

**Geosciences teaching plan**

(\* = >300 seats)  
 (# = ~1000 seats)

UArizona Online 1/14/21

Course #	Title	Spring 21	Fall 21	Spring 22	Fall 22	Spring 23	Fall 23
GEOS 170A	Earth: From Birth to Death	Kapp, J. *	Kapp, J. *	TBD	Kapp, J. *	Kapp, J. *	Kapp, J. *
GEOS 170A1 UArizona Online	Earth: From Birth to Death UArizona Online	Moitra, P.					
GEOS 170C	Life on Earth	-----	-----	-----	-----	-----	-----
GEOS 195D	A Sense of Place	Sheppard & Huckleberry		Sheppard & Huckleberry		Sheppard & Huckleberry	
GEOS 195i	Honors Seminar		Carrapa				
GEOS 197e	Resarch Experiences in Geochronology		Pepper				
GEOS 212	Introduction to Oceanography	Gehrels*	Russell/ Goodman *	Gehrels/ Goodman*	Russell/ Goodman *	Gehrels/ Goodman*	Russell /Goodman*
GEOS 216	Dinosaurs	-----	-----	-----	-----	-----	-----
GEOS 216 UArizona Online	Dinosaurs UArizona Online						
GEOS 218 (icourse)	Natural Disasters	Goodman, P.	Goodman, P.	Goodman, P.	Goodman, P.	Goodman, P.	Goodman, P.
GEOS 218 UArizona Online	Natural Disasters UArizona Online	Pepper, M.					
GEOS 220	Envir Hist of the Southwest	Sheppard	Sheppard (may be taught on-line during summer session by Ron Towner?)		Sheppard	Sheppard	Sheppard
GEOS 240	National Parks: A Window Through Earth's Geological Processes (Honors)	-----	Carrapa (depending on field plans)	-----	-----	-----	Carrapa
GEOS 251	Physical Geology	Kapp, P.	Ibanez-Mejia	Paul Kapp	Gehrels	Reiners or Ibanez-Mejia	Gehrels
GEOS 255	Historical Geology	Carrapa, Jepsen	-----	TBD		TBD	-----
GEOS 260 (new)	Introduction to Gems and Minerals		Mallick		Mallick		Mallick

GEOS 270 (pending)	Planetary Geology		Moitra		Moitra		
GEOS 280	Programming and Data Analysis in the Earth Sciences	Lofverstrom (Python)	Harig and/or McGuire		Harig and/or McGuire		Harig and/or McGuire
GEOS 285 (TBA)	Proposed Lofverstrom Python course			Lofverstrom			
GEOS 300	Earth Surface Processes	McGuire	-----	Pelletier	-----	McGuire	-----
GEOS 302	Stratigraphy and Sedimentation	-----	Cohen	-----		-----	Cohen
GEOS 304	Structural Geology	Hughes	-----	Hughes	-----	P. Kapp (? Check)	-----
GEOS 306	Mineralogy	-----	Mazdab	-----	Ibanez-Mejia	-----	?
GEOS 308	Paleontology	Thirumalai & Cohen	-----	Thirumalai & Cohen	-----	Thirumalai (Cohen possible sabbatical)	-----
GEOS 322	Introduction to Geophysics	Kiser	Kiser		Kiser		Kiser
GEOS 342	History of Earth's Climate	-----	Thirumalai and Lofverstrom	-----	Thirumalai and Lofverstrom	-----	Tierney
GEOS 346	Mineral and Energy Res.	-----	-----		-----	-----	-----
GEOS 356	Petrology	Mallik	-----	Ducea	-----	Ducea	-----
GEOS 388/ RNR 388/ GEOG 388 (pending)	Biosphere 2: From Wonder to Discovery		Thompson				
GEOS 400/500	Introduction to Geochemistry	-----	Quade/Ibanez		TBD	-----	TBD
GEOS 408/508	Tectonic Petrology	-----	-----	-----	Ducea	-----	-----
GEOS 412A	Ocean Sciences	Tierney	-----	Cohen and/or Thompson	-----		-----
GEOS 412B	Ocean Sciences Field Course			Cohen and/or Thompson			
GEOS 414	Geology Field Camp	-----	DeCelles/Kapp/ Carrapa, summer '21	-----	DeCelles and Kapp, summer '22	-----	DeCelles and Kapp, summer '23
GEOS 415	Geologic Hazards	-----	Baker	-----	Baker	-----	Baker
GEOS 417/517	Sedimentary Basin Analysis	DeCelles	-----	-----	-----	-----	-----
GEOS 419/519	Physics of the Earth	-----	-----	Harig, C.	-----	-----	-----

