# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: Diablo Valley College General Catalog, Semester

### PHYSICS, B.S.

#### SCHOOL OF NATURAL SCIENCES

\*\*Physics, B.S. offers emphasis tracks in: Atomic/Molecular/Optical/Condensed Matter, Physics, Biophysics, Mathematical Physics, and Custom emphasis. Transfer applicants must choose an emphasis in this major.

#### **REQUIREMENTS FOR ADMISSION**

For admission to the Physics B.S. 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:

 $\circ\,$  CHEM 2, 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).
- 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.
   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 <u>solely responsible</u> 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 course work 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 REQUIREMENT

\*\*In addition to the lower division courses listed below, students must complete one "breadth" UC transferable science or engineering elective that is not a physics or math course, and must be 3-4 semester units.

#### LOWER DIVISION MAJOR PREPARATION COURSES

CHEM 2 - General Chemistry I (4.00)	$\leftarrow$	<b>CHEM 120</b> - General College Chemistry I (5.00)
<b>CSE 20</b> - Introduction to Computing I (2.00)	$\leftarrow$	<b>COMSC 110</b> - Introduction to Programming (4.00)
(2.00)		Programming (4.00)

		<b>COMSC 165</b> - Advanced Programming with C and C++ (4.00) <b>Or</b>
		<b>ENGIN 135</b> - Programming for Scientists and Engineers (4.00)
	Or	
MATH 50 - MATLAB Programming (2.00)	$\leftarrow$	No Course Articulated
<b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 192</b> - Analytic Geometry and Calculus I (5.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 193</b> - Analytic Geometry and Calculus II (5.00)
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	<b>MATH 292</b> - Analytic Geometry and Calculus III (5.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00)	$\leftarrow$	MATH 194 - Linear Algebra (3.00) And MATH 294 - Differential Equations (5.00)
<ul> <li>MATH 32 - Probability and Statistics</li> <li>(4.00)</li> <li>Course recommended to be taken at university</li> </ul>	<i>~</i>	No Course Articulated
<b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)	$\leftarrow$	<b>PHYS 130</b> - Physics for Engineers and Scientists A: Mechanics and Wave Motion (4.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	$\leftarrow$	<b>PHYS 230</b> - Physics for Engineers and Scientists B: Heat and Electro-Magnetism (4.00)
PHYS 10 - Introductory Physics III (4.00)	<del>~</del>	<b>PHYS 231</b> - Physics for Engineers and Scientists C: Optics and Modern Physics (4.00)

## **END OF AGREEMENT**