

## A Simplified Explanation of American Football

what each sport is called everywhere else in the world	football	American football
what each sport is called in the United States	soccer	football

### similarities:

- soccer (is *most popular sport* in world, *World Cup*), football (is *most popular sport* in U.S. for spectators, *Super Bowl*).
- one team *tries to move the ball* in one direction, but their opponents *try to move the ball* in the other direction.
- levels of age and skill: as with soccer, football is played by children and in high school, college, professional (NFL, CFL, Arena,...).

### differences

- in soccer, players kick a round ball with their feet, in football they carry or throw an oval-shaped ball with their hands.
- in soccer the action is (almost) continuous, but in football it's stop-and-go with pauses between each "play".
- player substitutions are limited in soccer, are unlimited in football with "specialists" who play either offense or defense.

**Football Field** is 100 yards long plus two *end zones* (10 yards each) and 53 yards wide. (100 yards = 91.4 meters)

**Basic Strategy:** **offense** (team with ball) can score points but opposing **defense** tries to prevent this; offense tries to move ball in one direction, defense tries to stop them; offense & defense each have 11 players, and deciding "how to use them" is analogous to military strategy. (fascinating details in person, later in talk)

**A Play begins** when offensive *center* "snaps" the ball by giving it to a teammate, and this play ends when a player holding the ball is tackled and *his body touches the ground*, or *ball touches ground after forward pass*, or *ball goes out of bounds* over a field-sideline.

**Basic Rhythm:** offensive team has 4 plays to move ball 10 yards or more; if they fail, other team gets ball and they become the offense; if a team fails to move 10 yards in 3 plays (on 1st down, 2nd down, 3rd down), on 4th down they have 3 options; they can *try to get a [new] first down* by finishing 10-yard move (if success they keep ball, if failure other team gets ball at point of failure), or *punt the ball* (give it away, kick it far downfield), or *try a 3-point field goal* (if placekicker kicks ball through goal posts in end zone).

**Line of Scrimmage** is defined by front (nose) of ball, extends sideways to separate offense (on one side) and defense (other side).

**Moving the Ball with a Run or Pass:** an offensive player can run with the ball, or throw it *backward* to another player who runs with it; or, in a *forward pass* a player (usually the quarterback) throws ball in the forward direction to a teammate and thus moves it *quickly* down field. (run after catch!) (forward pass thrown from behind line of scrimmage; only one forward pass allowed per play)

**Turnovers:** the ball is given to the defense after an unsuccessful 4th down play by the offense; or defense can get the ball before this in a *turnover* (a *takeaway*) if they recover a fumble (when ball is dropped by an offensive player, or is pulled away or is knocked away by a defensive player) or intercept a forward pass (by catching a passed ball that was intended for offensive player).

**Placement of Players:** defensive players can begin a play anywhere on their own side of the line of scrimmage; offense has rules for where its players can begin — 7 must be on (near) line of scrimmage (one common placement strategy is "tight end, *tackle*, *guard*, *center*, *guard*, *tackle*, wide receiver" where *italicized* players are *linemen*) and 4 are behind it (often quarterback, tailback & fullback, flanker [receiver, wide receiver, wideout]); a forward pass (usually thrown by quarterback) can go to any of the other 5 non-lineman, and any non-lineman can run with the ball; some pre-snap motion not OK. A common defensive strategy is 4 linemen, 3 linebackers, and 4 defensive backs (2 cornerbacks and 2 safeties). But many other placement-strategies (by offense or defense) are possible.

**Strategies:** analogous to military strategy, major decisions (by offense & defense) are initial placement of players and what they do after a play begins; some actions are planned by coaches (or quarterback, or defensive leader) but some are improvised by players during a play; there are many options for an offense & defense, and effective strategy requires clever thinking and careful planning. coaching staffs (Green Bay Packers have 18 coaches!) watch films of next opponent, computer-split into categories: what things (and what % of time) does the opponent's offense do on 1st down? 2nd? 3rd? down-and-distance: 3rd & 1? 3rd & 4? 3rd & 8? 4th and 1? also — behind or ahead in score? time left in game? / similar categories for what opponent's defense does in these situations. /

**Surprise Principle:** defense tries to be prepared for what they think - in their *educated guess* - the offense might do (so they can stop it) so - also making *educated guesses* - the offense tries to do things the defense won't be prepared for and offense is skilled at doing. For both offense & defense, the goal is optimal use of their players; but another important factor is having good players.

**Required Characteristics for Players:** physical skills (speed, strength, endurance, coordination,...) plus mental skills (memory, quick evaluation-and-decision,...); ideal combination varies with position: big/strong (linemen, O > D) to fast (receiver, cornerback) and in-between with medium-strong/medium-fast (linebackers), slightly-strong/fairly-fast (fullback, tight end), fast (tailback, safety); but... tailbacks can be fast and/or strong (to escape tackling); receivers (know "route") usually taller than cornerbacks (must adjust).

**How to get Players:** college coaches recruit (get players by persuasion, re: education, winning, location, future,...), professional teams draft (worst teams get first choice of players graduating from college) or recruit free agents (veteran players, re: money,...).

**Scoring:** 6 points for touchdown (carry ball into opponent's end zone) plus opportunity for 1 or 2 extra points (1 for kicking ball through goal posts, 2 if run or pass it over goal line in one play); 3 points for field goal (kick ball through goal posts); after these the scoring team "kicks off" so other team becomes the offense. 2 points for safety (if you tackle offensive player in his own end zone) and the team scoring the 2 points also gets the ball kicked to them so they become the offense.

**Penalties:** offsides (defense over line of scrimmage), placement (offense, illegal position or "motion"), un-necessary roughness (especially if action might cause injury), pass interference (usually by defense, but also offense), and (all by offense) delay of game, ineligible receiver; and many others.

**Time of Game:** 60 minutes in 4 quarters; clock stops for timeout, halftime, instant replay, or incomplete pass; total > 3 hours.

**Social Aspects:** UW fans wear red, tribal pride, pre-game tailgates (party: bratwurst, beer,...), tv bar, watching collision sport.