GEOS 421/521	Petroleum Geology and Geophysics	-----	Hughes	-----	Hughes	-----	Hughes
GEOS 423/523	Regional Structural Geology	-----	-----	P. Kapp	Kapp, P.	-----	-----
GEOS 424A/524A	Space Geodesy	-----	-----	Bennett	-----	-----	-----
GEOS 425/525	Regional Tectonics	-----	Kapp, P.	-----	-----	-----	-----
GEOS 427/527	Orogenic Systems	-----	-----	Beck	-----	Beck	-----
GEOS 430/530	Chemical Evolution of Earth	-----	Ducea	-----	?	-----	Ducea
GEOS 432/532	Earthquake Seismology	-----	Beck	-----	Beck	-----	Beck
GEOS 434A/534A	Exploration Seismology	-----	Johnson	-----	?	-----	?
GEOS 436/536	Earthquakes and volcanic systems: processes and hazards	-----	-----	Kiser	-----	Kiser	-----
GEOS 437/537	Intro to Earth Sytem Modeling	-----	Lofverstrom?	-----	-----	-----	Lofverstrom
GEOS 439A/539A	Intro to Dendrochronology	-----	Frank and Trouet	-----	Trouet?	-----	Hughes & Trouet
GEOS 440/540	Geodynamics	Harig	-----	-----	-----	Harig	-----
GEOS 446/546	Economic Mineral Deposits	-----	Barton	-----	-----	-----	Barton
GEOS 450/550	Geomorphology	-----	-----	-----	-----	-----	-----
GEOS 453/553	Glacial and Quat Geology	Baker	-----	-----	-----	Baker	-----
GEOS 456/556	Thrust Belts and Synorogenic Sediments	-----	-----	-----	DeCelles	-----	-----
GEOS 460/560	Characterization and Identification of Minerals	Downs (Crystallography)	-----	-----	-----	-----	-----
GEOS 466/566	Stable Isotope Geochem, Paleoclimate	-----	Quade / Thirumalai	-----	-----	-----	Quade / Thirumalai
GEOS 469/569	Seismic Data Processing	-----	-----	?	-----	-----	-----

GEOS 470L/570L	Volcanology: Laboratory	Seedorff	-----	-----	-----		-----
GEOS 470R/470R	Volcanology: Physical Processes and Petrologic Applications	Seedorff	-----	-----	-----		-----
GEOS 474A/574A	Geochronology & Thermochronol ogy	-----		-----	-----	-----	Reiners
GEOS 477/577	Active Tectonics	Bennett / Hughes	-----	Bennett/ Hughes	-----	Bennett / Hughes	-----
GEOS 478/578	Global Change	-----	Russell / Saleska	-----	Russell / Saleska	-----	Russell / Saleska
GEOS 479/579	Intro to Climate Dynamics	Yin	-----	Yin	-----	Yin	-----
GEOS 481/581	Quat Paly and Plant Macro (unlikely to be taught again)	-----	-----	-----	-----	-----	-----
GEOS 483/583 (new)	Modes of Climate Variability	Thompson				Thompson	
GEOS 484/584	Coevolution of Earth and the Biosphere	-----	-----	-----	-----	-----	-----
GEOS 486/586	Organic Geochemistry	-----	Tierney	-----	-----	-----	-----
GEOS 487/587	Physical and Dynamical Oceanography		Yin		Yin		
GEOS 489/589	Quaternary Geochronology	Quade, Jull	-----	TBD	-----	-----	-----
GEOS 497C/597C	Dendrochronolo gy Workshop	Sheppard	-----	Black	-----	Black	-----
GEOS 497I/597I	Practical Dendroclimatol ogy (Tree Ring summer presession)						
GEOS 497J/597J	Dendroarchaeol ogy (Tree Ring summer presession)			Towner		Towner	
GEOS 497K/597K	Dendroecology (Tree Ring summer presession)						

GEOS 502	Analytical and Numerical Modeling in Geosciences	-----	Pelletier	-----	-----	-----	Pelletier
GEOS 504A (pending)	Structural Geology for Exploration			Seedorf/Carson ? Richardson			
GEOS 504B	Ore Deposits Mapping (short course)	-----	Seedorff / Barton	-----	Barton/Seedorf	-----	Barton
GEOS 504C	Mineral deposit types (short course)	-----	Seedorff / Barton	-----	Barton/Seedorf	-----	Barton
GEOS 509	Advanced Petrology	-----	-----	-----	-----	-----	-----
GEOS 512A	Geoarchaeology (ANTH is home)	Holliday	-----	-----		-----	-----
GEOS 514	Quaternary Geology	-----	-----		-----	-----	-----
GEOS 528	Crustal Deformation	-----	Bennett	-----	-----	-----	-----
GEOS 543C	Geologic Best Practices	-----	Seedorff (tentative)	-----		-----	
GEOS 543D	Sustainable development and mineral resources						
GEOS 544	Advanced Physical Sed	-----	-----	-----	-----	-----	-----
GEOS 561	PaleoIndian origins (ANTH is home)	Holliday	-----	Holliday			
GEOS 567	Inverse Problems in Geophysics	-----	-----	-----	Bennett	-----	-----
GEOS 568	Advanced Seismology	-----	-----	-----	-----	-----	-----
GEOS 572	Global Biogeochem Cycles (GC is home)	-----	Leavitt	-----		-----	Leavitt
GEOS 573	Earth System Modeling	-----	-----	-----	TBD	-----	-----
GEOS 582	Paleoclimatology	-----	-----	-----	Thirumalai	-----	-----
GEOS 585A	Applied Time Series analysis	-----	-----	-----	-----	-----	-----
GESO 595A	Colloquium						

GEOS 595E	Dendrochronology Colloq. (Scientific Writing)		Trouet		Tree Ring Faculty (TBD)	Tree Ring Faculty (TBD)	Tree Ring Faculty (TBD)
GEOS 646A	Advanced Ore Deposit Geology	-----	-----	-----	-----	-----	-----
GEOS 646B	Advanced Ore Deposits II	-----	-----	-----	-----	-----	-----
GEOS 650	Field Studies in Geomorphology	Pelletier	-----	McGuire	-----	Pelletier	-----