



The College at  
**BROCKPORT**  
 STATE UNIVERSITY OF NEW YORK  
 College Senate  
 350 New Campus Drive  
 Brockport, NY 14420-2925

**RECEIVED**  
 MAY 11 2009  
 The College at Brockport  
 Office of the President

Resolution # 35  
 2008-2009  
 College Senate

New Resolution:   
 Supersedes Res #:

COLLEGE SENATE  
 SUNY College at Brockport  
 MAY 13 2009  
 350 New Campus Drive  
 Brockport, NY 14420-2925

TO: Dr. John R. Halstead, College President

FROM: The College Senate: *May 4, 2009*

RE:  $\longrightarrow$  I. Formal Resolution (*Act of Determination*)  
 II. Recommendation (*Urging the Fitness of*)  
 III. Other, For Your Information (*Notice, Request, Report, etc.*)

SUBJ: **Removal of Requirement for 300-level Electives for Biology Majors  
 and Addition of 2-lab Requirement** (routing # 47 08-09 UC)

Signed: *T. M. Rao* Date: 5/7/09  
 (*Thambrakalli M. Rao, 2008-09 College Senate President*)

**Please fill out the bottom portion and follow the distribution instructions at the end of this page.**

TO: T.M. Rao, The College Senate President

FROM: John R. Halstead, College President

RE:  $\longrightarrow$  I. Decision and Action Taken on Formal Resolution (circle choice)  
 a.  Accepted - Implementation Effective Date: Fall 2009  
 b. Deferred for discussion with the Faculty Senate on \_\_\_/\_\_\_/\_\_\_  
 c. Unacceptable for the reasons contained in the attached explanation

II, III. Response to Recommendation or Other/FYI

a. Received and acknowledged \_\_\_/\_\_\_/\_\_\_

b. Comment: \_\_\_\_\_

Signed: *J. Halstead* Date: 5/11/09  
 (*Dr. John R. Halstead, President, The College at Brockport*)

**DISTRIBUTION**

PRESIDENT'S OFFICE COPIES: Provost, Vice Presidents, College Senate, Other: \_\_\_\_\_

PROVOST & VICE PRESIDENT(S) COPIES: Assistant Provost, Dean(s), Academic Advisement, Registrar, Other: \_\_\_\_\_

DEAN(S) COPY: Department Chair(s), Other: \_\_\_\_\_

**COLLEGE SENATE OFFICE  
RESOLUTION PROPOSAL COVER PAGE**

<b>Routing Number</b> <i>Routing # assigned by Senate Office</i>	<b>#47 08-09 UC</b> <i>Use routing number and title in all reference to this proposal.</i>
<b>Replaces Resolution</b>	<b>#</b>

**DEADLINE FOR SUBMISSIONS: FEBRUARY 28**

Incomplete proposals or proposals received after the deadline may not be reviewed until next semester.

**INSTRUCTIONS** – please, no multiple attachments – each proposal must be submitted electronically as one document.

- Submit only complete proposals. Include support letters from department chair and dean.
- Proposals must be prepared individually in Word format using committee guidelines available at [brockport.edu/collegesenate/proposal.html](http://brockport.edu/collegesenate/proposal.html).
- Fill out this cover page for each proposal and insert it electronically as the front page of your document. ([collegesenate/proposal.html](http://collegesenate/proposal.html))
- Email whole proposal with cover page as one attachment to [senate@brockport.edu](mailto:senate@brockport.edu) and [facprez@brockport.edu](mailto:facprez@brockport.edu).
- All updates must be resubmitted to the Senate office with the original cover page including routing number.
- Questions? Call the Senate office at 395-2586 or the appropriate committee chairperson.

1. **PROPOSAL TITLE:** Please be somewhat descriptive, ie. *Graduate Probation/Dismissal Proposal* rather than *Graduate Proposal*.

Removal of Requirement for 300-level Electives for Biology Majors and Addition of 2-lab requirement

**2. BRIEF DESCRIPTION OF PROPOSAL:**

We wish to remove the current requirement for Biology Majors regarding 300-level electives. Currently, two courses at the 300-level are required for the major: BIO301, Cell Biology, and BIO302, Genetics. The current requirement is for one (minimum) **OR** two (maximum) additional courses at the 300-level, selected from the following: BIO323, BIO321, BIO322, BIO 303 (Microbiology, Anatomy and Physiology I and II, or Ecology respectively). We wish to change the requirement for these classes, so that **the only required courses at the 300-level are Cell Biology and Genetics, and that the remaining credits in the major can be selected from any of the remaining BIO323, 321, 322 and 303, or any of the 400-level Biology classes.** There will still be a restriction in that no more than two elective 300-level courses can be counted towards the major. In addition to the above change, students will be required to take **at least two laboratory courses at the 400-level within the major** (courses listed on attached comparison sheet). Both of the changes above will better serve our students by increasing their exposure to valuable laboratory skills, improving our curriculum to focus more on Cell/Molecular Biology, and to increase student flexibility in terms of elective choices

3. **WILL ADDITIONAL RESOURCES AFFECTING BUDGET BE NEEDED?**  **NO**  **YES** EXPLAIN

4.

