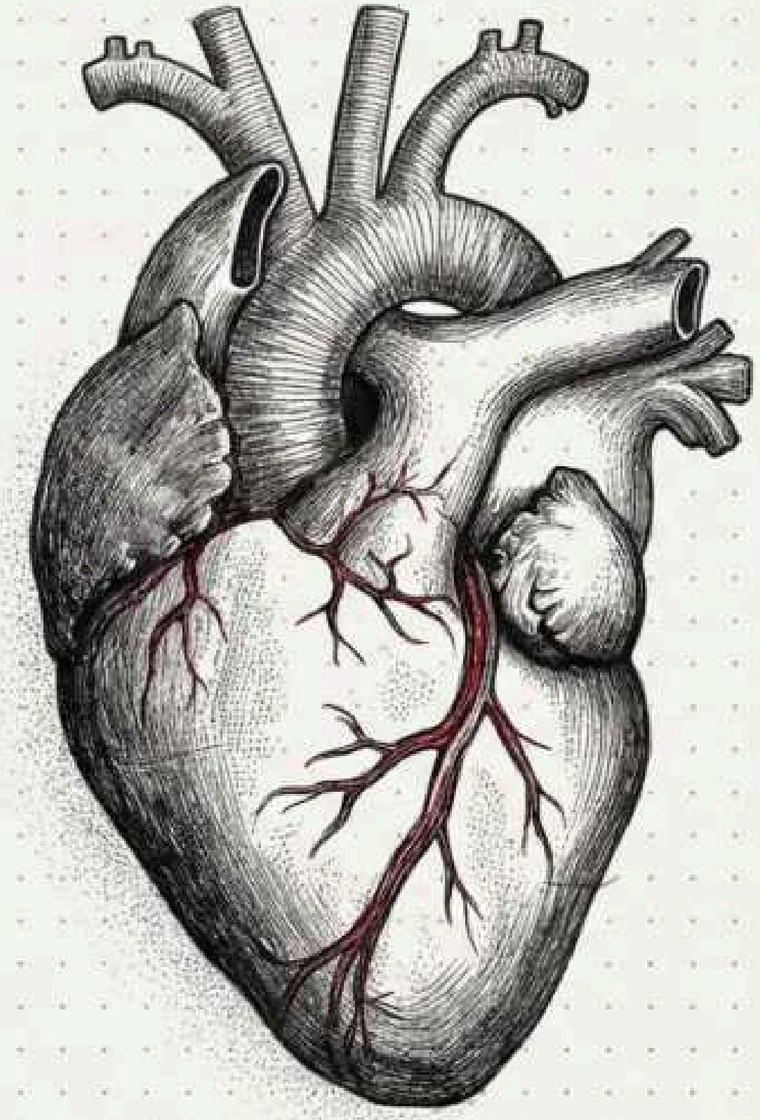


MED 501 B: Human Functional Anatomy

Lecture 0 — Course Overview

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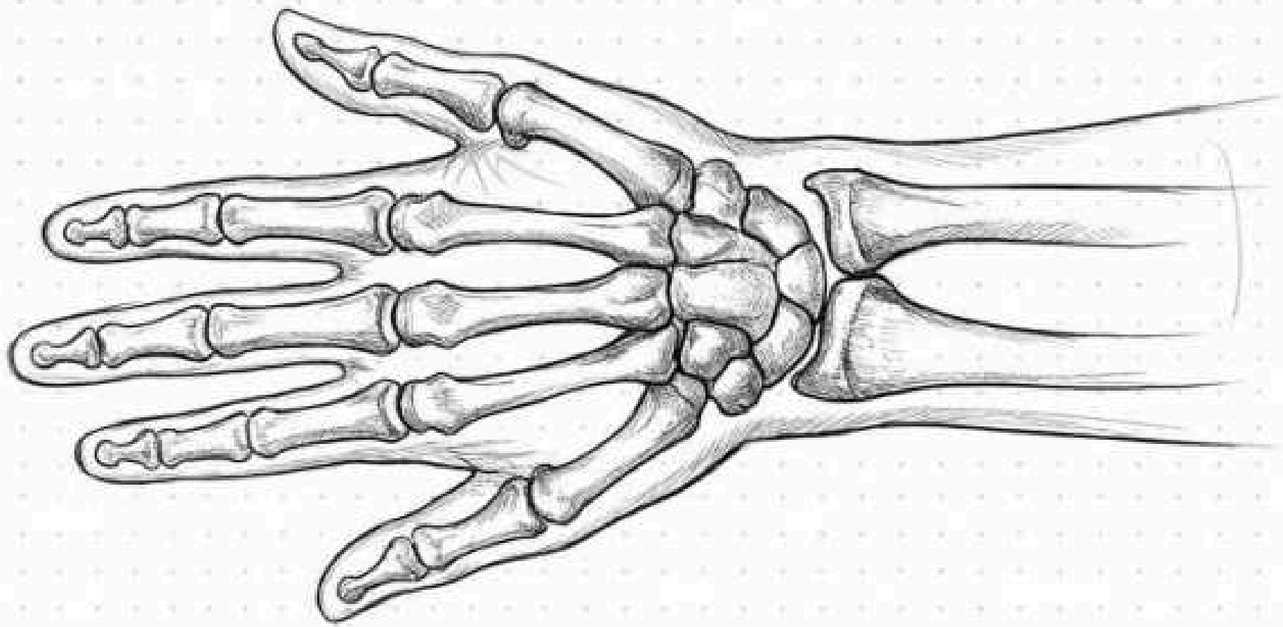
¶ 0.1

