

**2023 - 2024 Bachelor of Science in Environmental Science and Policy****83 - 84 Units**

Use this checklist in combination with your official Academic Requirements Report (ARR). This checklist is not intended to replace advising. Consult the advisor for appropriate course sequencing. *Curriculum changes in progress. Requirements subject to change.*

To be considered for admission to the major, complete the following Major Specific Requirements (MSR) by 60 units:

- **BIOL 211 & 212, CHEM 111A, MATH 119A or 122, EARTH 102 & 104, ECON 101** with grades of "C" or better and a minimum 2.5 overall GPA
- Grades of "C" or better in GE Foundations

| Courses   |  | Prerequisites  |
|---|--|--|
| <b>Complete ALL of the following courses with grades of "C" or better (7 units total):</b>      |  |  |
| ECON 101: Principles of Microeconomics (3)  |  | MATH 103 or Higher   |
| ERTH 102: Planet Earth (3)<br>AND<br>ERTH 104: Planet Earth Lab (1)                             |  | Corequisite: Concurrent or Prior Enrollment in EARTH 102 or 110  |
| <b>Complete ALL of the following courses (6 units total):</b>                                   |  |  |
| ES P 200: California Environmental Issues (3)   |  | Corequisites: EARTH 102 and 104 or GEOG 130 or 140 or ES P/GEOG 101; BIOL 200 or 211 or ECON 101; or Consent of Instructor   |
| ERTH 280: Water Resources and Society (3)   |  | ERTH 102 and 104; Four Years of High School Math   |
| <b>Complete ONE of the following courses with a grade of "C" or better (3 - 4 units total):</b> |  |  |
| MATH 119A: Survey of Calculus I (3)   |  | MATH 112B or 113 with a Grade of "C" or Better; or Appropriate CSULB Algebra and Calculus Placement  |
| MATH 122: Calculus I (4)  |  | MATH 111; MATH 112B or 113; All with Grades of "C" or Better; or Appropriate CSULB Algebra and Calculus Placement  |
| <b>Complete ONE of the following courses with a grade of "C" or better (5 units total):</b>     |  |  |
| CHEM 111A: General Chemistry (5)  |  | Corequisite: MATH 112B or Higher; CHEM 90 or 102 or 140 with "C" or Better or Appropriate Score in AP CHEM (2 or 3) or CHEM ALEKS or Other Measures<br><u>OR</u><br>Corequisite: MATH 119A or Higher |
| CHEM 112A: Advanced General Chemistry (5)   |  | Department Consent   |
| <b>Complete ONE of the following courses with a grade of "C" or better (5 units total):</b>     |  |  |
| CHEM 111B: General Chemistry (5)  |  | CHEM 111A or 112A; MATH 112B or Higher; All with Grades of "C" or Better   |
| CHEM 112B: Advanced General Chemistry (5)   |  | CHEM 112A with a Grade of "C" or Better  |
| <b>Complete ONE of the following courses (3 units total):</b>                                   |  |  |
| CHEM 220A: Organic Chemistry I (3)  |  | CHEM 111B or 112B with a Grade of "C" or Better  |
| CHEM 227: Fundamentals of Organic Chemistry (3)   |  | CHEM 111A or 112A with a Grade of "C" or Better  |
| <b>Complete ALL of the following courses with grades of "C" or better (16 units total):</b>     |  |  |
| BIOL 211: Introduction to Evolution and Diversity (5)   |  | Pre/Corequisite: CHEM 111A or 112A with a Grade of "C" or Better   |
| BIOL 212: Introduction to Cell and Molecular Biology (4)  |  | Prerequisites: BIOL 211; CHEM 111A or 112A with Grades of "C" or Better<br>Corequisite: CHEM 111B or 112B  |
| BIOL 213: Introduction to Ecology and Physiology (4)  |  | BIOL 211 and 212; CHEM 111B or 112B; All with Grades of "C" or Better  |
| BIOL 260: Biostatistics (3)   |  | BIOL 201 or 207 or 211 or MICR 200; MATH 111 or 113 or 119A or 122; All with Grades of "C" or Better   |
| <b>Complete ONE of the following courses (4 units total):</b>                                   |  |  |
| PHYS 100A: General Physics (4)  |  | MATH 109 or 111 or 112A or 113 or 119A or 122  |
| PHYS 151: Mechanics and Heat (4)  |  | Corequisite: MATH 122 or 123 or 224  |

