

Sequencing in the Golf Swing

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When performed by experts, the golf swing looks so simple and efficient. Yet when the average golfer attempts to hit a golf shot, the distance the ball travels belies the effort that they put into the shot! One of the key differences between the expert player and the average golfer is the sequencing and “timing” of their body movements. Advanced golf technologies, such as Golf BioDynamics, allow golfers and their instructors to evaluate the timing and efficiency of their golf swing. Based on sound golf engineering principles, a single graph or chart can quickly summarize the difference between a well-timed and poorly-timed golf shot.

In simple terms, the downswing movement of the body involves the sequential movement of the hips, upper torso, arms and finally club. Sensors attached to these body segments give their position, orientation and speed of movement throughout the swing. The “golf tech” savvy coach uses these data to garner a profile of when each segment speeds up, reaches its maximum speed and then slows down (the slowing down is important to create a whip-like action). The key to an efficient golf swing is to have the hips reach their peak speed before the upper body, which in turn, must reach its maximum velocity before the arms and hands. The club should attain its peak speed at impact. This sequelae of events known in golf engineering circles as the *kinematic sequence* is key to developing an efficient golf swing.

Dr. Robert Neal is the Founder of Golf BioDynamics, a company specialising in 3D Golf Swing Analysis and BioFeedback Training for Golfers. www.golfbiodynamics.com

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