



Triathlon

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About the Tutorial

Triathlon is a multi-stage competition where the competitors compete with each other in three continuous sports of different disciplines. The most common format of the sport consists of three different sports which are swimming, cycling, and running. Since 2000, it has been included in the Olympic Games.

Audience

This tutorial is meant for anyone who wants to play Triathlon. It is prepared keeping in mind that the reader is unaware about the basics of the sport. It is a basic guide to help a beginner understand the sport of Triathlon.

Prerequisites

Before proceeding with this tutorial, you are required to have a passion for Triathlon and an eagerness to acquire knowledge on the same.

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1. Triathlon – Overview

Triathlon is a multi-stage competition similar to Pentathlon where players compete against each other in three set of different sport events which are **swimming**, **cycling**, and **running**. Triathlon demands a lot of physical endurance.



In this sport, the players compete with each other in three different sport disciplines. The sport starts with the swimming event that is trailed by a bicycle event and at the end, the players' race against each other in running event. The first three players to finish the three events are declared winners.

A Brief History of Triathlon

Triathlon was invented at the San Diego Track Club mostly as an alternative to rigorous track exercises. Directed by Jack Johnstone and Don Shanahan, a total of 46 participants participated in the first competition. At the beginning, the sport s involved were 10km run, cycling of 8 km and 500 metre swimming.

On September 25, 1974, the first triathlon event was held. Slowly the sport started gaining popularity and in 1989, the International Triathlon Union (ITU) was founded at France. It was awarded Olympic status in 1989 and in 2000, for the first time, triathlon was included in Olympics Games.

Participating Countries

Triathlon is quite popular around the world. People largely follow this sport for better physical endurance and stamina as well as a cardiovascular exercise. Around the world, this sport is played includes thousands of events. Presently players from around 50 countries all over the world participate in different triathlon events.

Some of the countries where people in large numbers participate in different triathlon events worldwide are Switzerland, Canada, New Zealand, Austria, Germany, Great Britain, Spain, USA, Portugal, and France.

2. Triathlon – Equipment

As triathlon is combination of three sports i.e. swimming, cycling and running, large number of equipment is required for all the individual sports starting from swimming to running. Some of the basic equipment are as follows:

Swimming Equipment

- **Wet suit** – The participant must have a set of wet suit required in swimming. It will keep the body of swimmer warm and increases the buoyancy as a result helping him/her in swimming. The silky surface of the suit helps in reducing the friction with water.
- **Goggles** – The goggles protect the eyes of the swimmer during swimming and improve his/her visibility which in turn helps in improving the execution time. Goggles should fit well such that it will not allow the water in the swimmer's eyes while he/she is trying to see in the water.



Wet Suit



Goggles



Swim Cap



Tri Suit

- **Swim cap** – The main purpose of swim cap is to reduce the resistance and drag while swimming which results in increasing the speed. It keeps the hair stay away from face and helps to keep the goggle straps in the correct position.
- **Tri suits** – This suit is convenient for entire race, i.e. it is suitable for all three sports. This will reduce the time and energy in changing from one suit to another. This suit is light-weighted and gets dry fast which will increase the comfort while riding bike and running.

Cycling Equipment

- **Bicycle** – It is one of the important equipment for cycling event. For this sport, a normal bicycle can be used but there also some specially designed bicycle for this sport. Bicycle should be well serviced, properly oiled, and chain, brakes and gears should be in proper working condition.

These bicycles have special aerodynamic wheels, aero- handle bars and other components. It has a steep seat tube, which helps the players spare their muscles that are used for running.

- **Bicycle Repair Kit** – This kit will be very helpful when there any sudden repairs are needed. This may reduce the time spent for any repairs made in the bike.



Bicycle



Bicycle Repair Kit



Helmet



Shoes

- **Helmet** – This equipment is mandatory for cycling. This will protect the riders from any head injury due to some unfortunate accidents or collision. Helmet should fit comfortably on the player's head for proper balance during the sport.
- **Cycling Shoes** – Some players attach shoes to the paddle which will help in maintaining stability and easy to ride. They will also protect the leg from injury. These are specially made shoes for triathlon which are easier to wear to reduce the transition time.

