

Tennis: Form & Technique Knowledge Base

What the Game Demands (Short Description)

Tennis blends explosive movement with precise, repeatable swing mechanics. Control comes from spin, pace from racket-head speed, and time from depth and angles.

Universal Foundations

- Athletic base: feet shoulder-width, knees soft, hips back; weight on balls of feet.
- Unit turn: coil shoulders/hips as you read the ball's side.
- Contact in front: slightly ahead of lead hip; earlier for down-the-line.
- Racket-head speed: accelerate through contact; don't brake at the ball.
- Use the ground: load outside leg and transfer through; forefoot → instep → big toe.
- Head still, eyes quiet: stabilize vision at contact; exhale on strike.
- Finish with purpose: higher for topspin, across for drive, open for slice.

Grips • Footwork • Core Strokes (Condensed)

- Grips: FH semi-western/eastern; BH two-handed or one-handed eastern; serve/volleys continental.
- Footwork: split step on opponent contact; explosive first step; rapid adjustment steps; recover on shot bisector.
- Forehand: low-to-high path, elbow relaxed, windshield-wiper finish for heavy topspin.
- Backhand: 2HBH—top hand drives; 1HBH—bigger shoulder turn, contact further in front.
- Serve: toss slightly into court; trophy position; leg drive; pronation through contact.
- Return: compact takeback; block/punch; deep middle targets.
- Volleys: continental grip; compact punch; step through with lead foot.
- Slice/Drop/Lob: open face and carve for slice; soft hands for drop; brush up high for topspin lob.

Movement Patterns & Heuristics

- Lateral shuffles for micro-adjustments; crossover to cover distance; drop step for lobs.
- Crosscourt is safer (lower net middle + longer diagonal); aim big targets under pressure.
- Need safety → topspin + higher finish; need penetration → drive flatter but keep some lift.

Shot Angles & Net-Clearance — Sentence Reference

- Flat first serve down the T: shallow launch clearing the net by ~20–40 cm with high pace; prioritize precision on the center line.
- Wide slice serve (deuce side): add sidespin so the ball curves toward the sideline; target ~30–50 cm net clearance to keep the trajectory skidding away.
- Second-serve kick: brush up for topspin; aim ~60–100 cm over the net so the bounce rises above shoulder height to shrink the returner's strike zone.
- Neutral rally ball from center baseline: use topspin with ~60–90 cm net clearance and deep landing (three-quarter court) to push the opponent back.
- Aggressive drive from inside baseline: lower clearance to ~30–60 cm with more pace, accepting a smaller margin for a time-stealing ball.
- Crosscourt forehand angle: clear net ~70–110 cm with topspin so the ball drops into the shorter diagonal and pulls the opponent wide.
- Down-the-line backhand change-up: modest clearance ~40–70 cm—effective net is higher near posts; prioritize depth and line control.
- Approach shot: drive deep with ~50–80 cm clearance into corners, then close to volley the first reply into the open court.
- First volley from service line: compact punch with ~30–50 cm net clearance to force a defensive pass; target big (middle/deep corners).
- Passing shot crosscourt: topspin dip with ~60–90 cm clearance so it falls inside while staying out of volley range.
- Topspin lob over net player: clear the net by 2–3 m with heavy brush so it drops deep; topspin brings it down fast and bounces high.
- Soft drop shot from behind baseline: clear the net only ~10–30 cm with backspin so it dies short and double-bounces if opponent is deep.
- Block return vs 200+ km/h serve: minimal backswing; central target with ~40–70 cm clearance to neutralize and start the rally.
- Chip/blocked short-angle return: carve sidespin/backspin for a low, short crosscourt that draws the server forward.