Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: De Anza College General Catalog, Quarter

APPLIED MATHEMATICAL SCIENCES, B.S.

SCHOOL OF NATURAL SCIENCES

Applied Mathematical Sciences, B.S. offers emphases in: Computational Biology, Computer Science, Computational & Data Sciences, Economics, Engineering, Environmental, and Physics. Transfer applicants must choose an emphasis in the major.

REQUIREMENTS FOR ADMISSION

For admission to the Applied Mathematical Sciences major, students must earn a minimum overall GPA of 2.8 or better, and <u>must</u> complete classes articulated with the following UC Merced courses prior to admission:

MATH 21, MATH 22, PHYS 8 and PHYS 9

Transfer students seeking fall admission should have the following completed by the spring term preceding fall enrollment at UC Merced:

- 1. All minimum admissions requirements including appropriate courses in math and the equivalent of WRI 1 and WRI 10 (see articulation by department on ASSIST.org).
- 2. At least one social science, Humanities or Arts course listed in the general education information for the School of Natural Sciences. Two courses (one from each area) is <u>strongly</u> recommended.
- 3. All major preparation requirements as stated above.

ADVANCED PLACEMENT INFORMATION

Advanced Placement (AP) and International Baccalaureate (IB) Examination note:

AP and IB examination credit policies are detailed in the 2017-18 UC Merced general catalog viewable online at: http://catalog.ucmerced.edu/content.php?catoid=7&navoid=647#AP_IB

ALERT It is strongly recommended that you obtain a full transcript of your academic records from each of the colleges and universities you have attended before you start your UC application. Applicants must report ALL grades in ALL courses--transferable and not transferable--from all institutions attended. Applicants are solely responsible for the integrity of their self-reported academic record in the UC application.

Applicants are encouraged to clear any No Pass, D, or F letter grade received in UC Transfer course. Applicants are most competitive in the Admissions Process with fewer withdrawls and/or repeated coursework in major preparation.

All course work must be completed with a 'C' or better.

Following these guidelines will assist you to be more competitive for admission to your UC Merced major.

If you have any questions abour UC Merced admissions policy, please email: admissions@ucmerced.edu

Completion of IGETC is not recommended but is accepted for this major.

All course work must be completed with a letter grade of "C" or better.

For the most up-to-date information about transferring to UC Merced, please visit admissions.ucmerced.edu/transfer_requirements.

Information about applying for a Transfer Admission Guarantee is available at admissions.ucmerced.edu/tag.

ADDITIONAL LOWER DIVISION REQUIREMENTS

For the Applied Mathematical Sciences and Computational Biology emphasis tracks, students must take BIO 1 and BIO 1L and earn a grade of B or better.

For the Applied Mathematical Sciences and Environmental emphasis tracks, students will take ESS 1 to fulfill emphasis track requirements, and must take a different course to fulfill the lower division course requirement

COMPLETE ONE OF THE FOLLOWING

BIOL 6A - Form and Function in the **BIO 1** - Contemporary Biology (4.00) Biological World (6.00) And And **BIO 1L** - Contemporary Biology Lab **BIOL 6B** - Cell and Molecular Biology (1.00)(6.00) ■ **REFER TO TOP OF And AGREEMENT** **BIOL 6C** - Evolution and Ecology (6.00) Depending on the area of concentration No Course Articulated **ESS 1** - Introduction to Earth Systems Science (4.00) ■ **REFER TO TOP OF AGREEMENT** Depending on the area of concentration **ESS 5** - Introduction to Biological Earth No Course Articulated Systems (4.00)

MATHEMATICS REQUIREMENT (COMPLETE THE FOLLOWING FIVE COURSES):

MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	\leftarrow	MATH 1A - Calculus (5.00) And MATH 1B - Calculus (5.00)
MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)	←	MATH 1C - Calculus (5.00)
MATH 23 - Vector Calculus (4.00)	←	MATH 1D - Calculus (5.00)
MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)	\leftarrow	MATH 2A - Differential Equations (5.00) And MATH 2B - Linear Algebra (5.00)
MATH 32 - Probability and Statistics (4.00) ■ Course recommended to be taken at university	←	No Course Articulated

COMPLETE ONE OF THE FOLLOWING		
CSE 20 - Introduction to Computing I (2.00)	←	CIS 22A - Beginning Programming Methodologies in C++ (4.50)
		Or
		CIS 36A - Introduction to Computer Programming Using Java (4.50)
		Or
		CIS 26A - C as a Second Programming Language (4.50)
		Or
		CIS 26B - Advanced C Programming
		(4.50)
ME 21 - Engineering Computing (4.00)	←	No Course Articulated

CHEMISTRY REQUIREMENT

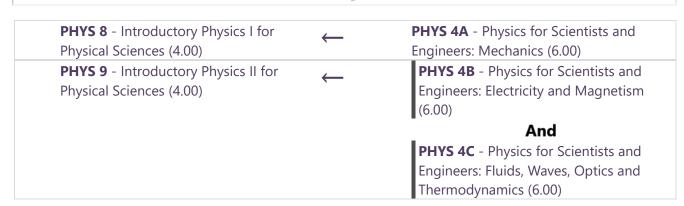
CHEM 2 - General Chemistry I (4.00) ←

CHEM 1A - General Chemistry (5.00)

And

CHEM 1B - General Chemistry (5.00)

PHYSICS REQUIREMENT



END OF AGREEMENT