

# Lecture 2

Thursday, July 8, 2021 08:44

## Foundation, Principles, and Goals of Ex Rx

- For self-preservation (when training an individual): keep records of individual's health condition(s)
- Every person EVER has had a body
  - But we all have different parts
- Physiology \*started\* because people started dying early and everyone was like "...whatttttt???"
- Body is able to heal itself rather well
- Jensen could've won olympic gold -- human performance has increased drastically in today's world
- "advice" administered by popular sources (the Rock, Govenator) people will take this advice and inject it into their own workouts and exercises
- What are your [clients'] goals?
- 4 categories of goals:
  - 1) Physical appearance
  - 2) Athleticism/performance
  - 3) Health/longevity
  - 4) Injury therapy
    - Precise understanding of what your/client's goals are, the better a structure for an exercise prescription you will get
- Organs/organ systems inter-lap and work together in some shape or form
- Homeostasis -- stress physiology --> already took that class
  - Body is lazy - wants food, self-preservation, and sex
- Individuation
- Wolff's Law -- 1892, Julius Wolff published *The Law of Bone Remodeling* which argued that bones rebuild themselves in predictable patterns based on the **mechanical stresses** to which they are subjected
- Davis' Law -- 1867, Henry Gassett Davics published *Conservative Surgery* which argued ligaments (or any soft tissue) remodels

according to the manner in which they are stressed (talking specifically about **elongating forces**)

- Cycles:
  - 1) Macrocycle -- annual plan; incorporates in-season maintenance and off-season progress toward goals. Phases: preparation, competition, and transition
  - 2) Mesocycle -- about 2-6 weeks, during which the program emphasizes a particular goal
  - 3) Microcycle -- a week's training program (heavy days, light days, different body parts, etc.)
  - 4) Linear periodization -- similar training intensity and volume (to achieve a core goal) used during microcycle and generally throughout a mesocycle
  - 5) Nonlinear (or "undulating") periodization -- focuses more than 1 goal during micro and mesocycles; characteristics of FITT change more frequently to vary muscle stimuli