

Training for High Jump

Basic Training for High Jump

Athletes must be:

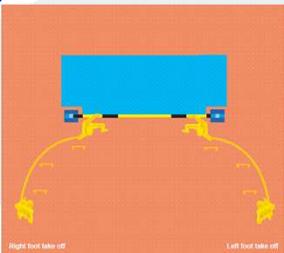
- Good technical runners with excellent jumping qualities.
- Powerful.
- Well coordinated and agile.
- Skilful, with good rhythm.

So, training sessions for developing athletes will include:

- A dynamic warm up with mobility work.
- Drills which specifically warm up the athlete and enhance high jumping skills.
- Technical training for the high jump.
- Running technique work to develop controlled sprinting speed for the run up.
- Strength development.
- Warm down.



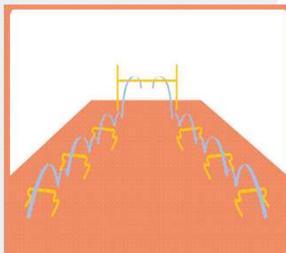
Skill Learning Setup



Curved run around hurdles to scissors
Curved run around hurdles to flop
As confidence increases the athletes start further away and the bar can be raised.



Use scissors technique to jump over the hurdles from a side on position ~30° – dada rhythm emphasis.



Scissors echelon to scissors jump
Scissors echelon to flop
Could also be performed with a curved set up

High Jump

High Jump Basics

Athletes taking up this event will need to have great ballistic strength to achieve the necessary elevation. It can help to be long legged. The event requires the athlete to have good rhythm and coordination coupled with agility and skill. High jump techniques have progressed from scissors (still a technique for developing jumpers) through eastern cut-off and western roll to straddle and finally the current dominant technique of the event. The modern Fosbury leading into a curve towards the bar clearance and safe landing on the foam bed.

Basic Rules of High Jump

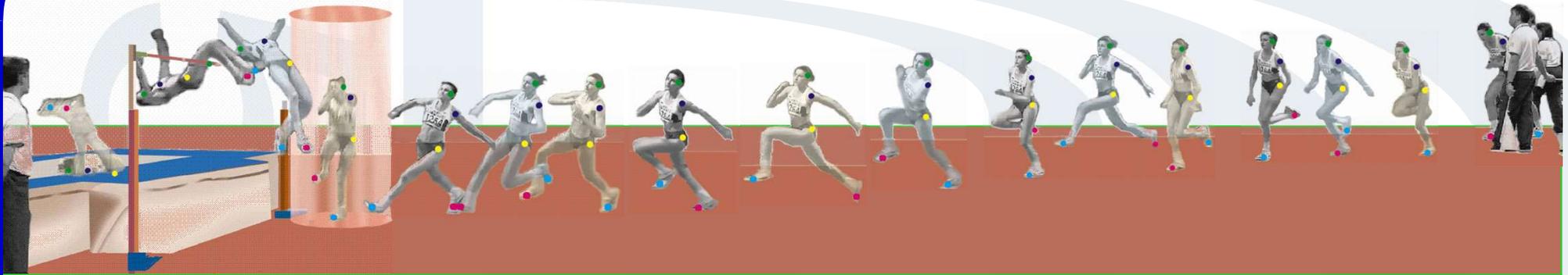
- Athletes must take off from one foot.
- After three consecutive failures, an athlete is eliminated.
- A failure is when, in the course of a jump the bar is dislodged so that it falls from the pegs **OR** when the athlete contacts the ground or the mat beyond the plane of the uprights
- Athletes may pass the first round of any height without penalty
- In the event of a tie, the number of failures at the winning height and then the total number of failures is used to decide the winner. If there is still a tie, a jump-off is used.



Equipment for Shot Put

- Uprights should be at least 10cm higher than the level of the bar with ledges to rest the bar on.
- The bar should be uniformly thick and circular with square end – it is normally fiberglass.
- The landing mat should be at least 5m wide by 3m deep and of foam construction.
- Athletes should wear spiked shoes; heel spikes are essential for advanced level performance.

