Fiscal Unit/Academic Org	Plant Cell & Molec Biology - D0380
Administering College/Academic Group	Biological Sciences
Co-adminstering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Plant Cellular and Molecular Biology Minor
Proposed Program/Plan Name	Plant Cellular and Molecular Biology Minor
Program/Plan Code Abbreviation	PCMB-MN
Current Degree Title	

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		20	13.3	14	0.7
Required credit hours offered by the unit	Minimum	20	13.3	14	0.7
	Maximum	20	13.3	14	0.7
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	0	0.0
Required prerequisite credit hours not included above	Minimum	33	22.0	18	4.0
	Maximum	33	22.0	18	4.0

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

-

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- PCMB Minor.pdf: rev.

(Program Proposal. Owner: Vaessin,Harald Emil Friedrich)

- PCMB minor cover letter.doc: NMS Division of Arts and Sciences cover letter

(Letter from the College to OAA. Owner: Andereck,Claude David)

Comments

- Feedback will come via e-mail from Jim Fredal (chair CCI Sciences Subcommittee). *(by Vankeerbergen,Bernadette Chantal on 02/10/2011 10:29 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Vaessin,Harald Emil Friedrich	01/11/2011 04:05 PM	Submitted for Approval
Approved	Vaessin,Harald Emil Friedrich	01/11/2011 04:07 PM	Unit Approval
Revision Requested	Andereck,Claude David	01/19/2011 03:11 PM	College Approval
Submitted	Vaessin,Harald Emil Friedrich	01/21/2011 05:49 PM	Submitted for Approval
Approved	Vaessin,Harald Emil Friedrich	01/21/2011 05:50 PM	Unit Approval
Revision Requested	Andereck,Claude David	01/27/2011 01:56 PM	College Approval
Submitted	Vaessin,Harald Emil Friedrich	01/27/2011 02:34 PM	Submitted for Approval
Approved	Vaessin,Harald Emil Friedrich	01/27/2011 02:54 PM	Unit Approval
Approved	Andereck,Claude David	01/27/2011 03:58 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	02/10/2011 10:30 AM	ASCCAO Approval
Submitted	Vaessin,Harald Emil Friedrich	05/02/2011 02:46 PM	Submitted for Approval
Approved	Vaessin,Harald Emil Friedrich	05/02/2011 02:48 PM	Unit Approval
Revision Requested	Andereck,Claude David	05/10/2011 10:41 AM	College Approval
Submitted	Vaessin,Harald Emil Friedrich	05/10/2011 12:00 PM	Submitted for Approval
Approved	Vaessin,Harald Emil Friedrich	05/10/2011 12:00 PM	Unit Approval
Approved	Andereck,Claude David	05/10/2011 02:15 PM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadette Chantal Hanlin,Deborah Kay	05/10/2011 02:15 PM	ASCCAO Approval

College of Arts and Sciences

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230 North Oval Mall
Columbus, OH 43210

Phone (614) 292-8908
Fax (614) 247-7498

May 10, 2011

Larry Krissek
Chair, Arts and Sciences CCI

Dear Larry:

It is a pleasure to forward to you the proposal for the undergraduate minor in Plant Cellular and Molecular Biology under semesters. The minor has been modified from its present quarter version through some small course restructuring and changes in the electives, as well as by eliminating organic chemistry as a required prerequisite. The latter change in particular should make the minor program more accessible and flexible for students through reducing the total credit hours necessary.

Beyond my own review of the documents, the proposal has been discussed with colleagues from other NMS units at a meeting on January 19, 2011. Feedback from the discussions, and from the CCI Sciences Subcommittee, has been incorporated in the proposal.

If you have any questions, I would be happy to address them.

Sincerely,

David Andereck
Professor of Physics
Associate Dean of Natural and Mathematical Sciences, College of Arts and Sciences

THE OHIO STATE UNIVERSITY

Department of Molecular Genetics

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To: Office of Academic Affairs

From: Anita Hopper, Chair, Department of Molecular Genetics

Anita K Hopper

Mark Seeger, Associate Chair, Department of Molecular Genetics

Mark A. Seeger

Date: January 21, 2011

Re: Semester Program Proposal for Undergraduate PCMB Minor

The Department of Molecular Genetics has the following programs that will be converted from quarters to semesters:

1) Undergraduate Molecular Genetics Major (BS)
2) Undergraduate Molecular Genetics Major with a Specialization in Plant Cellular and Molecular Biology (BS)
3) Undergraduate Molecular Genetics Minor
4) Undergraduate Plant Cellular and Molecular Biology Minor
5) Molecular Genetics MS
6) Molecular Genetics PhD

The subject of this proposal is the undergraduate Plant Cellular and Molecular Biology (PCMB) Minor.