Running Equipment

- **Running Shoes** – Shoes should be comfortable and light-weighted. Generally these shoes are used with elastic shoelaces which will make the shoe to pull easy without wasting time to remove the shoelaces.
- **Socks** – As the socks are not used in swimming section of the sports, but it is mandatory for other two sports. Wearing socks is time consuming shoes without socks may lead to painful scratches on the foot.

3. Triathlon – Playing Environment

As this sport involves three sports, the race starts with swimming pool, gets continued in cycling track and ends up on running track. The length of the pool and track depends upon the age group participating the race and the competitiveness.

Swimming Pool

The pool may contain hot or cold water. It is divided into lanes and starts with **Zero**. The competitor must swim in his/her lane to reach the end of the pool. The length and depth of the pool vary from sport to sport and on the age group.

Cycling Track

In some competition, the cycle tracks are also divided into lanes and the individual must ride his/her bike in the lane. The track may or may not have slope. It may be situated at sidewalk level or road level.

Running Track

This is the last phase of the race. On successfully completing the running on the track, the competitor finishes the race. This track may or may not be divided into lanes. Running track can be one sided or two sided and may be on roadside or sidewalk level.



4. Triathlon – How to Play?

The rules of this sport are pretty simple and they change from competition to competition. There is no restriction in how to swim, cycle and run. There are two transitions in between the two sports i.e. one between swimming and cycling and second transition between cycling and running.

Race time is calculated in five sections:

- **Swim Time** – It is calculated from the start of swimming to beginning of transition.
- **T1 Time** – It is calculated from start of transition to end of transition.
- **Cycling Time** – It is calculated from the start of cycling to the beginning of second transition.
- **T2 time** – It is calculated from start of transition to end of transition.
- **Running Time** – It is calculated from start of run to the finish line.



Transition Change

Players change from one sport to another in a designated place which is called the **transition place**. The first transition place is between the swimming and cycling competition and the second transition place is between cycling and running. Players change their equipment for the next event in these transition places.

Starting the Competition

Usually the competition starts with swimming. Different methods are followed in order to organize the swimming competition. In case of small number of participants, all athletes enter into the pool simultaneously and competition starts whereas in case of large number of participants, the whole group is divided into smaller groups based on their age or predicted swimming time.



Usually in case of triathlon, there are no pools or markers during the swimming. Instead the players swim in open water stage which makes it really hard for the players to get a proper position during the competition. Players usually try to get advantage by drafting any other competitors.

Start with Swimming

In swimming, competitors use the swimming strokes in a less vigorous way as compared to normal swimming competitions, which enables less pressure on legs as they need more strength in legs for continuing in the race during cycling and running. So they mostly use **Dolphin kicking** techniques while swimming.

Players follow many altered and modified strokes in order to swim against the turbulent water which helps them in conserving energy for the rest events. During the end part of the swimming, the players go for body surfing, which enables them to use the speed of the wave for their own swimming speed.

Open Water Swimming

In case of open water stage, the players occasionally have to go for sighting, which includes lifting their heads during the swimming to see the landmark of the course. Players often make modified strokes during the swim, which helps them to lift their head above the water for a sight without even interrupting the swimming process.

Transition from Swimming to Cycling

Each group enters into water after every few seconds. Once the participant is out of water, he/she moves to the transition area and changes his/her wet suit to pull on a cycling suit. Here also players apply different tricks to change the suits in order to reduce the transition time. Then the players start racing against each other using their bicycle on a marked course.



Cycling

The cycling in triathlon differs largely from normal cycling competitions mostly because of **drafting**. Drafting is a technique, where the players follow the slipstream of the forward player, which helps in reducing 50% of the pedal effort needed and is very much helpful in conserving energy. Drafting is allowed in triathlon whereas it is not allowed in individual competitions.

Usually a group of players choose a leader for drafting who works as the forward player while other players work towards helping him/her stay off the wind. With time, one by one, all the players take the place of the leader while others stay in his/her slipstream.

The whole process of changing the leader with time and drafting together while riding is known as **paceline**.

