Earth Science 127/227: Radiogenic and Stable Isotopes

1. Instructor and Course details:
Instructor: James Zachos & Terrence Blackburn
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Office: JZ: A260; TB: A108
Office hours: TB: T&R 9-10; JZ: [Commented [TB1]: Add office hours]

Course Hours: MW 10-11:35
Course Location: D236

2. Assignments, reading and student evaluation:
Assignments: 5 problem sets. These short quantitative problems sets are designed to expose students to data manipulation and calculations.

Final evaluation: Term paper and short (<12 minute presentation) that synthesizes and interprets the data collected during the practical lab sessions.

Reading: online readings posted on Canvas.

Grades/Evaluations: based on problem sets, participation in laboratory exercises, final paper.
40% problem sets
40% final paper and presentation
20% Midterm exam

Notes about assignments:
1) All problems sets are due a week after they are assigned. Late assignments will be accepted with points 10% deduction per day.
2) All work turned in for grading should be neat and easy to read. Copy calculations for clarity, if needed, showing all necessary steps. All plots should be generated using a computer. Text answers should be typed where possible.

Notes on Final paper:
1. Goal: provide students an opportunity to synthesize the different data types (stable and radiogenic isotopes) to interpret the history recorded by the provided samples.

3. Learning outcomes and course work requirements
Learning outcomes: Student will be provided with the skills and background required to interpret and apply both radiogenic and stable isotopic data.

Course work requirements: Students should be prepared to dedicate up to 15 hours a week (on average) towards this class. Laboratory modules will require students to dedicate (additional) time to sample preparation and data acquisition. Reduction of real, large data sets is time-consuming.

4. Diversity statement:
UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, I would also like us to discuss ways we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.

5. Weekly schedule: