchford@mun.ca>
Date: Wednesday, June 24, 2020 at 10:30 AM

Subject: Calendar Change Proposal - BIOL

Dear colleagues,

The purpose of this email is to extend an opportunity for you to provide feedback on the attached calendar change proposal for a new Special Topics course; BIOL 4916 (Plant Ecology and Global Change).

We hope to offer this course in the Fall. Your feedback, at your earliest convenience, is appreciated.

If you have any questions, please don't hesitate to contact me.

Be well and stay safe!

Jody Burke, BSc.(Hons), M.Ed, PGC(QM) - Academic Program Officer

Department of Biology, Memorial University

Office: (709) 864 8021 E-mail: <u>jodyb@mun.ca</u> From: cvardy@mun.ca
To: Jody-Lynn Burke

Cc: DeanofMedicine@med.mun.ca
Subject: FW: Calendar Change Proposal - BIOL
Date: Thursday, June 25, 2020 2:21:22 PM
Attachments: New Course - BIOL 4916.pdf

The Faculty of Medicine is supportive of the proposed calendar change regarding Biology 4916-Special Topics in Plant Ecology and Global Change.

Regards,

Cathy Vardy, MD Vice Dean

From: Jody-Lynn Burke [mailto:jrotchford@mun.ca]

Sent: Wednesday, June 24, 2020 10:31 AM

To: Faculty of Humanities and Social Sciences < hss@mun.ca; Shannahan, Rachelle

<rshannahan@mun.ca</pre>>; Collett, Meghan <mcollett@mun.ca</pre>>; engrconsult@mun.ca; Rohr, Linda

<lerohr@mun.ca>; miugconsultations@mi.mun.ca; Steele, Dr. Margaret: Dean of Medicine

<<u>DeanofMedicine@med.mun.ca</u>>; Sutherland, Ian D <<u>isutherland@mun.ca</u>>; DeanNurse

<DeanNurse@mun.ca>; pharminfo@mun.ca; Dean of Science <deansci@mun.ca>; adeanugradswk

<adeanugradswk@mun.ca>; Library Correspondence <univlib@mun.ca>; kjacobse@grenfell.mun.ca; ssedean@grenfell.mun.ca; thennessey@grenfell.mun.ca

Cc: sdufour@mun.ca; Sullivan,Shannon <shannon@mun.ca>

Subject: Calendar Change Proposal - BIOL

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If you have any questions, please don't hesitate to contact me.

Be well and stay safe!

Jody Burke, BSc.(Hons), M.Ed, PGC(QM) – Academic Program Officer

Department of Biology, Memorial University

Office: (709) 864 8021 E-mail: <u>jodyb@mun.ca</u> From: Shannahan, Rachelle
To: Jody-Lynn Burke

Subject: RE: Calendar Change Proposal - BIOL Date: Sunday, July 5, 2020 10:03:05 PM

Hi Jody,

Thank you for the opportunity to review this proposal. The Faculty of Business Administration has no issue and is therefore supportive.

Best regards,

Rachelle Shannahan

Rachelle J. Shannahan, PhD Associate Dean, Academic Programs Faculty of Business Administration Memorial University of Newfoundland

rshannahan@mun.ca

From: Jody-Lynn Burke

Sent: Wednesday, June 24, 2020 10:31 AM

To: Faculty of Humanities and Social Sciences <hss@mun.ca>; Shannahan, Rachelle <rshannahan@mun.ca>; Collett, Meghan <mcollett@mun.ca>; engrconsult@mun.ca; Rohr, Linda <lerohr@mun.ca>; miugconsultations@mi.mun.ca; deanofmedicine@med.mun.ca; Sutherland, Ian D <isutherland@mun.ca>; DeanNurse <DeanNurse@mun.ca>; pharminfo@mun.ca; Dean of Science <deansci@mun.ca>; adeanugradswk <adeanugradswk@mun.ca>; Library Correspondence <univlib@mun.ca>; kjacobse@grenfell.mun.ca; ssedean@grenfell.mun.ca; thennessey@grenfell.mun.ca

thermessey@gremen.man.ea

Cc: sdufour@mun.ca; Sullivan,Shannon <shannon@mun.ca>

Subject: Calendar Change Proposal - BIOL

Dear colleagues,

The purpose of this email is to extend an opportunity for you to provide feedback on the attached calendar change proposal for a new Special Topics course; BIOL 4916 (Plant Ecology and Global Change).

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If you have any questions, please don't hesitate to contact me.

Be well and stay safe!

