

July 21 - July 28, 2024

Coordinators: Mitchel Lambert,
Eleanor Cote, Jennifer Peña

12th Grade Total Students: 126
12th Grade Total Staff: 16

Instructors:	Students:	RGL/Counselor:	
Goudge	20	Mindy Clark	
Afu	8	Maria Herrera Santiago	
Tisato	12	Shirley Mensah	Main Campus
Loewy	8	Jessica Valdes	
Hovorka	24	Josh Malone, Christina Raymond	
Hattori	18	Jasmeen Kaur, Nolan Chapman	
McCall	16	Andrea Saavedra, Jackie Rodriguez	Pickle Campus
Moretti	8	Sophia Bautista	
Keisling	16	Juan Gutierrez, Keira Boehle	
Students Accounted for Currently: 130			

Day	Activity	Start	Finish	Notes
Saturday, July 20	Staff head to Houston/Uvalde	1:00 PM	4:30 PM	
Houston Staff	Eleanor - Jasmeen, Juan, Christina, Mindy			
Southwest Staff	Jennifer - Jessica, Maria, Nolan, Jackie (meet at Uvalde?)			
	Austin Staff meet at PRC	3:00 PM	3:30 PM	
Austin Staff	Mitchel - Josh, Shirley, Sophia, Keira, Andrea			
	Staff meeting, check-in at hotel, & dinner		8:00 PM	
Sunday, July 21				
Houston Students	Students arrive at Harmony School of Technology	8:00 AM		
Southwest Students	Students arrive at Morales Jr. High	8:00 AM		
	Bus to Austin	8:30 AM	11:30 AM	
	Austin Staff Drive to Jester West	10:00 AM	10:30 AM	
	Austin staff check-in at dorms	10:30 AM	11:00 AM	Lay out T-Shirts for 12th Grade.
Austin Students	Students arrive at UT Austin	11:00 AM		
	Check-in at Dorms - Jester West	11:00 AM	12:00 PM	Get Austin & Houston students checked in first, SW students last to arrive
	Lunch at J2	12:00 PM	1:15 PM	J2 cafeteria (closes at 1 -- verify this from last year)
	Walk to JGB - Boyd Auditorium	1:15 PM	1:30 PM	Boyd Auditorium
	Introductions - staff and the academy	1:30 PM	2:00 PM	
	Introduce research projects, students choose Top 3 AGU Sign-Up	2:00 PM	4:00 PM	12th Grade Research Projects PPT (add steps for AGU sign-up at the end) * Educational staff will not be in attendance for this introduction At the end Austin intros the Career Elevator Pitch each student will give during the week
	Icebreakers	4:00 PM	5:00 PM	
	Walk to J2	5:00 PM	5:30 PM	
	Dinner at J2	5:30 PM	6:30 PM	
	Walk to JGB Auditorium	6:30 PM	7:00 PM	
	Assignment of Research Project, Groups, Roles Watch Onward Video	7:00 PM	8:00 PM	Explain components of poster presentation: abstract, intro, etc. https://www.youtube.com/watch?v=s14bvjjQpQ
	Walk to Dorms	8:00 PM	8:15 PM	
	Free Time	8:15 PM	10:00 PM	
	Curfew	10:00 PM		
Monday, July 22				
	Wake-up	8:30 AM		
	Breakfast at J2	9:00 AM	10:00 AM	J2 opens at 9am Sunday, closes 1pm