The Molecular Genetics Curriculum Committee and other subsets of Molecular Genetics and Plant Cellular and Molecular Biology (PCMB) faculty have been working on semester conversion for the past year. This process has included a critical reexamination of the Molecular Genetics Major and Minor, focusing on the core course sequence. In addition, we have created a new Plant Cellular and Molecular Biology Specialization within the Molecular Genetics Major that will meet the needs of undergraduates desiring a plant biology focus to their major. With the imminent merger of the Departments of Molecular Genetics and PCMB, the PCMB Undergraduate Major will become unavailable to new students starting Autumn 2012.

The contents of this proposal have been discussed at multiple faculty meetings during Spring Quarter 2010 and extending into Autumn Quarter 2010. Proposed changes were presented to Molecular Genetics undergraduates at the first Autumn Meeting of the Molecular Genetics Undergraduate Student Organization where strong support for the changes outlined in this proposal was voiced. Since Molecular Genetics and PCMB graduate students have representation at departmental faculty meetings, they've had a clear opportunity to contribute to this proposal. The contents of the proposal were approved by unanimous vote (21-0) of the Molecular Genetics and PCMB faculty at the November 2010 faculty meeting. Transition plans are provided as a component of this proposal. The department has adequate resources to meet the increased advising that is anticipated throughout the semester conversion process. Molecular Genetics Majors are advised by three faculty members: Drs. Fisk and Simcox advise all undergraduates in the Honors Program, and Dr. Booton advises all other undergraduates. Total number of majors fluctuates between 250 and 300 students. Students pursuing a PCMB Specialization with their Molecular Genetics Major or the PCMB Minor will be advised by a faculty member with expertise in plant biology (currently this faculty member is Dr. David Somers). The number of current PCMB undergraduate majors is less than 15 students; the number of PCMB minors is even less. Thus, any increases in advising of plant-focused undergraduates due to the transition to semesters can be easily accommodated within our current advising plan.

The Plant Cellular and Molecular Biology Minor
The PCMB undergraduate minor will continue with minor modifications. The only change of significance is the elimination of the organic chemistry prerequisite for completion of the minor. This change should increase flexibility and opportunities for students to complete a PCMB minor. The remaining changes reflect the elimination of one course (PCMB 622) and the addition of plant components to other courses (MG 4503, MG 5601, and MG5602) with the conversion to semesters. Changes to the list of acceptable courses have been made to reflect these changes.

Transition Policy
Students who begin their degree under quarters will not be penalized as we move to semesters. The PCMB minor is not dependent upon specific sequences of courses. Most courses that are currently offered will continue to exist with similar content. Given the small number of PCMB undergraduate majors and minors, we will be able to provide individualized advising as they navigate the quarter to semester conversion process.

We will provide quarterly updates to all of our undergraduate majors and minors via email in the year preceding the semester conversion. These emails will communicate the importance of ensuring that major prerequisite course sequences in chemistry, math, and physics be completed to ensure a smooth transition to semesters. We do not foresee any significant difficulties in the transition process that are unique to our undergraduate major or minor programs.

Course Listing and Curriculum Map for the Plant Cellular and Molecular Biology Minor

Required prerequisites for the minor

(do not count towards hours in the major)

Requirements	Semester Course Number	Course Title	Semester Credits		Quarter Equivalent Course Number	Quarter Credits	Notes
Biology	Bio 1113	Intro Biology	4		Bio 113	5	Expanded content; Bio 1113H also accepted
	Bio 1114	Intro Biology	4		Bio 114	5	Expanded content; Bio 1114H also accepted
Chemistry	Chem 1210, 1220	General Chemistry I & II	10		Chem 121, 122, 123	15	Simple conversion; Honors or more advanced versions of these courses can be substituted

Core minor requirements

Semester Course Number	Course Title	Semester Credits		Quarter Equivalent Course Number	Quarter Credits	Notes
Mol Gen 3300	General Plant Biology	3		PCMB 300	5	Same content

Elective Courses in Molecular Genetics that count towards the minor

(electives must total at least 11 semester credit hours)

