# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: University of California, Santa Barbara 2022-2023 General Catalog, Quarter From: De Anza College 2022-2023 General Catalog, Quarter

# Physical Geography, B.S.

# **GENERAL INFORMATION FOR ALL MAJORS**

All transfer applicants must satisfy University of California admissions eligibility requirements as well as meeting campus admission selection criteria. Completing the UC transfer admission requirements in English and mathematics by the end of the fall term prior to the fall application quarter makes an applicant more competitive for admission to UCSB. All admission requirements must be completed by the end of spring prior to transfer. For more information on UC admissions eligibility requirements and admission to UCSB, please visit the Admissions website: <a href="https://www.admissions.ucsb.edu">www.admissions.ucsb.edu</a>

This articulation agreement lists course-to-course or sequence-to-sequence substitutions for preparation in the major. **Transfer students are strongly encouraged to complete as many major preparatory courses as possible prior to enrolling at UCSB.** <u>Completion of all major preparatory courses is not an admissions requirement, but some majors require certain courses to be completed prior to transfer with a <u>specified GPA</u>, and completion or near completion of major preparatory courses will help students move more efficiently toward graduation after transfer.</u>

Please note that the course "equivalencies" do not necessarily apply to UCSB general education. For information concerning satisfaction of UCSB general education requirements, please refer to the General Education/Breadth articulation agreement.

**Advanced Placement (AP)** and **International Baccalaureate (IB)** exams may or may not be used to meet course requirements, depending on the exam. Please refer to the <u>AP Chart</u> and <u>IB Chart</u> in the <u>UCSB General Catalog</u> for information on how we use AP and IB exams.

# PHYSICAL GEOGRAPHY, B.S.

Please visit the department's website to learn more about this major: www.geog.ucsb.edu

### PREPARATION FOR THE MAJOR:

- 1. Geography 3 and 4
- 2. Geography 5
- 3. Math 3A and 3B and 4A
- 4. Physics 6A-6B-6C or Physics 1-2-3-3L-4-4L
- 5. PSTAT 5A or PSTAT 5LS
- 6. Chemistry 1A-1AL
- 7. 12 elective quarter units (8 semester units) from: Chemistry 1B, 1BL, 1C, 1CL; MCDB 1A, 1AL, 1LL, 1B, 1BL; EEMB 2, 2L, 2LL, 3, 3L; Earth Science 2,
- 3, 4; Astronomy 1, 2; Math 4B, 6A, 6B, 8

**Note**: Chemistry 1A-B-C is prerequisite to MCDB 1A

Strongly recommended: Computer Science 8; Geography 12; any additional courses from the above elective selection

(Transfer applicants do not need to complete all Preparation for the Major in order to be admitted, but should complete as much as possible before transferring so they will be prepared to progress in the major at UCSB.)

# GEOG 3 - Oceans and Atmosphere (4.00) GEOG 4 - Land, Water and Life (4.00) GEOG 5 - People, Place and Environment (4.00) MATH 3A - Calculus with Applications, First Course (4.00) MATH 1A - Calculus (5.00) MATH 1A - Calculus - HONORS (5.00) MATH 1B - Calculus - HONORS (5.00) MATH 1B - Calculus - HONORS (5.00)



-- Or ---

PSTAT 5LS - Statistics for Life Sciences (5.00)

