## **Upper Division Electives 2018-2019**

#### <u>Fall 2018</u>

Course	Course Title	Units	Instructor
GEL 132	Intro Inorganic Geochemistry	3	Yin
GEL 140	Process Geomorphology	4	Pinter, Nicholas
GEL 162	Geophysics of the Solid Earth	3	Rudolph
GEL 190	Seminar	1	Lesher

#### **Winter 2019**

Course	Course Title	Units	Instructor
GEL 116N	Oceanography	3	TBA
GEL 131	Risks and Natural Hazards	3	Rundle
GEL 141	Evolutionary History of Vertebrates	3	Motani
GEL 150B	Geological Oceanography	3	McClain
GEL 190	Seminar	1	Motani

## **Spring 2019**

Course	Course Title	Units	Instructor
GEL 120	Big Bang to Today	3	Osleger
GEL 136	Ecogeomorphology (application required for enrollment)	5	Pinter, Nicholas
GEL 144	Historical Ecology	3	Vermeij
GEL 161	Geophysical Field Methods	3	Billen
GEL 190	Seminar	1	Rudolph

<sup>\*</sup>Please note: GEL 108, 109, and 109L will only be offered in Spring this year\*

#### **CalTeach/MAST Courses**

Only one course may be applied toward elective credit

Course	Course Title	Quarters	Units	Instructor
GEL 181	Math and Science Teaching II	F, W, Sp	2	Horn
GEL 183	Math and Science Teaching III	F, W, Sp	3	Pinter, Susann
GEL 185B	Integrated Science II	SS1	2	Pinter, Susann
GEL 186	Learning Assistant Seminar	F, W, Sp	1	Stevenson

### **Upper Division Electives:**

- Additional upper division electives chosen from GEL 130–194 courses
- Only one of GEL/EDU 181, 183, GEL 185A, 185B, or 186 may be applied toward elective credit
- No more than 3 units upper division elective credit for GEL 115–120 courses
- Maximum of 6 units upper division elective credit for GEL 192 or 194A-B or 194HA-HB
- Preapproved electives outside of Geology:
  - o ECI 171+171L Soil Mechanics (5 units)
  - o ECI 175 Geotechnical Earthquake Engineering (4 units)
  - o ESM 100 Principles of Hydrologic Science (4 units)
  - o ESM 186 Environmental Remote Sensing (5 units)
  - o ESP 152 Coastal Oceanography (3 units)
  - o HYD 144 Groundwater Hydrology (4 units)
  - HYD 146/GEL 156 Hydrogeology and Contaminant Transport (5 units)
  - o LDA 150/ABT 150 Introduction to Geographic Information Systems (4 units)
  - o SSC 100 Principles of Soil Science (5 units)
  - o WFC 102+102L Ecogeomorphology (1 unit) / Lab (6 units)

- Cross-enrollment online class at UCLA: Geography 168 Intermediate GIS (4 units) https://crossenrollcourses.universityofcalifornia.edu/catalog/view/119?title=GEOG+168+Intermediate+Geographic+Information+Systems (this course counts as UC Davis' LDA/ABT 150, so students cannot take both)
- And related fields approved *in advance* by faculty advisor

## **Geology 62 announcement**

GEL 62 (Optical Mineralogy) will no longer be offered as of Fall Quarter 2018. We are transitioning to a modified curriculum and the content of 62 will be folded into a modified and updated GEL 60 (Earth Materials), which will prepare you for GEL 105, 106, and 110.

# All students who have not yet taken GEL 62 will need to satisfy this 2 unit requirement for the Geology major in a different way. Your options are:

- 1) Take GEL 53: Intro to Geobiology taught by Professor Dawn Sumner in Fall 2018. This course will be listed under the placeholder GEL 98, section 016 (CRN: 24833).
- 2) Take GEL 56: Intro to Geophysics taught by Professor Magali Billen in Spring 2019.
- 3) Talk with your major advisor (Mandy) or your faculty advisor (Professor Jim McClain or Professor Ryosuke Motani) to find a different course that can be substituted for GEL 62.

# **Geology 53: Intro to Geobiology**

Professor Dawn Sumner
Fall 2018 – GEL 98 section 016 – CRN: 24833
Tuesdays & Thursdays 1:40–3:00 pm
EPS 1309
3 units

Introduction to interactions between Earth and life with an emphasis on how metabolism, cellular processes, evolution and ecology emerged within natural environments and have changed Earth's surface.

### **Geology 56: Intro to Geophysics**

Professor Magali Billen
Spring 2019
Lecture: Mondays, Wednesdays, and Fridays 11am–11:50am in EPS 1316
Lab: Tuesdays 1:10–3pm in EPS 2231 (Mac Lab)
4 units

Introduction to geophysical topics essential to all aspects of Earth and planetary sciences: theory of plate tectonics, gravitational field of planets, diffusion, rheology, seismology, and earthquakes.