

ELO Ranking System

This system ranks skiers according to whom they beat in competitions.

BASIC DESCRIPTION

1. The ELO system is used to rank skiers based on how well they do against their competition. The ranking value is a reflection of competitive skill. A skier with a high ranking has a high percentage chance of beating a skier with a low ranking. Two skiers with equal ranks have a 50-50 chance of beating the other skier in competition.
2. The system uses all of the skiers' rankings in a particular competition to calculate how well any particular skier will place and thus score points. If the skier exceeds his projected points, his ranking will go up. If a skier does not meet the expected points, his ranking will go down.

GENERAL RULES

1. Tournaments will be categorized as type 1 or type 2. Type 1 is a typical Elite or Titled tournament where the tournament scorebook placement will be used for ranking.
2. Type 2 has multiple age divisions. In type 2 tournaments, placement will be awarded on best performance across all divisions
3. In each tournament, a skier will be given 1 point for each skier that he/she beats and .5 points for each tie. Based on the rankings of the other skiers in the event, an expected score shall be calculated. The difference between the expected score and the achieved score will be multiplied by 32 and that will be added or subtracted to update the ranking. For example if you score 6 points but your expected score is 7, then you will lose 32 points. If your expected score is 5, with an achieved score of 6, you will gain 32 points.
4. There will be a down side limit to protect against too large a change in the ranking due to one catastrophic performance (i.e. missing the starting gate in slalom, withdrawal through injury, jump score of 0 through fall or injury). The largest reduction of ranking will be limited to 100 points.

SLALOM

1. Based on the May 2016 performance ranking, each skier is given a rank value. The rank value starts at 100 points for [6@18.25](#) and 50 points for each additional buoy. The rank values go from 100 to over 2000 points.
2. If a skier was not ranked in the May 2016 list and skis in a tournament, they will be assigned a rank score based on their slalom score and adjusted by the average difference between the top two scores of all competitors in the May 2016 rankings. In slalom, this was 1.73 buoys for women and 2.77 buoys for men. The adjustment will be ½ of that value.

TRICKS

1. Based on the May 2016 performance ranking, each skier is given a rank value. The rank value starts at 100 rank points for [500](#) trick points and 20 ranking points for each additional 100 trick points. The rank values go from 100 to over 2000 points.
2. If a skier was not ranked in the May 2016 list and skis in a tournament, they will be assigned a rank score based on their trick score and adjusted by the average difference between the top two scores of all competitors in the May 2016 rankings. In tricks, this was 300 points for women and 354 points for men. The adjustment will be $\frac{1}{2}$ of that value.

JUMP

1. Based on the May 2016 performance ranking, each skier is given a rank value. The rank value starts at 100 points for a 10 m jump and 40 ranking points for each additional 1 m in distance. The rank values go from 100 to over 2000 points.
2. If a skier was not ranked in the May 2016 list and skis in a tournament, they will be assigned a rank score based on their jump score and adjusted by the average difference between the top two scores of all competitors in the May 2016 rankings. In jump, this was 1.52 m for women and 2.14 m for men. The adjustment will be $\frac{1}{2}$ of that value.