Structure + Purpose = Comprehension

Welcome to Medicine 501 B

The first subject course in the Academy's Medical School. Modelled on the Harvard and MIT Health Sciences and Technology (HST) subject of the same name.

The Core Theme: The structure of the body makes immediate sense once you see what each structure is for.



Open Lines of Communication

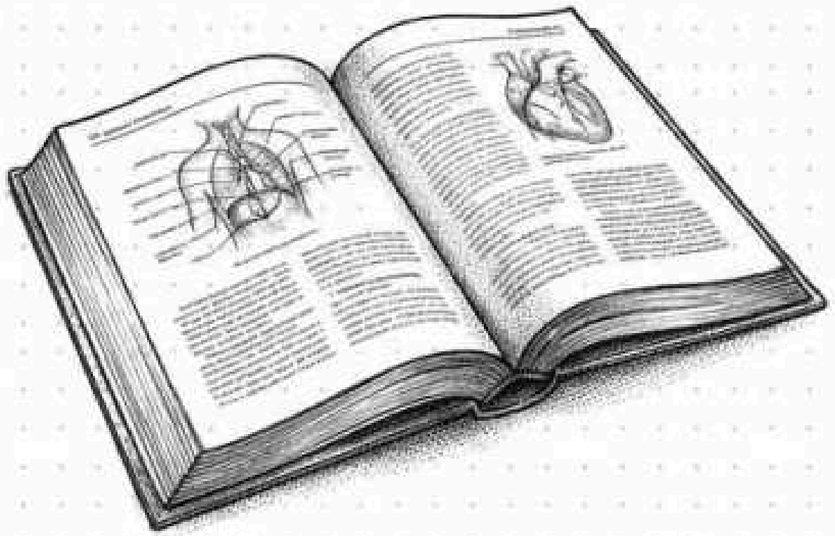
Questions or feedback about this course are always welcome.

Email: garyanderson@mail.grokbot.com
X (Twitter): @garyanderson

¶ 0.3

The Boundary of the Course

IN SCOPE



Teaches medical knowledge.

OUT OF SCOPE



Does NOT provide medical training, clinical skills, licenses, or medical advice.

Reference: See ‘Medicine 500 B: How to Use the Medical School Courses’ for full boundary details.