	Bus to PRC: Hovorka, Hattori, Moretti, Keisling groups. Travel from Main Campus: McCall group	10:00 AM	10:30 AM	
	Main Campus: First meeting with Tim Goudge, intro on project Lecture #1 Introduction to Discipline			
	Main Campus: First meeting with Nicola, Isabelle, Vicente and Ethan Lecture #1: Safety and discipline in the lab			
	Main Campus: Group #1 Crush and grind sample Group #2 & #3 Introduction to Mass Spectrometry and Sample images			
	PRC: First meeting with S. Hovorka, introduction to climate change and carbon management Activity 1: casues and options for management of CCS, cooperative activity			
	PRC: First Meeting with Hattori, Ko, & Martinez Introduction to Carbonate Sedimentology and Geochemistry			
	Fieldwork: First meeting with McCall at Mt. Bonnell Students see an example of a GeoSite			
	PRC: First meeting with Moretti Students tour the fossil collections			
	PRC: First meeting with Keisling & Pascual Lecture #1: Introduction to Glaciology			
	LUNCH @ J2	10:30 AM	12:00 PM	Need to reserve McCall a room on campus for this day only Austin, Scherr, and Swift with Goudge
66 @ Commons, 72 @ J2	Lunch at J2, Commons, or dropped off by Trail Driver	12:00 PM	1:00 PM	
	Lecture #1 Activity			
	Lecture #2 Data Collection & Field/Lab Work			
	Lecture #2 Activity			
	Lecture #2: Friction, Rotary Shear exp. Lecture #3: Data and software access Look at data example			
	Group #1 water table separation Subsurface hands-on model and rock types lab			
	Group #2 & #3 Select Zircon Spot for U/Pb analysis and start analysis EPA FLIGHT data base lab problem - ID sources (computer work)			
	cont. of Introduction to Carbonate Sedimentology and Geochemistry			
	Main Campus: Introduction to geoheritage & more detail on geosites			
	Discuss paleontology and natural history.			
	Lecture #1 Activity: Glacier Dynamics	1:00 PM	2:15 PM	Austin, Scherr, and Swift with Afu
	Lecture #2: Introduction to Climate data	2:15 PM	3:15 PM	
	Lecture #2 Activity: Understanding climate data	3:15 PM	4:30 PM	
	All groups return to Main Campus	4:30 PM	5:00 PM	
	Presentation - Research Posters & Abstracts	5:00 PM	6:00 PM	Students will learn what a research poster is and get helpful presentation tips * first 30 minutes for their Career Elevator Pitch - Goudge & Afu groups
	Dinner	6:00 PM	7:00 PM	
	Group Work	7:00 PM	8:00 PM	All "Group Work" listed will be done on campus and led by GeoFORCE staff, educational staff is not required to attend these sessions - work @ PCL
	Walk to dorms	8:00 PM	8:15 PM	