In order to reduce their transition time between swimming and cycling, players also bind their shoes on the cycle pedal and instead of wearing it in the transition place, they start riding their bicycle as soon as the marking line for swimming is finished and then wear their shoes in the middle way. They also avoid using socks in order to save more time.

Transition from Cycling to Running

Once the players have finished the cycling, they move on to the racing track by racking their cycle and quickly wear the racing suit and start racing against each other on the racing track. Racing is the final event of triathlon and the players have to pass a finishing line in order to complete the race.



Running

After swimming and cycling, the players while facing running events are literally tired of muscle weakness. The transition between cycling and running has a profound effect on the players which leads to running at slower rate than they are capable of. To avoid that, players go for a special workout during their training phase, which is known as **bricks**.

Competitor must cross the transition line to start their respective races i.e. after swimming and crossing the transition point, he/she can start riding the bicycle only after crossing the transition line and same goes for running. He/she can start running only after crossing the second transition finish line or else this may lead to disqualification.

5. Triathlon – Rules

Triathlon consists of three sports and each sport has different rules which the players have to follow.

Rules on Swimming

The competitors can swim in any position as they wish and comfortable with. There is no restriction if they want to stand in between the race and relax. The important rule is that a competitor may wear a wet suit for swimming when the temperature is 78- 84 degree Fahrenheit.



Wetsuits are prohibited when the temperature is above 84 degree Fahrenheit. Players are strictly prohibited from using any kind of floating materials during the competition which might result in disqualification of the player. Players can't throw any garbage or equipment on the course during and after the event.

Rules on Cycling

For cycling the competitor must wear helmet during the cycling event or he/she may be disqualified. The player has to complete buckling up the chin strap of his/her helmet even before boarding on the bike. In this part of the sport, competitor must not draft or block others way while cycling and should allow them to pass them or else this may lead to disqualification.

Even during drafting, the player must maintain a minimum three bike lengths distance between the forward players. Players are not allowed to propel the bicycle other than pushing including use of hands to push the cycle. During the race, players are not allowed to race off the course and have to follow the traffic rules.



Players are not allowed to either carry or wear headphones, headsets or any kind of mp3 player during the race. Players are strictly prohibited from using foul, harsh or any kind of abusive language during the race either toward each other or towards any event officials.

Rules on Running

The competitor can run at his/her own pace and can even walk if he/she got tired. The race will be considered finish when the upper body of the runner i.e. torso touches the finish line and the time of the same will be noted. Runner must wear helmet and shoes.

Players are prohibited from littering on course. During the race, the players are required to wear their race number all the times. The number should be clearly visible and can't be either folded or altered with any other player during the race as it may result in disqualification.

Transition Rules

Once an event is finished, the players have to keep the equipment in the proper designated place of the transition area. After the cycling event is finished, the players must place their bikes in the assigned bikes corral. The wheel of the bike must be down at the assigned space. Players are not allowed to interfere in other person's equipment and belongings.

Penalties

For all the rule violations, specific penalties based on the rules and regulations are rewarded. Mostly the players are rewarded with time penalties and in some specific cases like use of helmet and race number, disqualification is awarded.



If the players are violating the rules for two times, respective time penalties are awarded. The second time violation usually results in a double time penalty than the first time violation. A third violation results in disqualification from the event.

6. Triathlon – Champions

The International Triathlon Union (ITU) works as the international governing body for triathlon worldwide. It was founded in 1989 in order to advocate the entry of triathlon in to Olympics. It also organizes worldwide triathlon events. It has also been structured in to five continental regions in order to organize different triathlon championships in those respective regions.

Some of the national as well as world triathlon championships are:

- Lisbon ETU Triathlon European Championships
- ITU World Triathlon Championship
- Olympic Triathlon
- Commonwealth Games
- European Championship

Let us now discuss briefly about the careers of some of champions who have made a mark in Triathlon.

Francisco Javier Gómez Noya

Francisco Javier Gómez Noya is from Galicia, Spain and is a professional triathlete. He has competed twice at the Olympic Games in the year 2008 and 2012 and won a silver in the 2012 Olympic Games.

