



Timberline Challenge

A Design Science Association Fundraising Event

The Timberline Challenge is a hiking relay race around Mount Hood on the Timberline Trail. The race consists of five legs, varying in length from 3.7 miles to 11.1 miles, over which two members from each team will hike as quickly as possible, with the goal of completing the entire 40-mile course in 16 hours or less. Team members will raise funds for the Design Science Association by requesting donations from family, friends, churches, businesses, and other organizations to sponsor the team on a per-mile, per leg, time goal, or other basis. Teams will compete against the clock and against each other to be the first to finish, have the shortest elapsed time, and raise the most money. Along the course, team members will take pictures at 18 pre-defined waypoints with their cell phones and upload them to be placed on a Facebook page tracking the event. Each team will also carry a Spot Tracker which will enable near real-time web updates on their progress around the course and their position compared to other teams.

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Timberline Challenge 2017 – Event Details

Monday, May 1: Team registration opens

Monday, July 3: Facebook page and funding site go live, sponsorship sign-up sheets made available on the DSA website (<http://designsciencenw.org/>)

Monday, July 24: Team worksheets due

Friday, July 28: Team rankings/start times posted

Team Requirements

Due to wilderness rules in the Mount Hood National Forest, the Timberline Challenge is currently limited to 6 teams. Team registration opens on May 1, 2017 and the first 6 teams to register and pay the \$50 non-refundable registration fee will be guaranteed participation in the event. Additional teams will be placed on a waiting list in the order in which their registration is received and will be added to the event if another team drops out. Waiting list teams will not be required to pay the registration fee until a slot becomes available.

For the 2018 event and subsequent events, the top 2 teams by elapsed time in the prior year's Timberline Challenge will automatically receive a slot the following year, provided they pay the fee when registration opens. Additional slots will be available on a first-come basis, with a waiting list.

Team composition: 10 hikers per team, 2 hikers per leg, plus 2 alternates. Team members may only hike one leg. In the case that injury or other circumstances forces a team member to pull out of the event, a team must use their alternates. If a team has used both of their alternates and is unable to field two hikers for a leg, the team may use a hiker on more than one leg, provided that they make a request to and receive approval from the race director.

Please note that the minimum age requirement for hikers is 15 years. Teams requesting an exception to this rule should contact the race director.

Team leader: One member of the team must be designated the leader. The team leader may be but does not have to be one of the 10 hikers on the team. This person will be the point of contact for the team and will be responsible for team logistics, communication with the race director, and ensuring that the team meets all safety and other requirements. Team leaders must also complete a team worksheet (Microsoft Excel spreadsheet, available at <http://designsciencenw.org/>) and submit it to the race director no later than Monday, July 24, in order for their team to participate in the event. Information provided on team worksheets will be used for logistics, safety, and ranking purposes.

Recommended minimum level of fitness:

- Average pace of 3 miles per hour over 5 miles on flat terrain
- Average pace of 2.5 miles per hour over 5 miles on hilly terrain

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*Please note that the Timberline Challenge is a hiking race, **not** a trail running race. Trail running will result in disqualification. This requirement has been put in place to allow for increased participation and to increase the challenge of finishing the course in 16 hours or less.*

Required gear and equipment:

- (1) Handheld GPS with ability to create/upload waypoints, mark waypoints, and download waypoints and tracks
- (1-2) Cell phones per group of two hikers, with camera and data plan for uploading photos
- (2) Headlamps for hikers on Leg 1 and Leg 5
- (2) Mesh bags for safety gear

The following safety gear must be placed in the mesh bags and both bags must be carried on every leg and handed off at exchange points to team members hiking the next leg:

- (2) Handheld two-way radios
- (1) First aid kit (2-person backpacker type recommended)
- (1) Pump-type water filter (backpacker type recommended)
- (1) Handheld compass
- (1) Emergency whistle (this requirement may be fulfilled by a whistle attached to a pack)

Team T-shirts:

Each team is required to design and provide Team T-shirts to each hiker on their team. These shirts must be worn by the hikers on each leg in order to identify them as participants in the Timberline Challenge. Additional team T-shirts may be used for fundraising purposes. Team T-shirts must incorporate the following:

- The official Timberline Challenge logo (in full color or grayscale – image files provided by the race director)
- The words “Timberline Challenge” and the year “2017”
- The team name

Additional design details, T-shirt style, and T-shirt materials are up to each team.

Provided Gear and Navigation Aids

A Spot Tracker will be provided to each team in order to track team progress and allow notification in the case of an emergency. The Spot Tracker will be given to each team prior to the start of the event and must be returned to the race director upon finishing the event.