High Jump Technique



Run Up

- A standing start should be used as this guarantees an accurate starting position.
- The run-up should be between 5 and 11 strides depending on the size, speed, strength, skill and experience of the athlete.
- Acceleration should occur during the first few strides.
- The final curve before take-off should be either 3 or 5 strides.

Acceleration phase

- The first few (2 to 6) strides are run straight.
- The athlete should aim to accelerate smoothly, using relaxed, balanced strides.
- There should be a smooth transition from straight to curve.

Curved approach

- In the last 3 to 5 strides the athlete is increasingly leaning with the whole body towards the centre of the curve and away from the bar.
- The rhythm in the last 3 strides is daa da-da.

Preparation for take off

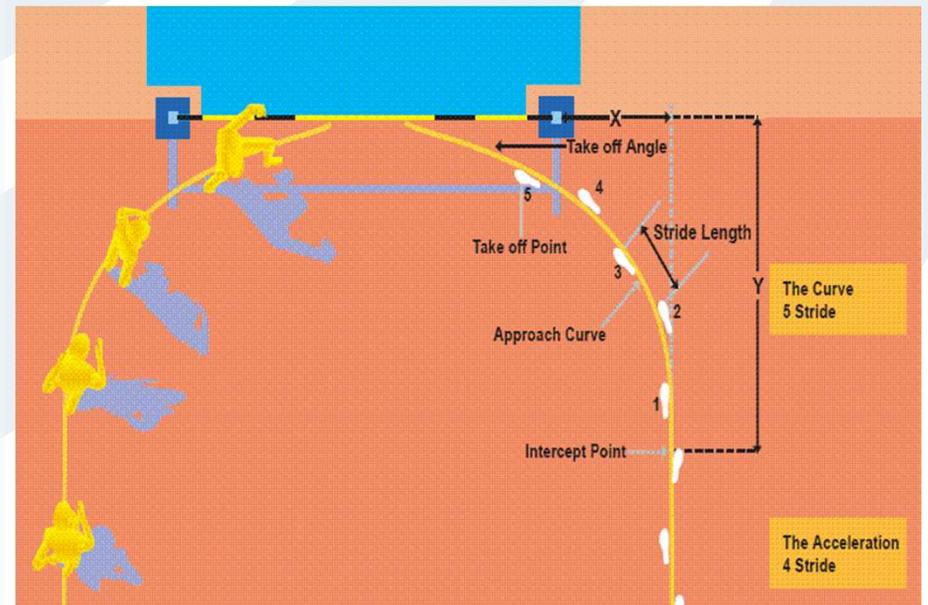
- Factors to look for on take off:
 - The feet are paced in front of the body.
 - The hips are lowered and then rise again as the take off begins.
 - The arms are gathered in preparation for take off.

Take off

- The hips are forward with the inside shoulder high.
- The take off foot is slightly ahead of the athlete's body.
- The take off foot is planted heel first to provide stability and maximize impulse.
- The take off foot is aligned with the angle of the last stride (20° - 30° to the line of the bar).
- At the moment of take-off, there is a straight line from toe through ankle, knee, hip and shoulder.
- The free knee is driven vigorously upwards.
- The inside shoulder is kept high throughout.

Flight

- The inside knee continues to drive upwards and is kept high.
- The hips are thrust forwards and upwards (thus arching the back).
- The take-off knee is brought level with free knee.
- The arms are kept well away from the bar.
- The head is pulled back during bar clearance with eyes looking at the mat (more advanced).
- Once hips clear the bar, the legs are raised to 'pike' the body.
- The athlete should land on the back or shoulders.



Path of acceleration

Throughout take off foot contact (heel to toe) the body should be as strong and stable as possible with the hips moving up at all times. If the hips stop, the athlete will drive towards the bar with their shoulders. The arm action can be double or single but must work in time with the free knee. The body should stay in 'the cylinder' of take off for as long as possible before moving to the bar. With a bend at the hips, the resulting lean towards the bar at take off produces a smaller path of acceleration and the risk of breaking early out of the cylinder.