He has won five golds, three silvers and one bronze at the ITU World Championships.

Francisco has also won three golds at the ITU World Cup and has also won the 2014 Ironman 70.3 World Championship in 2014.



Alistair Edward Brownlee

Alistair Edward Brownlee is considered as one of the best triathlete of present era, Alistair Edward Brownlee is from West Yorkshire, England. He has competed twice at the Olympic Games in the year 2008 and 2012 and won a gold in the 2012 Olympic Games.

He also won four golds and one bronze in Triathlon World Championships and three golds in the Triathlon Championships till now. He also took two golds in the Commonwealth Games in men's race as well as in mixed team relay.



Bevan John Docherty

Bevan John Docherty is from Taupo, New Zealand and is a professional triathlete. He has won one silver in the 2004 and one bronze in 2008 Olympic Games both in individual category.

He also has won one gold and one silver in the Triathlon World Championships in 2004 and 2008 respectively and has also won a silver in the 2006, Commonwealth Games. He also participated in Ironman 70.3 World Championship and won a bronze.



Luc Van Lierde

Luc Van Lierde is from Bruges, Belgium and is a retired professional triathlete. In his 20 years long career, he has won a silver in the 1996 Triathlon World Championships and has also won two golds and two silvers in the ITU Long Distance World Championships.

He also has won the Ironman World Championship twice in 1996 and 1999 respectively. In 2009 he retired from the sport and since then has been very much active as a triathlon coach.



Peter John Robertson

Peter John Robertson is from Melbourne, Australia and is a professional triathlete. He has won one gold each at the Triathlon World Championships in the year 2001, 2003 and 2005 in Elite Men's Race.

He also won a bronze at the 2006 Commonwealth Games. He has competed twice at the Olympic Games in the year 2000 and 2004 and finished 34th and 24th in the respective events.

He is also a winner of **Australian Institute of Sport Athlete of the Year** award with Robin Bell.



Vanessa de Sousa Fernandes

Vanessa de Sousa Fernandes is from Vila Nova de Gaia, Portugal and is a retired professional triathlete. She has competed twice at the Olympic Games in the year 2004 and 2008 and won a silver in the 2008 Olympic Games.

She also has won a total of 10 golds and 1 silver at the European Championships. She is the winner of the world cup 12 times consecutively. She was awarded with the **Best Female Athlete of the Year** award from CNID in 2006.



Emma Elizabeth Carney

Emma Elizabeth Carney is from Bourne End, England but later on she shifted to Australia with her family. She is a professional triathlete.

She has won the ITU Triathlon World Cup thrice in 2004, 2005 and 2006 consecutively. Along with this she also won two golds, one silver, and one bronze in ITU World Championships.

In 1999, she participated in ITU Duathlon World Championships and won a silver medal.



She also has won two golds, one silver and one bronze at the Triathlon World Championships. After suffering a cardiac arrest, she retired from triathlon in 2004.

Lisa Nordén

Lisa Nordén is from Skåne, Sweden and is a professional triathlete. She has competed twice at the Olympic Games in the year 2008 and 2012 and won silver in the 2012 Olympic Games.

She has won one gold, one silver and one bronze at the World Championship. She also has won two bronzes at the European Championships. She is also a winner of U23 World Championship in which she won a gold medal.



Jodie Lee Stimpson

Jodie Lee Stimpson is from West Midlands, England and is a professional triathlete. She won two golds at the Commonwealth Games in 2014 in individual as well as in mixed team discipline. She also won the Triathlon World Championships in 2011 in a team.

Besides these, she has also won 2009 British Triathlon Championship and 2010 British Triathlon Super Series Winner.

She also participated in 2013 ITU World Triathlon Series and was a runner-up.



Emma Moffatt

Emma Moffatt is from New South Wales, Australia and is a professional triathlete. She has competed twice at the Olympic Games in the year 2008 and 2012 and won a bronze at the 2008 Olympic Games.

She also has won the World Championships twice in 2009 and 2010 both in individual category.

She is a winner of bronze at the 2014 Commonwealth Games in mixed relay category. In 2007 and 2012, she received Triathlon Australia's Athlete of the Year award.