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In addition, the following navigation aids will be provided to each team upon receipt of the \$50 non-refundable fee required at registration:

- Green Trails Map (462S Mt Hood/Timberline Trail)
- (18) GPS waypoints
- (18) Pictures to aid in identifying waypoints

Course Details

Start times:

Teams will be ranked based on estimated elapsed times (determined using details provided on the team worksheets) and will start in reverse order (slowest to quickest), with up to six starts:

5:00am - Team 1
5:05am - Team 2
5:10am - Team 3
5:15am - Team 4
5:20am - Team 5
5:25am - Team 6

Cutoff time:

For safety reasons (primarily to avoid having teams cross the Sandy River after dark), teams must reach Exchange 4 by **7:00pm**. Teams that do not reach the exchange point by that time will be required to hike out to the Ramona Falls Trailhead parking lot or the Top Spur (McNeil Point) Trailhead parking lot, whichever is closer, when time expires.

Anticipated conditions:

Daylength for August 5, 2017 - 14hrs 33min [15hrs 40min of civil twilight]

First Light: 5:26am
Sunrise: 5:59am
Sunset: 8:32pm
Last Light: 9:06pm

Note: Information on daylight hours was obtained online from:

<https://www.timeanddate.com/sun/usa/portland-or?month=8&year=2017>

Given the staggered start times, teams that complete the course in a time greater than 15hrs 15min will most likely be hiking at least a portion of the final leg in the dark. All teams will be starting the first leg in the dark. For safety reasons, all hikers are required to carry headlamps on the first and last legs of the course (Leg 1 and Leg 5).

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Average weather for August 5, 2017:

Temperature: high 81° F, low 59° F

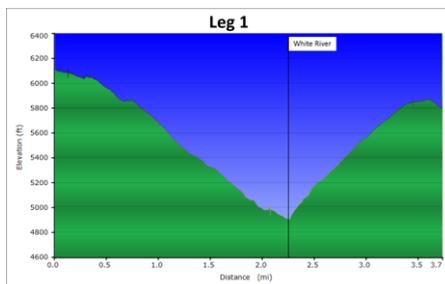
Probability of precipitation: 17%

This weather information is for Portland, so the anticipated high and low temperatures on the course can be as much as 15 to 20 degrees lower due to the higher elevation.

Note: Information on average weather was obtained online from:

<https://weatherspark.com/averages/31802/8/5/Portland-Oregon-United-States>

Leg 1 details:



Leg 1 is 3.7 miles but requires a 1.5 mile hike downhill afterward to reach a parking lot, for a **total of 5.2 miles**. The Leg 1 high point is 6,113 ft. The Leg 1 low point is 4,976 ft. The Leg 1 starting point is higher in elevation than the ending point.

The starting point of Leg 1 is at the PCT trail sign just uphill from Timberline Lodge. It can be reached from the

Timberline Lodge parking lot.

Leg 1 includes the crossing of White River. There is no bridge, so the river must be forded. It is shallow but its width varies from year to year, depending on weather conditions, since it is fed by snowmelt from White River Glacier higher up on the mountain. It is sometimes possible to cross using exposed rocks, but hikers must more often than not cross in the water. Considerable caution should be exercised during the crossing, particularly in low light conditions.

Leg 2 details:



Leg 2 is 9.8 miles but requires a 1.5 mile hike uphill to reach the leg start and a .5 mile hike afterward to reach a parking lot, for a **total of 11.8 miles**. The Leg 2 high point is 7,325 ft. The Leg 2 low point is 5,550 ft. The Leg 2 starting point is lower than the ending point.

The starting point of Leg 2 (Exchange 1) is at the junction of the Umbrella Falls Trail (#667) and the Timberline Trail

(#600) near Mitchell Creek. It can be reached from the Mt. Hood Meadows main parking lot by following the Umbrella Falls trail to the northwest.

Leg 2 includes the highest elevation on the course and the second greatest elevation gain. Leg 2 also includes the crossing of Newton Creek. This crossing is not as significant as the White River crossing on Leg 1. Though the creek must technically be forded, it may usually be crossed using exposed rocks. Considerable caution should be exercised.

