

Applied Mathematical Sciences—Major Requirements for BS Degree

Computational Biology Emphasis Track

Fall 2010

University of California, Merced

Anticipated Graduation Date (ex: May 2010) \_\_\_\_\_

Full Name: \_\_\_\_\_ ID: \_\_\_\_\_ Email: \_\_\_\_\_

Phone: \_\_\_\_\_

Requirement/ Course Dept #	Course Title	Grade	Units Required	Term Completed	Substitute Approved
<b>UCM Requirements</b>					
UC Entry Level Writing (WRI 001 or ELWR)			n/a		
American History/Institutions			n/a		
World at Home I (CORE 001)			1 course		
College Composition (WRI 010)			4		
<b>School Requirements</b>					
World at Home II (CORE 100 or replacement)			4		
Calculus I (MATH 021)			4		
Probability & Statistics (MATH 032)			4		
Introduction to Physics I (PHYS 008)			4		
Computer Science Course (CSE 020)			2		
General Chemistry I (CHEM 02)			4		
Lower Division Arts/Humanities Elective			4		
Lower Division Social Science Elective			4		
UD Science Writing Course ( <b>course approved by NS-for a list please see your advisor</b> )			4		
UD Social Science/Humanities Elective			4		
Freshman Seminar (optional)			1		
<b>Major/Core Requirements</b>					
Contemporary Biology (BIO 01 and BIO 01L)			5		
Calculus of a Single Variable II (MATH 22)			4		
Vector Calculus (MATH 23)			4		
Linear Algebra and Differential Equations (MATH 24)			4		
Introduction to Physics II (PHYS 009)			4		
Complex Variables & Applications (MATH 122)			4		
Intermediate Differential Equations (MATH 125)			4		
Partial Differential Equations (MATH 126)			4		
Numerical Analysis I (MATH 131)			4		
Numerical Analysis II (MATH 132)			4		
Linear Analysis I (MATH 141)			4		
<b>Computational Bio Track (20 units)</b>					
Introduction to Molecular Biology (BIO 02)			4		
Biostatistics (BIO 175)			4		
Mathematical Modeling for Biology (BIO 180)			4		

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Survey of Computational Biology (BIO 181)			4		
Bioinformatics (BIO 182)			4		
<b>Other/Elective/Non-Course Requirements</b>					
Free Electives to meet 120 units			10		

<b>Notes/Comments:</b>
<b>Advisor Signature/Date:</b>
<b>Student Signature/Date:</b>

**Academic Advisor for Applied Math Students:**

Angie Salinas ([acendejas@ucmerced.edu](mailto:acendejas@ucmerced.edu))

Science & Engineering 370

**Faculty Contact for Applied Math Students:**

Francois Blanchette ([fblanchette@ucmerced.edu](mailto:fblanchette@ucmerced.edu))

Science & Engineering 348

**Helpful Websites:**

NS Advising: <http://ns-advising.ucmerced.edu>

Tutoring Assistance: <http://learning.ucmerced.edu>

Career Services: <http://careerservices.ucmerced.edu>

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