Syllabus

Course Instructors:

Viorel Atudorei – CSI Facility Director
Geraldine Busquets-Vass – Postdoctoral Scientist
Joshua Cortez – PhD Student – Ecology
Emma Elliott Smith – Postdoctoral Scientist
Kim Fike – Science Faculty, Bosque School
Anejelique Martinez – MS Student – Ecology
Seth Newsome – Professor, UNM Biology
Mikayla Ranspot – UG Technician
Alana Robinson – CSI Technician
Rachel Seddon – PhD Student – Ecology
Dan Shaw - Science Faculty, Bosque School
Caitlin Zimmer – MS Student – Ecology

Course Website: https://sethnewsome.org/bemp-csi/

Pre-Course Mandatory Reading: Ben-David and Flaherty 2012

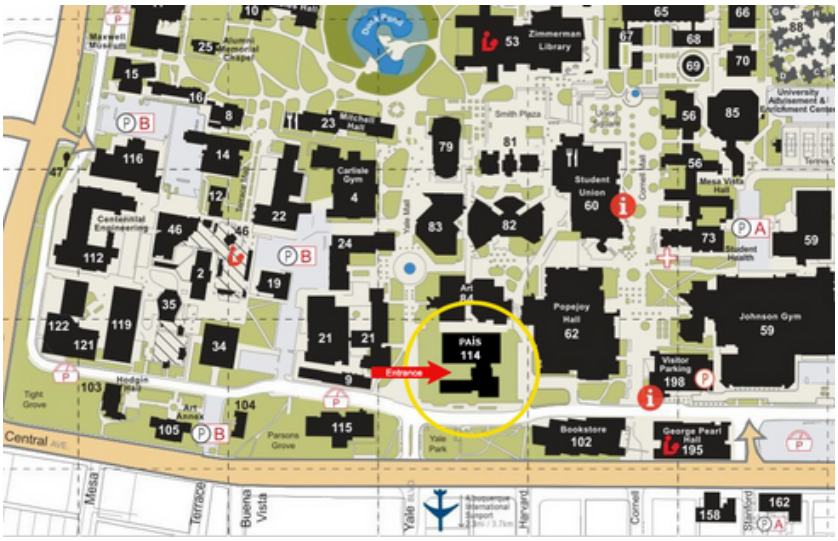
Course Time and Location:

Thursday 9/21 (8:00–4:00):

Bosque School – Fontana Lab located in the Rod and Mary Key Pera Science building at the north end of Bosque School's campus. Please park in the parking lot north of the Pera building and walk around to the (green) front doors on the south side of the building. The classroom is down the right hall and is the second classroom on the right.

Friday 9/22 (8:00–4:00) and Saturday 9/23 (9:00–3:30):

University of New Mexico – main (west) entrance of Physics, Astronomy, and Interdisciplinary Sciences (PAIS) Building.



Overview:

The Stable Isotope Workshop teaches high school students all over Albuquerque about a new cutting-edge tool used to study ecology and environmental science. This event offers students the opportunity to learn about stable isotopes using a place-based, hands-on approach which immerses them in the world of working scientists. Working in a university setting while supervised by an active research group students a chance to learn a unique skill set while building an impressive college resume.

Learning Objectives:

- Concepts and vocabulary related to stable isotopes
- Basic laboratory skills and field sampling techniques
- Quantitative evaluation of isotopic data and data representation
- Science communication: preparing and presenting a final project based on concepts learned throughout the workshop

NGSS Disciplinary Core Ideas:

HS-PS1-1; HS-LS1-5; HS-LS1-6; HS-LS1-7; HS-LS2-3; HS-LS2-4; HS-LS2-5; HS-LS2-7 and HS-LS4-6

Expectations:

We ask student participants to behave professionally during this workshop, paying attention to lessons and protocols, taking notes when appropriate, and following instructions provided by the workshop leaders. During this course, all cellphones should be switched off or muted and should only be accessed during designated breaks.

All vital communications during and after the workshop will be made by email, thus we expect students to check their email regularly (at least once a day) and answer promptly. If you are selected to participate in this workshop, we will email you a mandatory pre-workshop reading assignment and some simple questions to help you familiarize yourself with workshop concepts before the workshop start date.