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LECTURE-3: B.A. I, II & III (Course code: 785; 885; 985)

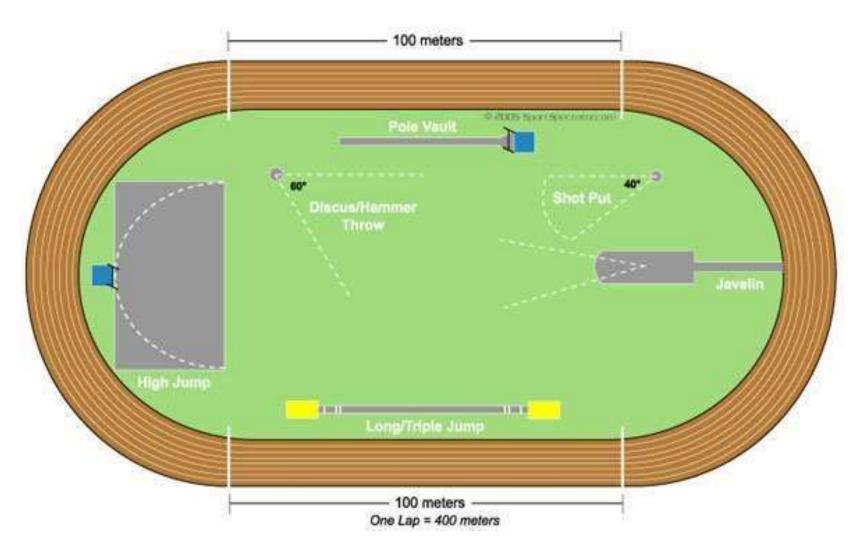
History

- Athletics, also known as track and field or track and field athletics, is a collection of sports events that involve running, throwing and jumping.
- The name is derived from the Greek word "Athlon" meaning "contest".
 - Athletics was the original event at the first Olympics in 776 BC where the only event held was the stadium-length foot race or "stade".



- The <u>International Association of Athletics</u>
 <u>Federations</u> is the worldwide governing body for track and field events, and athletics as a whole.
- Associations at the national, state and local level generally follow IAFF rules, though modifications can exist.
- The Philippine Amateur Track and Field
 Association (PATAFA) is the national
 governing body for athletics sports such as
 track and field, road running, cross country
 running, and race walking in the Philippines.

Track and Field Dimensions



Kind of Starts



Types of Crouched Starts

- There are three main types of crouched starts.
- BULLET START
 - The first type of sprint start is called a bullet or bunch start.
- The toes of the back foot are about level with the heel of the front foot.
- Both of the feet are placed well behind the starting line. The toe to toe distance is said to be 25 to 30 centimeters.
- In this start, your feet are closest together, compared to the other starts. Because your feet are close together, your legs and body are "bunched" together. That is why it is called the bunched, or bullet start.

MEDIUM START

- The second type of sprint start is called medium start. In this the knee of the back leg is opposite the front foot.
- The toe to toe distance said to be 40 to 55 centimeters. In this start, the feet are closer together than the elongated start but farther apart than the bullet start.
- Its in the middle. That's why it is called the medium start, because it is in between the other two.

ELONGATED START

- The third type of sprint start is called the elongated start.
- The sprinter has their knee of the back leg level, or slightly behind the front foot's heel. The toe to toe distance is 60 to 70 centimeters.
- In this start, your feet are spread out farther than the other two. Your back leg is stretched or elongated, behind you.

Running Event



Short Distance or Sprints



A sprint is a short running race.

In a track and field competition there are generally three different sprint distances:

- 100m, 200m, and 400m. Indoor is 60 m.
- The original Olympic event, the stadium race, was a sprint of around 180m.

Middle Distance



- The middle distance races are the 800m, the 1500m, and the 1 mile long runs.
- These races require different skills and tactics to win that the sprints. They rely more on endurance and pacing than just pure speed.
- The runners don't stay in a single lane for the entire race

Long Distance

- There are three main long distance races:
- The 3000m, the 5000m, and the 10,000m races.

These races are similar to the middle distance races, but the emphasis is even more on correct pacing and endurance.







Relay Event

- There are two very common relay events: the 4×100 meters relay and the 4×400 meters relay.
- Relay races are the only track and field event in which a team of runners directly compete against other teams.
- Typically, a team is made up of four runners of the same sex.



- Each runner completes their specified distance (referred to as a leg) before handing over a baton to a team mate.
- There is usually a designated area where athletes must exchange the baton.

Teams may be disqualified if they fail to complete the change within the area, or if the baton is dropped during the race.

A team may also be disqualified if its runners are deemed to have willfully impeded other competitors.

- In the shorter relay, each runner covers 100 meters; in the longer, 400 meters.
- Relays in which members run different distances are called **medley relays**.



HURDLES

- Hurdling is the act of running and jumping over an obstacle at speed.
- In the sport of athletics, hurdling forms the basis of a number track and field events which are a highly specialized form of obstacle racing.

 In these events, a series of barriers known as hurdles are set at precisely measured heights and distances which each athlete must pass by running over.

Set-up

- The placement of the hurdles depends on the length of the race and the sex of the athlete.
- Ten hurdles are used in the 100-meter, 110-meter and 400-meter hurdle races.
- Men run the 110 races with 9.14 meters between hurdles and women run the 100 races with 8.5 meters between hurdles, according to IAAF rules.
- Both men and women run the 400 races with 35 meters between hurdles.

Hurdling Event

- 60 meter hurdles. The indoor hurdles event includes just five, evenly spaced hurdles.
- 100/110 meter hurdles. The outdoor sprint hurdle events offer one of the last bastions of gender difference in senior track and field, as the women's sprint hurdles event is 100 meters long while the men run 110 meters. Both events feature 10 evenly-spaced hurdles.
- 400-meter hurdles: Both genders run a full lap in the low hurdles event, which also includes 10 evenly-spaced barriers.

Steeplechase:

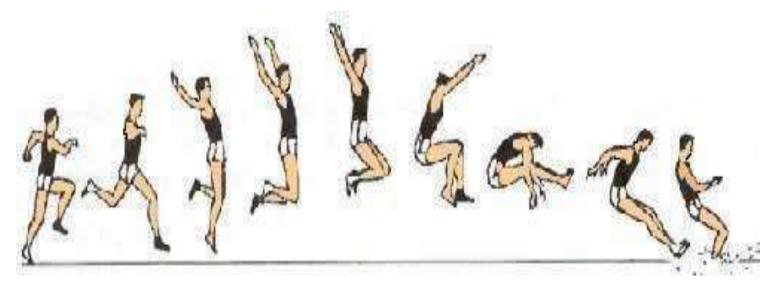
- Not a pure hurdles event, the steeplechase combines distance running and a different form of hurdling.
- The 3000-meter race features no barriers on the first lap. Each of seven subsequent laps includes five hurdle jumps, one of which is followed immediately by a water pit that slopes upwards.
- The better jumpers are rewarded by leaping into shallower water. The race begins on a curved starting line. Runners do not remain in lanes.





Whole Sequence

- Approach
- Takeoff
- Flight
- Landing



High Jump

- In the high jump event, the athlete gets a running start and must jump over a bar without knocking it over.
- They land on a big soft cushion.
- Like many track and field events, there is a key element to doing well in this sport, which in this case is being able to jump high, but technique is very important as well.
- Timing and leaving your feet at the right point as well as how you bend your body as you go over the bar are all important.

Long Jump

- Like many field events, the long jump involves more skill and technique than just being able to jump.
- First the athlete must have good speed as they sprint down the runway to prepare for the jump;
- next they must have very good footwork at the end of their run so they can launch as close to the line as possible without going over the line and faulting;
- third they must make a good jump; and lastly they must have proper form through the air and into the landing.
- All of these techniques and skills must be executed to perfection to pull of a good long jump.

Pole Vault

- While all of the field events take require technique to excel, the pole vault may be the toughest to master.
- In this track and field event, the athlete runs down the track holding a pole at one end.
- At the end of the run the plant the far in of the pole into a metal box in ground and then propel themselves up and over a high bar using both a jump and the spring of the pole to gain height.
- They must get over the bar without knocking it off.
 They then land on a large soft mattress for safety.

Triple Jump

- The triple jump is similar to the long jump, but there are three combined jumps that go into the total length.
- These are called the hop, the step, and the jump.
- The athlete will first run down the track gaining speed; at the start of the jump or take off point they will jump from one foot and land on that same foot (hop); they then jump again, this time landing on the opposite foot (step); next they jump as far as they can and land on both feet (jump).



Shot Put

- The shot put involves 'putting' a heavy metal ball as far as possible.
- The shot put facility includes a throwing circle, a stop-board and a landing sector.
- Competitors take their throw from inside a circle 2.135m in diameter, with a toe board approximately 10cm high at the front of the circle.
- The distance thrown is measured from the inside of the circumference of the circle to where the shot lands at its nearest disturbance of the soil.

Discuss Throw

- Discus throw is a throwing event where athletes throw a 2kg platelike implement from a 2.5m circle.
- The discus is launched after the thrower, starting at the back of the circle, has completed one-and-a-half turns.
- The facility for discus throw includes a throwing circle, protective cage and landing sector.

Hammer Throw

- The hammer throw is a throwing event where the object thrown is a heavy steel ball attached with a long wire to a handle.
- The facility for the hammer throw includes a throwing circle, protective cage and landing sector.
- It is usually combined with the facility for the discus throw.

Javelin Throw

- The javelin throw is a throwing event where the object to be thrown is a spear-like object made of metal, fibreglass and, in some cases, carbon fibre.
- The facility for the javelin throw includes a runway, a throwing arc and a landing sector.
- The minimum length of the runway is 30m and the maximum 36.5m. It is marked by two parallel white lines 5cm wide and 4m apart.

THANK YOU!!

Courtesy: Banugan, Casey Ticangen, Michelle Galbis, Ryan

SOURCE:

physicstt.tripod.com/id3.htm http://www.ducksters.com/sports/trackandfieldjumping.php Wikipedia.com