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Leg 3 details:



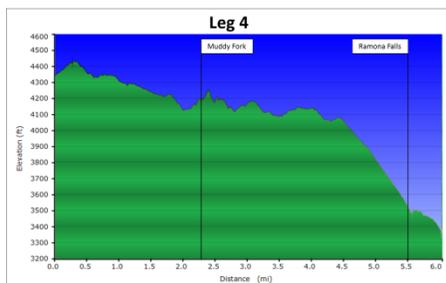
Leg 3 is 11.1 miles but requires a .5 mile hike to reach the leg start and a .5 mile hike afterward to reach a parking lot, for a **total of 12.1 miles**. The Leg 3 high point is 6,173 ft. The Leg 3 low point is 4,298 ft. The Leg 3 starting point is higher than the ending point.

The starting point of Leg 3 (Exchange 2) is on the Timberline Trail (#600) near the Cloud Cap Saddle Campground and the Cloud Cap Inn. It can be reached via a short trail from Cloud Cap Road.

Leg 3 includes the crossing of Eliot Creek. The traditional crossing was washed out in November, 2006, making the approach down to the creek and back up again very steep. For the last ten years, the crossing has been negotiated with the assistance of fixed ropes. However, work to reroute the trail was completed in the fall of 2016 and the new section of trail is now open to hikers. It is anticipated that the new crossing will be much easier and that the creek can be crossed using exposed rocks. Still, due to the swift currents typical of Eliot Creek, considerable caution should be exercised at this crossing.

Note: Due to the recent re-routing of the trail, the total distance of Leg 3 is an estimate and may vary slightly from the actual distance.

Leg 4 details:



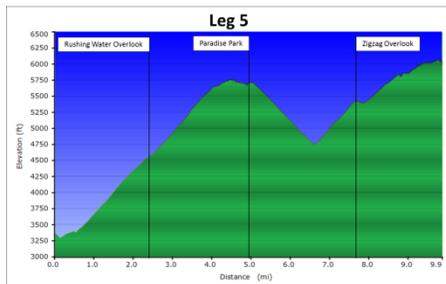
Leg 4 is 6.0 miles but requires a .5 mile hike to reach the leg start and a 2.8 mile hike afterward to reach a parking lot, for a **total of 9.3 miles**. The Leg 4 high point is 4,433 ft. The Leg 4 low point is 3,356 ft. The Leg 4 starting point is higher than the ending point.

The starting point of Leg 4 (Exchange 3) is on the Timberline Trail (#600) at the junction with the Pacific Crest Trail (#2000). It can be reached via a relatively short hike from the Top Spur (McNeil Point) Trailhead parking lot.

Leg 4 includes the crossing of the Muddy Fork. There is no bridge, so the river must technically be forded. The river may usually be crossed using exposed rocks, but this is not always the case. Because of the time of day when the crossing is likely to occur, the river may have a very strong current. Considerable caution should be exercised during the crossing.

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Leg 5 details:



Leg 5 is 9.9 miles but requires a 2.8 mile hike to reach the leg start, for a **total of 12.7 miles**. The Leg 5 high point is 6,113 ft. The Leg 5 low point is 3,356 ft. The Leg 5 starting point is lower than the ending point.

The starting point of Leg 5 (Exchange 4) is at the junction of the Ramona Falls Trail and the Timberline Trail (#600) / Pacific Crest Trail (#2000). It can be reached via a hike

from the Ramona Falls Trailhead parking lot.

Leg 5 includes the crossing of the Sandy River both on the approach to the exchange point (before the start of the leg) and also very early during the leg. There is no bridge. On the approach crossing, there are usually logs across the river that may be used as a makeshift bridge. Considerable caution should be used here. The second crossing does not have a bridge, and there are usually no logs either. The river must technically be forded. However, this crossing is not as significant as the White River crossing on Leg 1. The river may usually be crossed using exposed rocks, but considerable caution should be exercised. This leg also includes the crossing of the Zigzag River. This can usually be done using exposed rocks. Leg 5 also includes the greatest elevation gain of any leg, as well as a significant canyon crossing (Zigzag Canyon) which requires hikers to descend around 1,000 feet before immediately regaining the lost elevation. Leg 5 should be considered the most difficult leg of the entire route. It is recommended that the strongest hikers from your team be assigned to this leg. The finish of the leg is also the finish of the Timberline Challenge route, which occurs at the same spot as the start (the PCT sign).

Exchange Point Logistics

Arrangements should be made to transfer car keys at exchange points from the team members starting a leg to those that are finishing a leg so that those finishing a leg can hike out and use the vehicle left by their team members to return to team headquarters. The alternative (having a designated driver or drivers pick up and drop off team members for each leg) is not recommended due to the driving distances involved.

Race Director Contact Information

For additional information, please contact the race director at:

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