Jody Burke, BSc.(Hons), M.Ed, PGC(QM) – Academic Program Officer

Department of Biology, Memorial University

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To:
                   iodyb@mun.ca
Subject:
                   Re: FW: Calendar Change Proposal - BIOL
Date:
                   Thursday, July 9, 2020 1:35:58 PM
Hi Jody,
Chemistry is ok with this course and has no additional comments.
Best,
Mike
On 2020-06-24 12:25, Dean of Science wrote:
> FROM: Jody-Lynn Burke
> SENT: Wednesday, June 24, 2020 10:31 AM
> SUBJECT: Calendar Change Proposal - BIOL
> Dear colleagues,
> The purpose of this email is to extend an opportunity for you to
> provide feedback on the attached calendar change proposal for a new
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> earliest convenience, is appreciated.
> If you have any questions, please don't hesitate to contact me.
> Be well and stay safe!
> JODY BURKE, BSC.(HONS), M.ED, PGC(QM) – ACADEMIC PROGRAM OFFICER
> Department of Biology, Memorial University
> Office: (709) 864 8021
> E-mail: jodyb@mun.ca
> [1]
>
> Links:
> [1] https://www.mun.ca/success/
```

Department of Chemistry Consult

From:

From: Engineering Consult
To: Jody-Lynn Burke

Cc: <u>Edmunds, Jayde</u>; <u>Peters, Dennis</u>; <u>Bruce Quinton</u>

Subject: Re: Calendar Change Proposal - BIOL Date: Thursday, June 25, 2020 11:13:30 AM

Dear Ms. Burke,

Thank you for the opportunity to comment on the proposed new Special Topics course BIOL 4916 "Plant Ecology and Global Change".

The next scheduled meeting of the Committee on Undergraduate Studies of the Faculty of Engineering and Applied Science is not until July 15. As Chair of the Committee, I see no impact on Engineering programs.

I am happy to support this proposed change.

Yours sincerely,

> -----

Dr. Glyn George, Chair

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Committee on Undergraduate Studies
Faculty of Engineering and Applied Science
Memorial University of Newfoundland
St. John's NL A1B 3X5
_____
On 2020-06-24 10:30, Jody-Lynn Burke wrote:
> Dear colleagues,
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> earliest convenience, is appreciated.
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> Be well and stay safe!
> JODY BURKE, BSC.(HONS), M.ED, PGC(QM) – ACADEMIC PROGRAM OFFICER
> Department of Biology, Memorial University
> Office: (709) 864 8021
> E-mail: jodyb@mun.ca
>
> [1]
>
>
>
> Links:
```

From: Sutherland, Ian D
To: Jody-Lynn Burke

Subject: Re: Calendar Change Proposal - BIOL Date: Thursday, June 25, 2020 9:53:15 AM

The School of Music has no issue with the proposed course.

From: Jody-Lynn Burke < jrotchford@mun.ca> Date: Wednesday, June 24, 2020 at 10:30 AM

To: Faculty of Humanities and Social Sciences <hss@mun.ca>, "Shannahan, Rachelle" <rshannahan@mun.ca>, "Collett, Meghan" <mcollett@mun.ca>, "engrconsult@mun.ca" <engrconsult@mun.ca>, "Rohr, Linda" <lerohr@mun.ca>, "miugconsultations@mi.mun.ca" <miugconsultations@mi.mun.ca>, "deanofmedicine@med.mun.ca" <DeanofMedicine@med.mun.ca>, "Sutherland, Ian D" <isutherland@mun.ca>, DeanNurse <DeanNurse@mun.ca>, "pharminfo@mun.ca" <pharminfo@mun.ca>, Dean of Science <deansci@mun.ca>, adeanugradswk <adeanugradswk@mun.ca>, Library Correspondence <univlib@mun.ca>, "kjacobse@grenfell.mun.ca" <kjacobse@grenfell.mun.ca>, "ssedean@grenfell.mun.ca>, "thennessey@grenfell.mun.ca" <thennessey@grenfell.mun.ca>

Cc: "sdufour@mun.ca" <sdufour@mun.ca>, "Sullivan,Shannon" <shannon@mun.ca> **Subject:** Calendar Change Proposal - BIOL

Dear colleagues,

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If you have any questions, please don't hesitate to contact me.

Be well and stay safe!

Jody Burke, BSc.(Hons), M.Ed, PGC(QM) – Academic Program Officer

Department of Biology, Memorial University

Office: (709) 864 8021 E-mail: <u>jodyb@mun.ca</u> From: Psych Deputy Head To: jodyb@mun.ca

Subject: Re: Calendar Change Proposal - BIOL Date: Wednesday, June 24, 2020 3:27:49 PM

Hi Jody,

This sounds like a great course. Psychology has no concerns.

Christina

Christina Thorpe
Deputy Head, Undergraduate Studies
Psychology Department
Memorial University of Newfoundland
St. John's, NL,
A1B 3X9

phone: 709-864-4806 fax: 709-864-2430

e-mail: psychdeputyhead@mun.ca

On Jun 24, 2020, at 12:25 PM, Dean of Science <<u>deansci@mun.ca</u>> wrote:

From: Jody-Lynn Burke

Sent: Wednesday, June 24, 2020 10:31 AM **Subject:** Calendar Change Proposal - BIOL

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If you have any questions, please don't hesitate to contact me.

Be well and stay safe!

From: Annie Mercier
To: jodyb@mun.ca

Subject: Re: FW: Calendar Change Proposal - BIOL Date: Monday, June 29, 2020 9:59:39 AM

Dear Jody:

The OSCUP has reviewed the proposed new course and found it suitable; we are supportive.

Minor comments included using the present tense in the course description and adding the publication year for the suggested textbook.

Best of luck with this new offering,

Annie

Annie Mercier, PhD Professor and Deputy Head Department of Ocean Sciences Memorial University 709-864-2011 amercier@mun.ca

On 2020-06-24 12:25 p.m., Dean of Science wrote:

From: Jody-Lynn Burke

Sent: Wednesday, June 24, 2020 10:31 AM **Subject:** Calendar Change Proposal - BIOL

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Jody Burke, BSc.(Hons), M.Ed, PGC(QM) – Academic Program Officer