General Orienteering Information

Holmes Park
City of Medford, Oregon

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Troop 5, Medford, Oregon, 2021

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What is Orienteering?

Orienteering is an outdoor activity in which participants find their way to various checkpoints across rough country with the aid of map and compass. Competitive orienteering requires both speed and accuracy of overland navigation. For this course, please take your time and have "fun" acquiring the fundamentals.

This course is beginner friendly and contains 15 waypoints throughout the park. Each waypoint has a physical marker, as well as a point that is plotted on an attached map. The main goal of this course is to teach you how to properly use a map and compass to orient yourself to your surroundings.

What does Orienteering Teach?

Orienteering teaches you more than just how to read directions. It can teach you a life skill in how to properly read a map and compass. These skills may help you in a situation where you are lost outdoors without a phone or landmarks (a skill especially helpful to campers and hunters).

How to Read a Compass

A compass is a tool that all orienteering courses use, be it magnetic or a digital. A compass, being a circle, has a full 360° rotation.
Inside the compass dial is the (typically) red, magnetic needle. While holding the compass parallel to the ground, this arrow will always point towards magnetic North.

The next part of the compass is the compass housing with the degree dial. Around the dial are degree markers that indicate the cardinal directions of North, East, South and West (NESW). To orient yourself, hold your compass parallel to the ground, in the palm of your hand. Then, rotate the dial until the 0° marker (or the marker labeled N) is at the top of your compass (the side farthest from you). Then, rotate yourself until the red arrow is pointing in the same direction as the 0°/N marker. Once you do this, you'll have both yourself and your compass pointing towards North.

At 90°, your compass will point you towards East. 180° is South. And 270° is West.

Taking your Pace

There are two posts, waypoints 1 and 2, that are exactly 100 ft apart. Start at post 1 and walk in straight line to post 2. Count your steps along the way and you'll know your own pace. Your pace will change many times throughout your life, so it doesn't hurt to re-pace yourself. There is a section to write down your own pace to help remember it.

Number of steps _____ per 100 feet

How to Find a Bearing

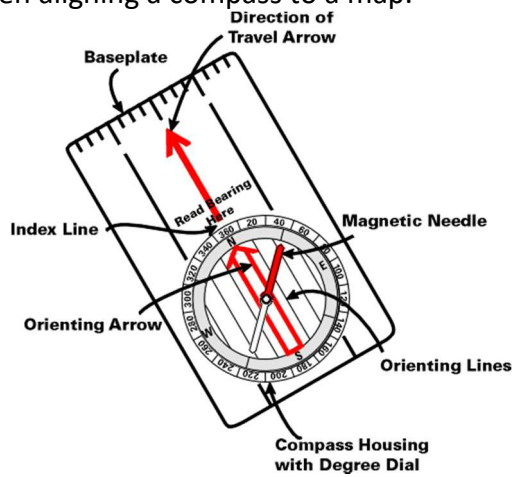
This is an example of finding the 40° bearing

1. Turn the degree dial to align the orienteering arrow and the number 40°
2. Hold the compass flat on your palm and the base plate square to your body
3. Turn **yourself** around until the red orienting arrow is covered by the magnetic needle. Some people call this putting "red in the shed."
4. Look to the direction of travel arrow. That is the 40° bearing!!!

General Information about Orienteering

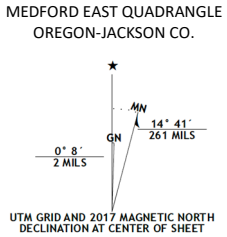
Parts of a Compass

Baseplate – A hard, flat surface located at bottom of compass. The dial is mounted on this. This is placed on the palm of your hand when holding a compass.
Compass Housing with Degree Dial – A ring with degrees 0 to 360 etched on the outer edges.
Direction of Travel Arrow – This arrow is located on the front of the base plate. It points to the way you will be traveling after a bearing is set.
Orienteering Arrow – This arrow is located on floor of compass dial beneath magnetic needle. It rotates as dial is turned. This arrow is used when aligning a compass to a map.
Magnetic Needle – A magnetized piece of metal floating in compass dial. The red end of arrow always points North and the white end of arrow always points south when held flat.
Index Lines – A series of parallel lines located on floor of compass dial. These lines are used when aligning a compass to a map.



Magnetic North

The difference between the North geographic pole and the North magnetic pole is called magnetic declination or usually just declination. The difference between the two varies depending on where you are on the Earth. For Medford, Oregon, magnetic North is just over 14° East different from true North in 2017. Declination does change over time.



Adjusting your Compass for Magnetic North in Medford

Adjust the Degree Dial on your compass to 14° East of North. For compasses with a 360° dial, turn the dial so that the Direction of Travel Arrow aligns with 346° on the Degree Dial.

By adjusting the compass to match the declination on our map, the orienting arrow now appears to be off-center from North, which is how it should be. Turn your compass to put RED in the SHED (needle inside orienting arrow), the North indicated at the Direction of Travel Arrow is true North.

Whenever you stop and check your heading or take a bearing on a distant object, the degrees on the dial will be the actual true degrees. The only thing that looks a bit odd is that the North end of the compass needle does not point directly at the N when you are heading due North.

How to Orient a Map

Orienting a map is the process to turn the map to align with magnetic North. This lines it up with the terrain and allows you better interpret where landmarks are.

There are four simple steps to orient a map

1) Place the map on a flat surface
2) Turn your **declination-adjusted compass dial** so due North is at the Direction of Travel Arrow
3) Place your compass on your map with the edge of the baseplate parallel to the north-south lines on the map. Notice the orienteering lines and direction-of-travel arrow are all parallel with the map lines.
4) Turn the map and the compass as a unit until the magnetic needle aligns with the Orienteering Arrow—Put Red in the shed.

The map is now oriented. If you know where you are on the map, you should be able to look in any direction and see the objects represented on the map in the same direction.