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Physics of a Lacrosse Shot JORGE SALAZAR, KIMBERLY FARAH, Lasell College, DIPTI SHARMA, WIT — This experiment focused on the application of Newton's second law for determining the force placed on a lacrosse ball as a function of player weight. If a lacrosse player shoots a ball using a stick into a goal, the force can be calculated. For this experiment we tested a lacrosse ball and the independent variable in this experiment was the weight of a lacrosse ball and the player, and the dependent variable is the measured force. The controlled variables were the length of the stick.¹ Kinematic data was collected using a motion detector and the graphical analysis software logger pro. Then, force was calculated following Newton's second law for each shot. Also power and work produced were calculated.

¹D. Sharma and K. Farah, "Introducing the 'RPPTM' Model of Teaching Physics to Health Science Majors," Bulletin of the American Physical Society, s2014, 59 (4) B1.00005)

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