Semester Course Number	Course Title	Sem Credits		Quarter Equivalent Course Number	Quarter Credits	Notes
Mol Gen 3436	Introductory Plant Physiology	3		PCMB 436	5	Same content
Mol Gen 4503	Molecular Genetics Writing Project	1		Mol Gen 503	2	Must be on a plant topic to count towards the PCMB minor
Mol Gen 4998 (or 4998H)	Undergraduate Research in Molecular Genetics	1-5		Mol Gen 699	1-18	Repeatable; not more than 4 credit hours can count towards the major; must be on a plant topic to

						count towards the PCMB minor
Mol Gen 5193	Individual Studies	1-3		Mol Gen 693 and PCMB 693	1-10	Repeatable; not more than 3 semester hours can count towards a minor; must be on a plant topic to count towards the PCMB minor
Mol Gen 5194	Group Studies	1-3		PCMB 694	1-5	Repeatable; not more than 3 semester hours can count towards a major; must be on a plant topic to count towards the PCMB minor
Mol Gen 5601 -----OR------ Mol Gen 5602	Molecular Genetics Lab -------OR-------- Cell and Developmental Biology Lab	3-4 -----OR-- -- 3-4		Mol Gen 601 ----------OR---------- Mol Gen 602	5 ---OR--- 5	Enhanced content for both Mol Gen 5601 or 5602; 3 semester hour version limited to May-mester or summer offerings; lab must have a plant module to count towards the PCMB minor
Mol Gen 5643	Plant Anatomy	3		PCMB 643	5	Same content
Mol Gen 6625	Plant Metabolic Engineering	2		PCMB 625	3	Same content
Mol Gen 6630	Plant Physiology	3		PCMB 630 and 631	3 + 3	Merging of 630 and 631 with reduction in content
Mol Gen 6735	Plant Biochemistry	3		PCMB 735 and 736	3 + 3	Merging of 735 and 736 with reduction in content
Alternative electives can be accepted for the Plant Cellular and Molecular Biology Minor with approval from the advisor.						

Plant Biology Undergraduate Minor

Advising Form - Quarter System

Name: _____ Quarter of Graduation:_____

Required Core Courses

- ❑ PCMB 300 (5)

Elective Courses

15 additional credit hours in Plant Biology at or above the 200 level. No more than 5 credit hours of 293, 693, or H783 can count towards the minor.

Potential electives include (but not limited to):

- ❑ PCMB 293 (1-5)
- ❑ PCMB 436 (5)
- ❑ PCMB 622 (4)
- ❑ PCMB 630 (3)
- ❑ PCMB 643 (5)
- ❑ PCMB 693 (1-5)
- ❑ PCMB 694 (1-5)
- ❑ PCMB 735 (3)
- ❑ PCMB 783H (3-5)

The minor program must be approved by a Plant Biology faculty advisor.

Advisor Name (Printed):_____ Advisor Signature:_____

Date:_____

Plant Biology Undergraduate Minor

Advising Form - Semester System

Name: _____ Semester of Graduation:_____

Required prerequisites

❑ Biology 1113 and Biology 1114

❑ Chemistry 1210 and 1220

Honors or more advanced versions of these courses are acceptable.

Required Core Course

❑ Mol Gen 3300 General Plant Biology (3)

Elective Courses

(Electives must total at least 11 semester credit hours; no more than 5 semester credit hours can be graded S/U and count towards the Minor)

❑ Mol Gen 3436 Introductory Plant Physiology (3)

❑ Mol Gen 4503 Molecular Genetics Writing Project **on** a plant topic (1)

❑ Mol Gen 4998 or 4998H Undergraduate Research (in a plant lab). Up to 4 semester hours can count towards the minor.

❑ Mol Gen 5193 Individual Studies on a plant topic (Up to 3 semester hours can count towards the minor).

❑ Mol Gen 5194 Group Studies on a plant topic (Up to 3 semester hours can count towards the minor).

❑ Mol Gen 5601 Molecular Genetics Lab or 5602 Cell and Developmental Biology Lab **with** a plant module (3-4)

❑ Mol Gen 5643 Plant Anatomy (3)

❑ Mol Gen 6625 Plant Metabolic Engineering (2)

❑ Mol Gen 6630 Plant Physiology (3)

❑ Mol Gen 6735 Plant Biochemistry (3)

❑ Alternative elective(s) approved by MG Plant advisor: _____

The minor program must be approved by a Plant Biology faculty advisor from the Department of Molecular Genetics.

Advisor Name (Printed):_____ Advisor Signature:_____

Date:_____