

All You Need to Know About Fencing

Fencing is one of five sports which have been permanent fixtures at the Olympic Games since the first modern Games were held in 1896. Based on sword fighting, fencing demands speed, anticipation, reflexes and great mental strength.

While the activity has its roots in Europe, China and the United States have enjoyed success at recent Games while Ruben Limardo won the second Olympic gold medal in Venezuela's history at London 2012.

What is fencing?

Evidence of sword fights goes back as far as Ancient Egypt in 1190 BC with bouts and duels continuing until the 18th century. Fencing was originally a form of military training and started to evolve into a sport in the 14th or 15th century in both Germany and Italy. German fencing masters organised the first guilds, the most notable being the Marxbrueder of Frankfurt in 1478.

The sport's popularity increased in the 17th and 18th centuries due to the invention of a weapon with a flattened tip known as the foil, a set of rules governing the target area, and a wire-mesh mask. One of the trailblazers of fencing as a sport was Italian Domenico Angelo who taught aristocratic Britons the art of swordsmanship at his academy in Soho, London in the second half of the 18th century. Angelo's book 'L'Ecole des armes' ('The School of Fencing') laid down the fundamentals of posture and footwork which live on to this day.

The sport also grew in popularity in France, with Camille Prevost assembling the first basic conventions, although London hosted the first formal fencing competition at the inaugural Grand Military Tournament and Assault at Arms in 1880. The Amateur Gymnastic and Fencing Association (now British Gymnastics) drew up official regulations in 1896, the same year as the sport appeared at the first modern Olympic Games in Athens.

The equipment

As well as the swords, there is a fair amount of equipment a fencer requires. Most of this is with safety in mind, an area which required urgent attention after the death of Moscow 1980 foil gold medallist Vladimir Smirnov at the 1982 World Championships when Matthias Behr's broken blade pierced the Russian's brain through his mask. Most of this is with safety in mind, an area which required urgent attention after the death of Moscow 1980 foil gold medallist Vladimir Smirnov at the 1982 World Championships when Matthias Behr's broken blade pierced the Russian's brain through his mask.

Since that tragic accident, masks and the neck bibs surrounding them are subject to stringent checks. All masks must pass a 12kg "punch test" with FIE-approved versions, obligatory for World Championships and Olympic Games, made of stainless steel and non-FIE masks usually made of carbon steel mesh. Masks normally have a removable inside lining for easy washing. The

neck bibs are usually made of Kevlar or other strong synthetic fibre and made to resist a force of 1600 Newtons. Kevlar combined with tough cotton or nylon is used for most of the rest of the equipment although this is only required to withstand 800 Newtons.

This consists a jacket, an under-layer stretching halfway down the sword arm known as a plastron, a glove for the sword hand, breeches or short trousers which stop just before the knee, and socks. Also worn under the jacket are plastic chest protectors which are mandatory for women with some men choosing to use them. Footwear can take the form of generic sports shoes with thinner soles and rounded profiles as used in racket sports or handball. The final pieces of equipment enable hits to be registered automatically: the lamé, an electrically conductive garment worn over the scoring area for each fencing sword type, and the body cord which connects to the weapon.

The weapons

There are three fencing blades used in Olympic fencing – the foil, épée and sabre – each of which have different compositions, techniques and scoring target areas.

Foil

The foil has a maximum weight of 500 grams and is a thrusting weapon. Only the tip of the blade counts with the target area the torso which is covered by the lamé.

Épée

The épée is also a thrusting weapon but has a maximum weight of 775 grams. Again, only the tip of the blade counts but the target area is the entire body so there is no lamé.

Sabre

The sabre is a cutting and thrusting weapon with a maximum weight of 500 grams. The entire blade can score with the target area the upper half of the body, covered by the lamé, including the face mask and neck bib which must also be made of conducting material.

The scoring

With hits incredibly difficult to judge via the naked eye, electrical scoring apparatus was introduced in 1933 first to the épée with the foil following suit in 1956 and the sabre eventually in 1988. With hits incredibly difficult to judge via the naked eye, electrical scoring apparatus was introduced in 1933 first to the épée with the foil following suit in 1956 and the sabre eventually in 1988.

It works when the blade (only the tip for foil and sabre) makes contact with the target area, completing an electric circuit and triggering a red or a green light depending on which athlete lands. Quick footwork and balance is essential for a fencer in both attack and defence. All three disciplines take place on a piste which is 14m long and 1.5m–2m wide. Retreating to the end of the piste results in a point to the opponent.

The first to 15 points wins with the action taking place in three

three-minute periods broken up by one-minute intervals. The clock stops between each 'phrase' with the two fencers resetting to the 'en garde' position.

Foil fencing

The foil is perhaps the most familiar of the three disciplines although it was not part of the 1908 Games held in London. It has the smallest target area with just the torso counting, and points are awarded via the 'right of way' system. For a fencer to score a point, he or she must land with the point of the blade on the scoring area having – in the view of the referee – initiated an attack.

The forward lunge is the usual form of attack although that can be parried with the fencer on the back foot then launching a riposte. There is also the 'beat attack' when one fencer beats the blade of his/her opponent to gain the right of way and then attack. A hit with the point of the blade landing away from the target area with the right of way results in the end of the phrase with no score, even if the opponent lands on target afterwards. The lightness of the foil also allows for the possibility of the flick attack when the blade can be almost thrown and bent over a parry to score although depressing the point for long enough to register the hit makes this more difficult.

Épée fencing

Like the foil, the épée is another point weapon but it is significantly heavier making the flick attack impossible. The two main differences are that the whole body, including the hand, is a scoring area, with no 'right of way' in operation. This also means both players can score for simultaneous hits although a 'double touch' with the scores tied at 14–14 is null and void.

There is no such thing as an off-target hit so a phrase will continue until there is a score unless a tip of a blade hits the floor. Here, the beat attack is a quick one-two of hitting the opponent's blade followed by aiming for his/her arm with counter attacks to the hand or arm more common due to lack of right of way.

Sabre fencing

The sabre is the only one of the three fencing sword types where the body of the blade scores as well as the tip. It is lightweight enabling the use of the flick attack and, also like the foil, the 'right of way' system is in force. One major difference between the sabre and the foil is that off-target hits do not stop the action with the phrase continuing until a point is scored. So if the fencer with the right of way lands off-target, his/her opponent can then win the point by landing on-target. If both fencers land on-target, as with the foil, the referee awards the point to whomever has the right of way rather than who lands first.