	Free Time									8:15 PM	10:00 PM	
	Curfew									10:00 PM		
Tuesday, July 23												
	Wake-up									7:00 AM		
	Breakfast at J2									8:00 AM	9:00AM	
	Bus to PRC: Hovorka , Hattori , Moretti , Keisling groups.											
	Travel from Main Campus: Goudge , Afu , McCall groups									9:00AM	9:30 AM	
	TRAVEL TO CLUTE	Fieldwork: Llano	Group 1: Prepare sample Group 2: Work on data examples from day 1	Main Campus: Group #1 Bromoform heavy liquids separation Demo Group #2 & #3 Evaluate overnight run	PRC: Educational Time: Classroom, Lab, or Fieldwork	PRC: Introduction to Core and Core logs	Fieldwork: Travel to Meadows Center Glassbottom boat ride	PRC to Fieldwork: Inner Space Cavern Observe paleontological excavations and associated Pleistocene deposits	PRC: Workshop #1 Glacier Mass Balance: data collection	9:30 AM	12:00 PM	Austin, Scherr, and Swift with Tisato
		Pick up LUNCH @ XXXX	LUNCH @ J2	LUNCH @ J2	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Pick up LUNCH @ Alvin Ord's	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons			
66 @ Commons, 28 @ J2												
	Lunch at J2, Commons, or dropped off by Trail Driver									12:00 PM	1:00 PM	- Need lunch for Afu and McCall Austin, Scherr, and Swift with Loewy
	Fieldwork: Data Collection	Fieldwork: Llano	Group 2: Prepare sample Group1: Work on data examples from day 1	Group #1 Frantz Group #2 & #3 Data processing, pick zircons if time allows Group summarizes what learned/did in last 30 mins	Introduction of Assessment of the subsurface Subsurface Lab materials handout and team assessment - collecting input data (computer work)	Students walk to the Core facility at PRC	Fieldwork: Natural Bridge Caverns	PRC: cont. sub-sample fossil bats	Workshop #1 Glacier Mass Balance: data analysis	1:00 PM	4:30 PM	
	All groups return to Main Campus									4:30 PM	5:00 PM	
	Group Work									5:15 PM	6:00 PM	PCL
	Dinner									6:00 PM	7:00 PM	
	Presentation - College Applications									7:00 PM	8:00 PM	* first 30 minutes for their Career Elevator Pitch - Tisato & Loewy Groups
	Free Time									8:00 PM	10:00 PM	
	Curfew									10:00 PM		
Wednesday, July 24												
	Wake-up									7:30 AM		
	Breakfast at J2									8:00 AM	9:00 AM	
	Bus to PRC: Hovorka , Hattori , McCall , Moretti , Keisling groups.									9:00AM	9:30 AM	
	Fieldwork: Data Collection		Group 1: Perform experiment Group 2: Lecture on Posters Inkscape Start poster	Main Campus: Group #1 MEI heavy liquid separation demp Group #2 & #3 ETune MC ICP, choose zircons for Hf	PRC: Educational Time: Classroom, Lab, or Fieldwork	PRC: Introduction to Petrography	PRC: Students receive their GeoSites	PRC: Lecture on bat skeletons, their teeth, and their ecology.	PRC: Lecture #3 Sea Level Rise Lecture #3 Activity: Mapping Sea level rise	9:30 AM	12:00 PM	Austin, Scherr, and Swift with Hattori
		LUNCH @ J2	LUNCH @ J2	LUNCH @ J2	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons			
82 @ Commons, 28 @ J2												
	Lunch at J2, Commons, or dropped off by Trail Driver									12:00 PM	1:00 PM	Austin, Scherr, and Swift with Moretti
	Fieldwork: Data Collection		Group 2: Perform experiment Group 1: Lecture on Posters Inkscape Start poster	Group #1 Additional separation steps Group #2 & #3 Analyze Hf Group summarizes what learned/did last 30 mins	Physics of Fluid flow in porous media and basics of capacity assessment Data input inot EASI-Tool (computer work)	Students observe & analyze thin sections through 3 petrographic microscopes connected to large monitors	Students research GeoSite & decided on 3 reasons for their location to be considered a GeoSite	Students finish assembling their sub-samples and will begin to analyze the fossils	Workshop #2 Texas Sea Level: Data Collection	1:00 PM	4:30 PM	
	All groups return to Main Campus									4:30 AM	5:00 AM	PCL
	Group Work									5:15 PM	6:00 PM	Begin working on Abstract
	Dinner									6:00 PM	7:00 PM	
	RGL Panel									7:00 PM	8:00 PM	* first 30 minutes for their Career Elevator Pitch - Hattori & Moretti groups
	Free Time									8:00 PM	10:00 PM	
	Curfew									10:00 PM		
Thursday, July 25												
	Wake-up									7:30 AM		
	Breakfast at J2									8:00 AM	9:00 AM	
	Bus to PRC: Hovorka , Hattori , McCall , Moretti , Keisling groups.									9:00 AM	9:30 AM	
	TRAVEL TO UT (MAIN Campus)		Crank data Prepare figs for poster	Main Campus: Group #1 observe zircons and other minerals under microscope Group #2 & #3 Process Hf data and plot	PRC: Educational Time: Classroom, Lab, or Fieldwork	PRC: Demos on how to run isotope analysis machinery Isotope analysis	PRC: Students complete research & begin working on GeoSite poster	PRC: Students complete their qualitative and quantitative assessments of the bat teeth in their sub-samples	PRC: Lecture #4 Ice sheet modelling Lecture #4 Activity: ice-sheet hysteresis	9:30 AM	12:00 PM	Austin, Scherr, and Swift with Keisling