**HOW WILL THIS EFFECT TRANSFER STUDENTS:** No effect

5. **ANTICIPATED EFFECTIVE DATE:**

Fall, 2009

6. **SUBMISSION & REVISION DATES:** PLEASE PUT A DATE ON ALL UPDATED DOCUMENTS TO AVOID CONFUSION.

<i>First Submission</i>	<i>Updated on</i>	<i>Updated on</i>	<i>Updated on</i>
2/27/09			

7. **SUBMITTED BY: (contact person)**

<i>Name</i>	<i>Department</i>	<i>Phone</i>	<i>Email</i>
Craig Lending, Ph.D.	Biological Sciences	395-5755	clending@brockport.edu

8. **COMMITTEES TO COPY: (Senate office use only)**

<b>Standing Committee</b>	<b>Forwarded For Approval To</b>	<b>Dates</b>
<input type="checkbox"/> Enrollment Planning & Policies	Committee for approval	2/27/09
<input type="checkbox"/> Faculty & Professional Staff Policies	Executive Committee	3/9/09 *, 4/13/09
<input type="checkbox"/> General Education & Curriculum Policies *	GED to Vice Provost	
<input type="checkbox"/> Graduate Curriculum & Policies	Senate	4/20/09, vote 5/4/09
<input type="checkbox"/> Student Policies	College President	
<input checked="" type="checkbox"/> Undergraduate Curriculum & Policies	OTHER	
<i>* follow special Gen Ed procedures for submission of General Education proposals at "How to Submit Proposals" on our Website.</i>	REJECTED -WITHDRAWN	

\* Returned to department for clarification per 3/9/09 EC minutes.

**Major in Biological Sciences  
Current Biology requirements  
(37 credits; 29 credits at the 300 and 400 level)**

	<b>Credits</b>
BIO 201 Biology I	4
BIO 202 Biology II	4
BIO 301 Cell Biology	4
BIO 302 Genetics	4
300-level Elective Credits	4-8
BIO 498 Seminar	1
BIO 300 and/or 400-level courses (by advisement)	12-16
<b>Minimum Total:</b>	<b>37</b>

**Elective credits at the 300 level must be selected from the following, and can include a maximum of 8 total credit hours:**

BIO 303 Ecology	4
BIO 321 Anatomy and Physiology I	4
BIO 322 Anatomy and Physiology II	4
BIO 323 Microbiology	4

**Chemistry requirements:**

CHM 205-206 College Chemistry I & II	8
CHM 305 Organic Chemistry I	4
CHM 306 or CHM 303 (Organic II or Analytical Chemistry)	4

**Math requirements:**

MTH201, MTH221, or MTH243	3 or 4
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**Physics requirements:**

PHS 205-210 Intro to Physics I & II w/lab OR	8
PHS 235-240 Physics I & II w/lab	8

BIO 202 Biology II	4
BIO 301 Cell Biology	4
BIO 302 Genetics	4
300-level Elective Credits	0-8
BIO 498 Seminar	1
BIO 400-level courses (by advisement)	12-20
<b>Minimum Total:</b>	<b>37</b>

Note: two of the 400-level courses above MUST entail a laboratory-based component selected from the following: BIO401 (Adv.Cell Lab), 404 (Dev.Bio), 417 (Recomb. DNA), 424 (Exp. Res.), 428 (Microtechniques), 429 (EM), 460 (Neurophysiology, curr. 495), 470 (Biochemistry), 480 (Genomics and Proteomics)

**Elective credits at the 300 level must be selected from the following, and can include a maximum of 8 total credit hours:**

BIO 303 Ecology	4
BIO 321 Anatomy and Physiology I	4
BIO 322 Anatomy and Physiology II	4
BIO 323 Microbiology	4

**Chemistry requirements:**

CHM 205-206 College Chemistry I & II	8
CHM 305 Organic Chemistry I	4
CHM 306 or CHM 303 (Organic II or Analytical Chemistry)	4

