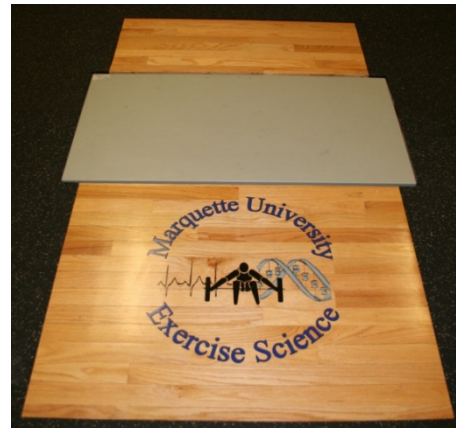


# Strength & Conditioning Laboratory

Cramer Hall 010



The Strength & Conditioning Laboratory opened in the fall of 2010. This 3,100 square foot laboratory is used for teaching, research (acute and chronic training & measurement), and patient rehabilitation for the Marquette University Sports Rehabilitation Clinic (MUSRC). Students can take coursework learning foundational principles of strength and conditioning and other advanced courses in related focused topics. Students also learn rehabilitation techniques by serving as aids to the physical therapists in the MUSRC. The lab houses CTRH graduate student offices.

The laboratory is equipped to offer various research opportunities. Many cross-sectional and longitudinal training studies have been completed examining the efficacy of novel strength and power training techniques, plyometric training, muscle fatigue and its role in ACL injury, muscle fatigue in an elderly population, in addition to many more. The research opportunities are merely endless in this fully equipped laboratory allowing individual and group training and measurement including:

- 600cm x 1200cm AMTI force platform flush mounted in an Olympic lifting platform
- 8 channel telemetered Delsys EMG system
- 4 camera Vicon Bonita motion analysis system
- Brower Speed Trap II wireless timing system
- Four 36" flat screen monitors
- 8 speakers with 2 VGA/Audio input locations
- FreeMotion dual cable cross machine
- Cybex Eagle Leg Press
- Concept II rowing ergometer
- Dumbbell set (1-100 lb)
- Kettle Bell set (5-70 lb)
- Vertec vertical jump system
- Crossfit Dynamax Ball set
- Battle Ropes, weighted vests, and other tactical training gear
- Olympic lifting platform
- Magnum Fitness Smith Machine
- Various Magnum Fitness resistance training equipment
- Plyometric training equipment
- Balance training equipment
- Speed training equipment
- Agility training equipment
- Researcher Lab space with 4 computers; various software packages
- Permanent space for 8 CompuTrainers for cycling (dual functioning ergometer and power meter) with software to replicate outdoor training --Includes projector and software to host indoor classes.