

12.114: Field Geology - I (preliminary)
 Laboratory Section, Mondays, 11-2

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 Course Website: <http://web.mit.edu/12.114/>

Date	Focus	Content	Exercise
S 05	-	No Class	-
S 12	-	Sept 14, Organizational Meeting, 12:30	-
S 19	Trad (T)	Field: Beaver Tail (Map skills, compass, Notebooks, sketches, 3-D visual., x-sects, columns, organization)	-
S 26	T	Map and Brunton skills: Map location/orientation, S/D, T/P, Triangulation, data symbology, distance est.	L1: Practice Mapping Simple Geologic Structures Using Oriented Planes
O 03	Digital (D)	Introduction to GIS: Concept, Software Apps, Data types, Data creation/editing, labuser accounts	L2: Make a map of your hometown and add personal line, point, polygon data
O 10	T	HOLIDAY: No meeting. --- (We will meet twice the following week, during structure's time)	- No assignment
O 17 9.30-2	D	Making Geologic Maps: Georeferencing, Tracing Points, Lines, Polygons, working with layers of data	L3a: Scanning and Digitizing a Portion of a Geologic Map
O 24	T	Reading and interpreting Geologic Maps: structural and lithologic symbology, columns, x-sections	L4: Interpreting the Digitized Geologic Map and Working with the Data
O 31	D	Finalizing A Digital Geologic Map: Integration of disparate line data in to polygons, legend, colors, layout	L3b: Finalize Geologic Map
N 07	T	3-D visualization exercises: draping geology, rule of V's, x-sects and block diagrams from geologic maps	L5: visualization exercises
N 14	D	iPAQs and Mapsmith: device issues, GPS, ArcPad, mapping tools	- No assignment
N 21	T	Working with rocks: Identification, Classification, Hammers, Hand lenses, Acid, Magnets etc.	L6: Create Field Manual, Rock Lab
N 28	D	iPAQs Mapping Exercise: trail run with devices.	L7: Collect and interpret iPAQ data
D 05	D-T	Reconnaissance work for field area, GIS, regional maps, structural, stratigraphic and logistical expectations	L8: Preliminary map, x-sect, strat col.
D 12	D-T	Field Preparation: Technical and logistic planning, Ironing out the bugs.	