		LUNCH @ J2	LUNCH @ J2	LUNCH @ J2	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons				
82 @ Commons, 28 @ J2	Lunch at J2, Commons, or dropped off by Trail Driver										12:00 PM	1:00 PM	- Need lunch for Loewy
	Data Analysis		Crank data Prepare figs for poster	Group #1 observe minerals and describe Group #2 & #3 Compare Hf values to other locations Group summarizes what learned/did last 30 mins	Discussion of findings - Source to storage matching, intro to pipeline tool	cont. of Isotope analysis	cont. of GeoSite poster	cont. of Students complete their qualitative and quantitative assessments of the bat teeth in their sub samples	Ice-sheet Modelling: Running an experiment - first hour Sea level rise: adaptataion and solutions		1:00 PM	4:30 PM	Austin, Scherr, and Swift with McCall
	All groups return to Main Campus										4:30 AM	5:00 AM	PCL
	Group Work										5:15 PM	6:00 PM	Work on Abstract
	Dinner										6:00 PM	7:00 PM	
	AGU Abstract Submissions										7:00 PM	8:00 PM	* first 30 minutes for their Career Elevator Pitch - Keisling & McCall groups
	Free Time										8:00 PM	10:00 PM	
	Curfew										10:00 PM		
Friday, July 26													
	Wake-up										7:30 AM		
	Breakfast at J2										8:00 AM	9:00 AM	
	Bus to PRC: Hovorka, Hattori, McCall, Moretti, Keisling groups. Travel from Main Campus: Loewy group										9:00 AM	9:30 AM	
	Main Campus: Lab/ Classroom: Data Analysis		Working on poster	Fieldwork: Travel to Enchanted Rock	PRC: Lecture : Carbon Management by CCS rules of the road	PRC: Students finalize & present the story of geochemistry for their group of data	PRC: Students complete and present their GeoSite poster	PRC: Discussion on the implications of students' initial results	Main Campus: Analysis, Results, Poster Presentation		9:30 AM	12:00 PM	Austin, Scherr, and Swift with Hovorka
	LUNCH @ J2	LUNCH @ J2	LUNCH @ J2	LUNCH @ Enchanted Rock	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons	Walk to LUNCH @ Commons				
82 @ Commons, 40 @ J2	Lunch at J2 or Commons										12:00 PM	1:00 PM	
	Lab/ Classroom: Data Analysis Lecture #6 & Activity		Working on poster	Fieldwork: Travel to Inks Lake & Drive back	Completing the project with all components: economic assessment , monitoring, bonding and insurance closure Students work on research poster	Students compare datasets & geochemistry. Work on research poster	Students work on research poster	Students work on research poster	Students work on research poster		1:00 PM	4:30 PM	
	All groups return to Main Campus										4:30 PM	5:00 PM	PCL
	Onward Panel										5:00 PM	6:00 PM	
	Dinner										6:00 PM	7:00 PM	
	Group Work - Meet at JGB first										7:00 PM	8:30 PM	* first 30 minutes for their Career Elevator Pitch - Hovorka group, Austin closing statements
	Free Time										8:30 PM	10:00 PM	
	Curfew										10:00 PM		
Saturday, July 27													
	Wake-up										7:15 AM		
	Breakfast at J2										7:30 AM	8:00 AM	
	UT Tour & Admissions Talk										8:00 AM	9:00 AM	
	GeoFORCE Pictures & Group Work										9:00 AM	12:00 PM	Educational staff are not required to attend this day, however are welcomed to assist if they would like to
	Lunch at J2										12:00 PM	1:00 PM	
	Group Work										1:00 PM	2:45PM	Work @ PCL
CONTACT	LinkedIn Presentation - Corinne Millien, WRK										3:00 PM	4:15PM	GeoFORCE staff go up to Pickle to print out posters
	Rehearsals										4:30 PM	6:00 PM	Groups rehearse in front of counselors & each other
	Union Underground/IMAX										6:00 PM	9:00 PM	
	Curfew										9:00 PM		
Sunday, July 28													
	Wake-up										7:00 AM		
	Check-out of Jester Dorms										7:30 AM	8:30 AM	
	Set-up Posters & Grab Breakfast tacos										8:30 AM	9:00 AM	WEL 2.224
Reminder: 2 Judges from Onward	Poster Presentations										9:00 AM	10:00 AM	Judging - Facilitated by Austin
	Family & Friends walk through Poster Hall										10:00 AM	11:00 AM	
	Transition to College Talk										11:00 AM	11:30 AM	
	Senior Recognition & Awards Event										11:30 AM	1:00 PM	
	Students are dismissed										1:00 PM		