

# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced  
General Catalog, Semester

From: Sierra College  
General Catalog, Semester

## EARTH SYSTEMS SCIENCE, B.S.

### REQUIREMENTS FOR ADMISSION

For admission to the Earth Systems Science, B.S. major, students must earn a minimum overall GPA of 2.8 or better, and must complete classes articulated with the following UC Merced courses prior to admission:

- CHEM 2 and CHEM 10
- MATH 11 or MATH 21
- PHYS 8 or PHYS 18

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 strongly 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](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 withdrawals 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 about UC Merced admissions policy, please email: [admissions@ucmerced.edu](mailto: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](https://admissions.ucmerced.edu/transfer_requirements).

Information about applying for a Transfer Admission Guarantee is available at [admissions.ucmerced.edu/tag](https://admissions.ucmerced.edu/tag).

### ADDITIONAL LOWER DIVISION REQUIREMENTS

In addition to the courses listed below, choose two additional UC transferable courses in Natural Sciences or Engineering (not geology).

### LOWER DIVISION MAJOR PREPARATION COURSES

**CHEM 2** - General Chemistry I (4.00)



**CHEM 1A** - General Chemistry I (5.00)

**Or**

**CHEM 3A** - General Chemistry I - Part 1 (3.00)

**And**

**CHEM 3B** - General Chemistry I - Part 2 (3.00)

**CHEM 10** - General Chemistry II (4.00)



**CHEM 1B** - General Chemistry II (5.00)

### COMPLETE ONE OF THE FOLLOWING

|   |   |
|---|---|
| <b>ESS 1</b> - Introduction to Earth Systems Science (4.00) ← | <b>ESCI 10</b> - Introduction to Earth Science (3.00)<br><b>And</b><br><b>ESCI 10L</b> - Introduction to Earth Science Laboratory (1.00)      |
| <b>ESS 2</b> - Sustainability Science (4.00) ←                | No Course Articulated   |
| <b>BIO 1</b> - Contemporary Biology (4.00) ←                  | <b>BIOL 1</b> - General Biology (4.00)<br><b>And</b><br><b>BIOL 2</b> - Botany (4.50)<br><b>And</b><br><b>BIOL 3</b> - General Zoology (4.50) |

### COMPLETE ONE OF THE FOLLOWING

|  |  |
|--|--|
| <b>CSE 5</b> - Introduction to Computer Applications (4.00) ←      | No Course Articulated  |
| <b>CSE 20</b> - Introduction to Computing I (2.00) ←               | <b>CSCI 12</b> - Programming Concepts and Methodology I (3.00)<br><b>Or</b><br><b>CSCI 46</b> - System Programming with C (3.00)<br><b>Or</b><br><b>CSCI 66</b> - Object-Oriented Programming Using C++ (3.00) |
| <b>MATH 15</b> - Introduction to Scientific Data Analysis (2.00) ← | No Course Articulated  |

### COMPLETE CALCULUS I AND II

|   |   |
|---|---|
| <b>MATH 11</b> - Calculus I (4.00) ←                                      | No Course Articulated                                       |
| <b>Or</b>   |   |
| <b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00) ←  | <b>MATH 30</b> - Analytical Geometry and Calculus I (4.00)  |
| <b>And</b>  |   |
| <b>MATH 12</b> - Calculus II (4.00) ←                                     | No Course Articulated                                       |
| <b>Or</b>   |   |
| <b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00) ← | <b>MATH 31</b> - Analytical Geometry and Calculus II (4.00) |

**COMPLETE ONE OF THE FOLLOWING**

|  |   |   |
|--|---|---|
| <b>ECON 10</b> - Statistical Inference (4.00)  | ← | <b>MATH 13</b> - Elementary Statistics (4.00)   |
| <b>PSY 10</b> - Analysis of Psychological Data (4.00)  | ← | <b>MATH 13</b> - Elementary Statistics (4.00)<br><b>Or</b><br><b>PSYC 142</b> - Introduction to Psychological Statistics (3.00) |
| <b>MATH 18</b> - Statistics for Scientific Data Analysis (4.00)                                      | ← | <b>MATH 13</b> - Elementary Statistics (4.00)   |
| <b>MATH 32</b> - Probability and Statistics (4.00)<br>■ Course recommended to be taken at university | ← | No Course Articulated   |

**COMPLETE ONE OF THE FOLLOWING**

|  |   |  |
|--|---|--|
| <b>ESS 10</b> - Earth Resources (4.00)                                 | ← | No Course Articulated  |
| <b>ESS 20</b> - Fundamentals of Geology (4.00)                         | ← | No Course Articulated  |
| <b>BIO 47</b> - Astrobiology (4.00)<br>Same-As: ESS 47                 | ← | No Course Articulated  |
| <b>ESS 50</b> - Ecosystems of California (4.00)                        | ← | <b>BIOL 14</b> - Natural History, Ecology and Conservation (4.00)<br>Same-As: ESS 14 |
| <b>BIO 65</b> - Natural History of Dinosaurs (4.00)<br>Same-As: ESS 65 | ← | No Course Articulated  |

**COMPLETE INTRODUCTORY PHYSICS I AND II**

|   |   |   |
|---|---|---|
| <b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)     | ← | <b>PHYS 205</b> - Principles of Physics: Mechanics (4.00)                 |
| <b>Or</b>   |   |   |
| <b>PHYS 18</b> - Introductory Physics 1 for Biological Sciences (4.00)  | ← | No Course Articulated   |
| <b>And</b>  |   |   |
| <b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)    | ← | <b>PHYS 210</b> - Principles of Physics: Electricity and Magnetism (3.00) |
| <b>Or</b>   |   |   |
| <b>PHYS 19</b> - Introductory Physics II for Biological Sciences (4.00) | ← | No Course Articulated   |

**END OF AGREEMENT**