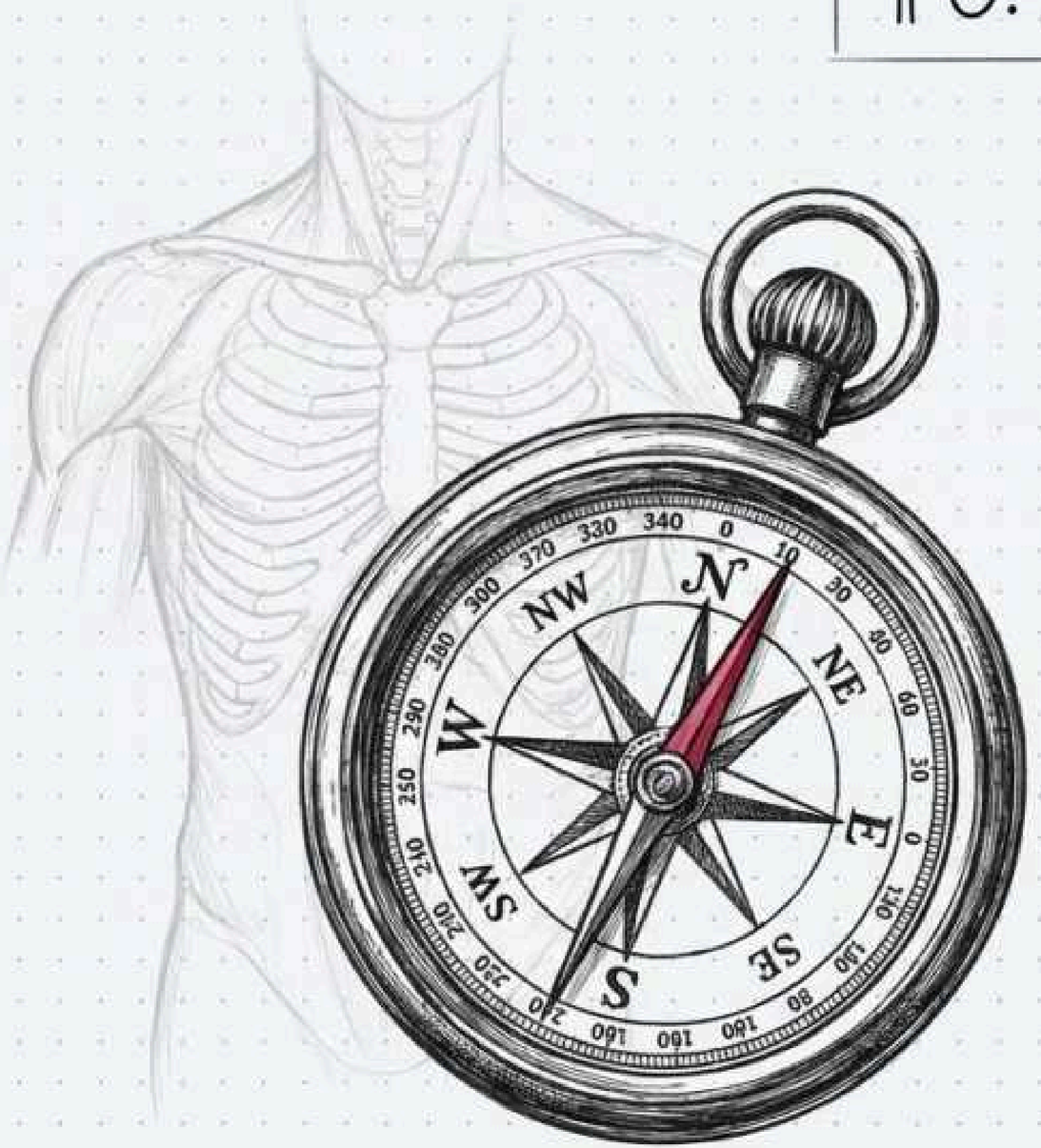
¶ 0.4

Providing the Map

Anatomy is the oldest medical science, traditionally learned by dissection. While a brief course cannot replace a dissection laboratory, it serves as your map.

The Map Provides:

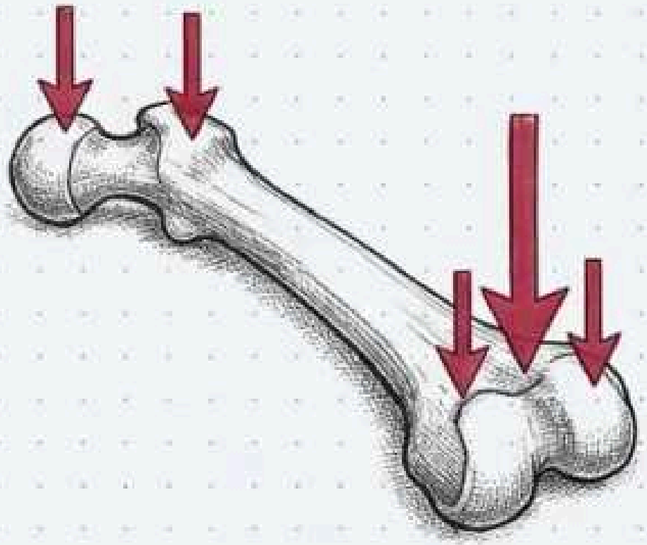
- ✓ The language anatomists use
- ✓ The overall plan of the body
- ✓ The architectural reasons why each region is built as it is



