

Day 1 (Classroom Day):

- AST1 Review
- Group Leadership
- Avalanche Types
- Terrain Management Techniques
- The Avalanche Forecast
- Trip Planning
- Avalanche Danger Exceptions
- Companion Rescue Theory

Day 2 (Field Day):

- Lesson 1: Avalanche Trip morning meeting: Discuss overnight changes in weather and conditions, discuss effect on days plan. Develop daily safety strategy (rank hazards, what to avoid, where to do test pit, how to go about day, etc)
- Lesson 2: Trailhead procedures - Equipment and Transceiver check - range check to verify proper transceiver function and that there is no electronic interference (Cell phone, GoPro, etc.)
- Lesson 3: Obtaining Field Observations: How to write down observations in red field book. How these impact the day and next days plan.
- Lesson 4: Companion Rescue: Instructor discusses first what to do if caught in an avalanche. Then demonstrates companion rescue.

Method: Personal safety, Organizing the rescue, Coarse search, Fine Search, Pin-point probing, Conveyor Belt digging technique, Clear airway, ABC's, Turn off victims transceiver if searching for multiple.

- Lesson 5 (also Lesson 30): Advanced Companion Rescue: At an opportune time teach multiple burial technique
- Lesson 6 (also Lesson 30): Advanced Companion Rescue: At an opportune time teach or discuss deep burial technique
- Lesson 7 (also Lesson 30): Advanced Companion Rescue: At an opportune time teach or discuss close burial technique
- Lesson 8: The Bulletin & Avalanche Problems: What, When, Where, How big:

Situational Awareness- Students take turns right behind instructor to indicate changes or observations in terrain transitions, weather, conditions, snowpack or avalanches.

- Lesson 9: Track setting; Upwards travel in avalanche terrain discussing safe terrain and route choices. Elaborate on specific avalanche terrain features (convex, shallow, open slope, terrain trap, steep, wind loaded, etc.).
- Lesson 10: Perform snowpack test: Compression test. Find the layers of concern (LOC) and discuss any Deep Persistent Slab problems (DPS). Discuss the hazard they pose. Look at a crystal type under the loop.
- Lesson 11: Perform snowpack test: Show Hand Shear Test as a useful test that is easy to perform and not time consuming
- Lesson 12: Descent in avalanche terrain. Evaluate a slope with Avaluator Slope Evaluator & Terrain Selection. Discuss and demonstrate downhill avalanche mitigation techniques (ski one at a time, ski cutting, safe re-grouping).
- Lesson 13: Avalanche discussion a.k.a. Morning meeting – review local weather, day & avalanche trip plan at AST 2 level
- Lesson 14: Situational awareness & leadership: Demo safe track setting and begin to let students lead. Student must demonstrate and be prompted to do the following lessons :
- Lesson 15: Recognizing terrain transitions
- Lesson 16: Recognizing typical avalanche hazard areas (terrain traps, avalanche slopes, avalanche paths, convex rolls, shallow snowpack areas, etc)
- Lesson 17: Safe travel techniques & group management
- Lesson 18: Find a suitable spot for field snow stability tests (L.O.C' & DPS: What, Where, Safe, Representative, Undisturbed, Record it)
- Lesson 19: Finding and testing known critical layers via other methods; (ski pole hand shear test, compression test, , ski cutting)
- Lesson 20: Snowpack and weather recording

Day 3 (Field Day):

- Lesson 27: Leadership in avalanche terrain – participants take turns as lead of the group, directly in front of and under the supervision of the instructor
- Lesson 28: Independent critical avalanche safety decision making - use avaluator slope evaluator
- Lesson 29: Anticipating transitions and recognizing avalanche terrain – safe track setting
- Lesson 14 - 18: (See above, these lessons are taught on a continual basis throughout the course)
- Lesson 30: Outdoor Advanced Companion Rescue - Multiple Burial or Deep Burial (or at a later time in the course)

Day 4 (Field Day):

- Lesson 14 - 29: (are taught on a continual basis throughout the course)
- Lesson 31: Special session on dealing with terrain crux's & critical decision making
- Final safety discussion Understanding the limits of your current skills - advice from the guide.

**Notice: MSAA pledges to always cover all of the critical skill sets. However, though rare, conditions or other constraints may cause for certain lessons to not be appropriate or safe to undertake. Be sure to address your instructor at the time if you have any concerns."