No Course Articulated

CHEM 1B - General Chemistry (3.00) And	_	CHEM 1A - General Chemistry (5.00)
CHEM 1BL - General Chemistry Laboratory (2.00)		And
And		CHEM 1B - General Chemistry (5.00)
CHEM 1C - General Chemistry (3.00) And		And
CHEM 1CL - General Chemistry Laboratory (2.00)		CHEM 1C - General Chemistry and Qualitative Analysis (5.00)
		Or
		CHEM 1AH - General Chemistry - HONORS (5.00)
		And
		CHEM 1BH - General Chemistry - HONORS (5.00)
		And
		<b>CHEM 1CH</b> - General Chemistry and Qualitative Analysis - HONORS (5.00)
Francis III and III an	<b>←</b>	
MCDB 1A - Introductory Biology I (4.00) And		BIOL 6A - Form and Function in the Biological World (6.00)
MCDB 1B - Introductory Biology II - Physiology (3.00)		And
And		BIOL 6B - Cell and Molecular Biology (6.00) And
MCDB 1LL - Introductory Biology Laboratory I (1.50) And		BIOL 6C - Ecology and Evolution (6.00)
EEMB 2 - Introductory Biology II - Ecology and Evolution (3.00)		
And EEMB 2LL - Introductory Biology Laboratory II (1.50)		Or
And		<b>BIOL 6AH</b> - Form and Function in the Biological World - HONORS (6.00)
EEMB 3 - Introductory Biology III (3.00)		And
	•	BIOL 6B - Cell and Molecular Biology (6.00)
		And
		BIOL 6CH - Ecology and Evolution - HONORS (6.00)
EARTH 2 - Principles of Physical Geology (4.00)	<b>←</b>	GEOL 10 - Introductory Geology (5.00)
EARTH 3 - Principles of Historical Geology (4.00)	<u></u>	No Course Articulated
EARTH 4 - Introduction to Oceanography (4.00)	<b>←</b>	
= itti i mareadelleri te e carregraphy (1.50)		GFOL 20 - General Oceanography (4 00)
ASTRO 1 - Basic Astronomy (4 00)	<b>←</b>	GEOL 20 - General Oceanography (4.00)  ASTR 4 - Solar System Astronomy (5.00)
ASTRO 1 - Basic Astronomy (4.00)	←	<b>ASTR 4</b> - Solar System Astronomy (5.00)  Or
ASTRO 1 - Basic Astronomy (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)
ASTRO 1 - Basic Astronomy (4.00)  ASTRO 2 - History of the Universe (4.00)	<b>← ←</b>	ASTR 4 - Solar System Astronomy (5.00) Or
	←	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)
ASTRO 2 - History of the Universe (4.00)	← ← ←	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated
ASTRO 2 - History of the Universe (4.00)	← ← ← ←	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)  Or  MATH 1CH - Calculus - HONORS (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)  Or  MATH 1CH - Calculus - HONORS (5.00)  And
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)  Or  MATH 1CH - Calculus - HONORS (5.00)
ASTRO 2 - History of the Universe (4.00)  MATH 4B - Differential Equations (4.00)	<b>←</b>	ASTR 4 - Solar System Astronomy (5.00)  Or  ASTR 10 - Stellar Astronomy (5.00)  No Course Articulated  MATH 2A - Differential Equations (5.00)  Or  MATH 2AH - Differential Equations - HONORS (5.00)  MATH 1C - Calculus (5.00)  And  MATH 1D - Calculus (5.00)  Or  MATH 1CH - Calculus - HONORS (5.00)  And

MATH 6B - Vector Calculus with Applications, Second Course (4.00)

--- And --
MATH 1D - Calculus (5.00)

--- Or --
MATH 1CH - Calculus - HONORS (5.00)

--- And --
MATH 1DH - Calculus - HONORS (5.00)

MATH 1DH - Calculus - HONORS (5.00)

# STRONGLY RECOMMENDED

# Recommended; Not required for the major

**CMPSC 8** - Introduction to Computer Science (4.00)

CIS 5 - Swift Programming (4.50)

--- Or --
CIS 22A - Beginning Programming Methodologies in C++ (4.50)

--- Or --
CIS 35A - Java Programming (4.50)

--- Or --
CIS 40 - Introduction to Programming in Python (4.50)

--- **Or** --- **CIS 41A** - Python Programming (4.50)

### Recommended; Not required for the major

GEOG 12 - Maps and Spatial Reasoning (4.00)

← No Course Articulated

## \*\*REFER TO TOP OF AGREEMENT\*\*

Any additional courses from the above elective selection

No Course Articulated

# **END OF AGREEMENT**