**Math requirements:**

MTH201, MTH221, or MTH243	3 or 4
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**Physics requirements:**

PHS 205-210 Intro to Physics I & II w/lab OR	8
PHS 235-240 Physics I & II w/lab	8

**Major in Biological Sciences  
Proposed Biology requirements  
(37 credits; 29 credits at the 300 and 400 level)**

	<b>Credits</b>
BIO 201 Biology I	4



3. The changes above reflect our Department's desire to emphasize laboratory skills in the curriculum. Additionally, the proposed changes more closely reflect the needs of our majors. Both of the changes will better serve our students by increasing their exposure to valuable laboratory skills, improving our curriculum to focus more on Cell/Molecular Biology, and to increase student flexibility in terms of elective choices.
4. There are no new courses involved in this proposal. In fact, several new 400-level laboratory courses have been added in the last several years to reflect the growing need for students to be exposed to more hands-on learning in upper-division courses.
5. There are no additional staffing needs required by this proposal.
6. **A. Letter of Recommendation from the Chair**



**350 New Campus Drive  
Brockport, New York 14420**

Rey Antonio L. Sia, Ph.D.  
Department Chair  
Associate Professor  
Dept. of Biology Sciences  
rsia@brockport.edu

February 20, 2009

To the College Senate,

The Department of Biological Sciences enthusiastically supports the proposed change to the requirements for a BS degree in Biological Sciences. Our department prides itself in its ability to provide hands-on learning. Hands-on learning is critical to the students in order to learn and comprehend many of the biological concepts presented. In addition, this hands-on approach provides practical experience for the job market. A number of our graduates obtain jobs as research technicians or staff scientists at the governmental, academic, and industrial levels. They also enter graduate Ph.D. programs that highly value research experience. The removal of the requirement for 4-8 credits of 300-level elective courses will allow students to tailor their courses to better suit their career goals. These 300-level elective courses (Microbiology and Anatomy and Physiology I & II) are primarily occupied by non-major students interested in a career as a health professional.

Since this new requirement for the major uses existing resources within our individual BS degree program, no new resources or staffing in Biological Sciences will be required for implementing this requirement. This new requirement will cause a size increase in our current upper level lab courses. However, the department does not see this affect as a big hurdle to the implementation of the new requirement. The Department of Biological Sciences strongly seeks the approval of this major.

Sincerely,

Rey A. Sia

### **B. Letter of Recommendation from the Dean (via e-mail)**

I endorse the attached curriculum change proposal.

Stuart Appelle, Ph.D.  
Dean, School of Letters and Sciences  
350 New Campus Drive  
The College at Brockport  
State University of New York  
Brockport, New York 14420

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**From:** Craig Lending [mailto:[clending@brockport.edu](mailto:clending@brockport.edu)]  
**Sent:** Wednesday, February 18, 2009 2:56 PM  
**To:** [sappelle@brockport.edu](mailto:sappelle@brockport.edu)  
**Cc:** Rey Sia  
**Subject:** Proposal for Curriculum Change

Hi, Stuart,

Here is a proposal we would like to submit for a modification of our curriculum. Rey and the Chemistry Chair are both writing letters, and I believe we also need a letter from you (a Word doc would be fine, as I need to include it in the forms submitted to the Faculty Senate).

Please let me know if you need any clarification or have any questions.

Thanks.  
Craig

Craig Lending, Ph.D.  
Department of Biological Sciences  
SUNY College at Brockport  
Brockport, NY 14420

Office: (585) 395-5755  
e-mail: [clending@brockport.edu](mailto:clending@brockport.edu)  
Fax: (585) 395-2006

**Department of Chemistry**

To: Dr. Rey Sia, Chair, Department of Biological Sciences  
From: Dr. Stephen Godleski, Chair, Department of Chemistry

I have consulted with the faculty of the Department of Chemistry and we support the proposed changes to the curriculum of Department of Biological Sciences. Any significant increase in the enrollment of Biochemistry Lab (CHM 470) resulting from this proposal will require either an additional lab section to be opened or a redesign of several of the experiments to facilitate a greater throughput of students. An alternative could be a new winter session Biochemistry Lab to allow some number of students to meet their requirements via this class and minimize the impact during the fall semester. We believe these responses to any increased enrollment can be managed with minimal additional resources.

7. There are no expected resources or facilities needed for this proposal.
8. No other units or departments are involved. The proposal may increase minimally the number of students taking Biochemistry Lab, and the Department of Chemistry approves of this change, which will not require additional staffing or resources.