

# Program Approval Form

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

X Modif	te New (So te Existing fy Existing Title (SCHE	CHEV approv  (check all the EV approval retion (Choose quirements	at apply) equired <u>e</u>	quired except for minors, certificates)						Type (Check one):  B.A. B.S. Minor Undergraduate Certificate M.A. M.S. M.Ed. X Ph.D. Graduate Certificate Other:		
		Requirement	ts							_		
College/So Submitted	<u> </u>	College of So Dmitri Klimov		Depar Ext:	<b>tment:</b> 8395	Bioir	nformati	cs & Com Email:		ional Biology (BCB, BNF) limov@gmu.edu		
	i <b>on:</b> (attach	separate do	cument if	program necessa	must be tary)	fully ap <sub>l</sub>	oroved,	entered i	nto Ba	ew degree, minor, certificate or concentration, the anner, and published in the University Catalog.  and MMB Departments, while keeping in line with		
University	requiremen	nts.				. •				F, along with the new program SC-PHD-BCB.		
					Exi	isting				New/Modified		
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.			PhD i	SC-PHD-BCB and SC-PHD-BNF PhD in Bioinformatics & Computational Biology PhD in Bioinformatics						Same		
Concentra	Concentration(s):								r	n/a		
Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)			n/a	n/a						n/a		
Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications			Disse	Dissertation Research 24 credits					r	Dissertation Proposal and Research, from minimum 12 to maximum 24 credits  See attached sheet for catalog copy		
Courses o		a distance:								See attached sheet for catalog copy		
		EQUIRED:	72						7	72		
		gnature										
Departmer			Date her unit o		ollege/Sch		:h anotl		ate at Mas	Provost's Office Date Interdisciplinary Council Use Only  son, the originating department must circulate this		
						ignature I				Failure to do so will delay action on this proposal.		
Unit Name	9		Unit App	rovai Na	ame		Unit A	pprover'	s Sigi	nature Date		
For Gr	aduat (	e Progra	ams O	nly								
Graduate	Council Me	mber			Provost	Office				Graduate Council Approval Date		
For Registro	ar Office's U	<i>se Only:</i> Recei	ived		_Banner				Cata	alog revised 5/5/10		

(Additions are shown in red, deletions are crossed out)

## **Degree Requirements**

Students must satisfy all requirements for doctoral degrees expressed in the <u>Academic Policies</u> 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 credits of dissertation research.

### Research (24 credits):

Note: no 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 BINF 998. 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**

<u>Justification:</u> 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.