| Complete <b>ALL</b> the following courses (15 units total):   |   |   |
|---|---|---|
|   | BIOL 350: General Ecology (3)                                     | BIOL 211, 212, 213, 260; MATH 119A or 122;<br>All with Grades of "C" or Better  |
|   | ECON 306: Environmental Issues of the World Economy (3)           | ECON 101  |
|   | ES P 300: Environmental Law and Policy (3)                        | ES P 200 and Upper Division Standing; or Consent  |
|   | ES P 400: Environmental Science and Policy Capstone Project (3)   | ES P Majors Only; Upper Division Standing;<br>Passing Score on GPE (or Necessary Portfolio);<br>BIOL 350 or ES P 330; ECON 306 or 462 or 463 or 464<br>or CE 406; ES P 300; GEOG 473 or 481; EARTH 300;<br>Department Consent |
|   | ERTH 300: Earth Systems and Global Change (3)                     | GE Foundations; Upper Division Standing;<br>CHEM 100 or 111A or EARTH 102 or 106 or 110 or 160<br>with a Grade of "C" or Better   |
| Complete <b>ONE</b> of the following courses (4 units total): |   |   |
|   | GEOG 473: Introduction to Earth Observation (4)                   |   |
|   | GEOG 481: Geographic Information Science for Natural Sciences (4) | GEOG 140 or BIOL 153 or EARTH 102;<br>Upper Division Standing; or Consent of Instructor   |

| Environmental Science & Policy Approved Electives (15 units total):   |           |  |
|---|-----------|--|
| Complete <b>3 UNITS</b> of social science electives. See Catalog and ARR for the list of approved courses (3 units total):                    |           |  |
|   | Elective: |  |
| Complete <b>9 UNITS</b> of natural science electives. See Catalog and ARR for the list of approved courses (9 units total):                   |           |  |
|   | Elective: |  |
|   | Elective: |  |
|   | Elective: |  |
| Complete <b>3 UNITS</b> of social science or natural science electives. See Catalog and ARR for the list of approved courses (3 units total): |           |  |
|   | Elective: |  |

**In order to graduate from CSULB, students must complete General Education/GWAR/Major requirements and have a minimum of 120 units (40 must be upper division) with at least a 2.0 in all GPAs (Overall, CSULB, Major).**

#### Additional Information

- **See online Catalog for additional course information, limitations, and requirements.**
- Some courses may also fulfill GE requirements. Visit the GE website for course selection: [csulb.edu/general-education](http://csulb.edu/general-education).
- A course can only be used to satisfy one major requirement. Double counting is not allowed within the major.
- EARTH courses were formerly GEOL courses. Courses taken prior to Fall 2023 with the GEOL prefix are accepted if equivalent.
- CHEM 111A and 111B are part of a two-semester sequence and must be taken consecutively.
- If a transfer student took courses equivalent to BIOL 211, 212, or 213 at another institution without labs, they must take BIOL 211L, 212L, and 213L at CSULB.

|  |            |                |  |
|--|------------|----------------|--|
| <b>Department of Environmental Science and Policy</b>  | PH1-210    | (562) 985-8432 | <a href="http://cla.csulb.edu/programs/es-p">cla.csulb.edu/programs/es-p</a>     |
| Dr. Christine Whitcraft, Program Director              | HSCI-136   | (562) 985-4820 | <a href="mailto:christine.whitcraft@csulb.edu">christine.whitcraft@csulb.edu</a> |
| Dr. Monica Argandoña, Major Advisor                    | FO5-210    | (562) 985-7681 | <a href="mailto:monica.argandona@csulb.edu">monica.argandona@csulb.edu</a>       |
| <b>College of Liberal Arts Advising Center (ATLAS)</b> | LA1-LO0102 | (562) 985-7804 | <a href="http://csulb.edu/atlas">csulb.edu/atlas</a>                             |

Checklists are available on the [ATLAS website](#)