Program Approval
Form
For approval of new programs and deletions or modifications to an existing program.

## Action Requested:



Create New (SCHEV approval required except for minors and certificates)
Delete Existing
Modify Existing (check all that apply)


Title (SCHEV approval required except for minors, certificates)
Concentration (Choose one): $\square$ Add $\quad \square$ Delete $\quad \square$ Modify
Degree Requirements
Admission Standards
Application Requirements
Other Changes: $\qquad$


| College/School: | College of Science | Department: |  | Bioinformatics \& Computational Biology (BCB, BNF) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Submitted by: | Dmitri Klimov | Ext: | 8395 | Email: | dklimov@gmu.edu |

## Effective Term: Spring 2011 Please note: For students to be admitted to a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

Justification: (attach separate document if necessary)
To have the dissertation credit requirements the same for PhD programs in both the BCB and MMB Departments, while keeping in line with University requirements.
We request these changes be made for the program that is being phased out, SC-PHD-BNF, along with the new program SC-PHD-BCB.

Program Title: (Required)
Title must identify subject matter. Do not include name of college/school/dept.
Concentration(s):
Admissions Standards /
Application Requirements:
(Required only if different from those listed in the University Catalog)

## Degree Requirements:

Consult University Catalog for models, attach separate document if necessary using track changes for modifications

Courses offered via distance: (if applicable)
TOTAL CREDITS REQUIRED:

| Existing | New/Modified |
| :--- | :--- |
| SC-PHD-BCB and SC-PHD-BNF <br> PhD in Bioinformatics \& Computational Biology <br> PhD in Bioinformatics | Same |
| $n / a$ | $n / a$ |
| $n / a$ | n/a |
| Dissertation Research 24 credits | Dissertation Proposal and Research, from <br> minimum 12 to maximum 24 credits |
| 72 | 72 |

## Approval Signatures

Department Date
College/School Date
Provost's Office
Interdisciplinary Council Use Only $\quad$ Date

If this program may impact another unit or is in collaboration with another unit at Mason, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

| Unit Name | Unit Approval Name | Unit Approver's Signature | Date |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## For Graduate Programs Only

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## Degree Requirements

Students must satisfy all requirements for doctoral degrees expressed in the Academic Policies section of this catalog.

The program requires 72 credits beyond the baccalaureate degree, with a minimum of 48 credits in course work and from 12 to 24 credits of dissertation research. For those holding master's degrees, the 72 required credits may be reduced by up to 30 credits, depending on graduate courses completed. The curriculum includes 6 credits of fundamental biosciences courses; 13 credits of core bioinformatics courses; 3 credits of lab rotation; 3 credits of colloquium; 23 credits of electives or independent research; and a minimum of 12 credits to maximum 24 credits of combined dissertation proposal and 24 eredits of dissertation research.

## Research (24 credits):

Note: ne more than a minimum of 12 and maximum of 24 combined credits from BINF 998 and BINF 999 may be applied toward satisfying doctoral degree requirements, with no more than 12 credits of BINF998. Students must take at least one semester of BINF 999 to graduate.

- BINF 998 - Doctoral Dissertation Proposal Credits: 1-12
- BINF 999 - Doctoral Dissertation Credits: 1-12


## Doctoral Dissertation

After advancing to doctoral candidacy, the student works on their doctoral dissertation while enrolled in BINF 999. The dissertation should represent a significant contribution that is suitable for publication in a refereed scientific journal. The dissertation must be defended in a public forum before the dissertation committee and other interested faculty.

## Total: 72 credits

Justification: The proposed change will clarify that the count of research credits includes BINF998 and BINF999. In addition, to satisfy the degree requirement the students will have to take from 12 to 24 research credits. Currently, the fixed requirement of 24 research credits necessitates some PhD students to acquire more than 72 credits needed for graduation. The proposed change will help the students to keep the courseload closer to that specified in the degree requirement. It will also help MS students to transfer their credits towards PhD program required coursework.