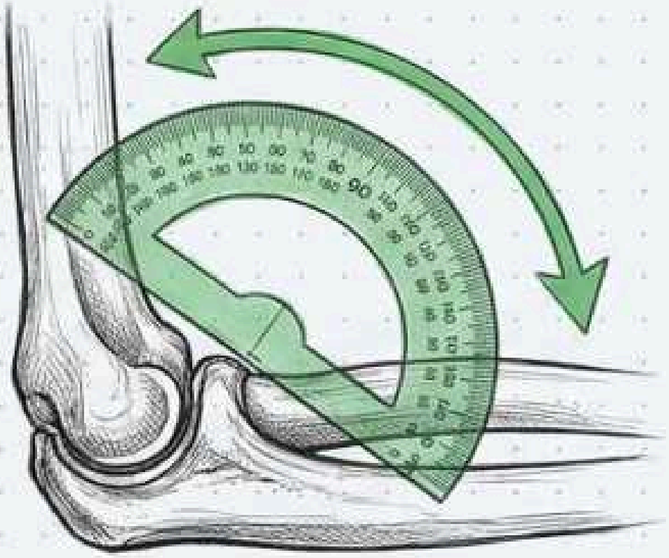
The Meaning of 'Functional'

Instead of just memorizing thousands of names, functional anatomy first asks: What does this structure do, and how does its shape let it do that?

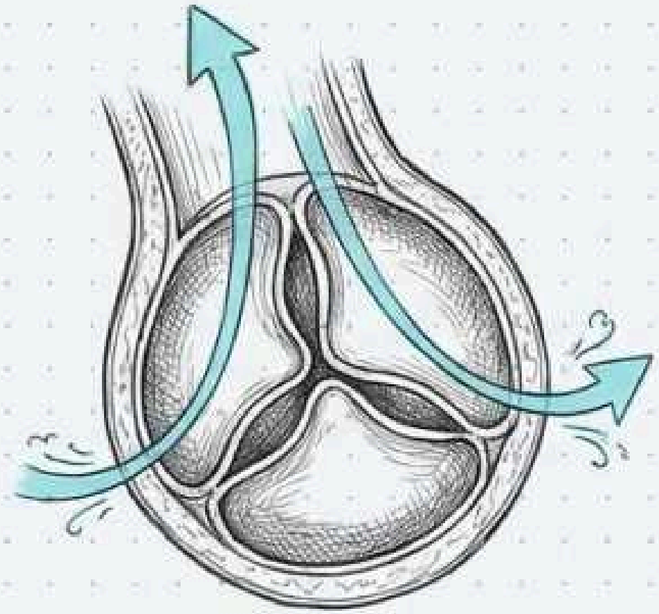
$$\text{Shape} = f(\text{Function})$$



A bone is shaped by loads.



A joint by movements.



A valve by flow direction.

When you know the function, the names become much easier to remember.

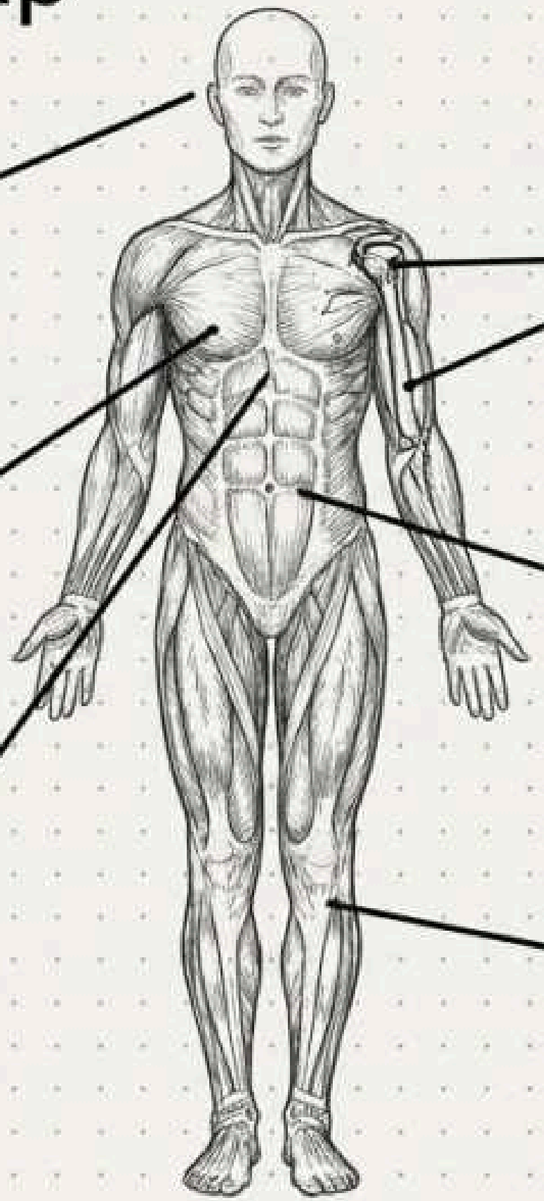
The Course Roadmap

¶ 0.6

L1: The Language & Overall Plan

L2: Living Machines (Bones, joints, muscles)

L3: The Chest (Heart, lungs, mechanics of breathing)



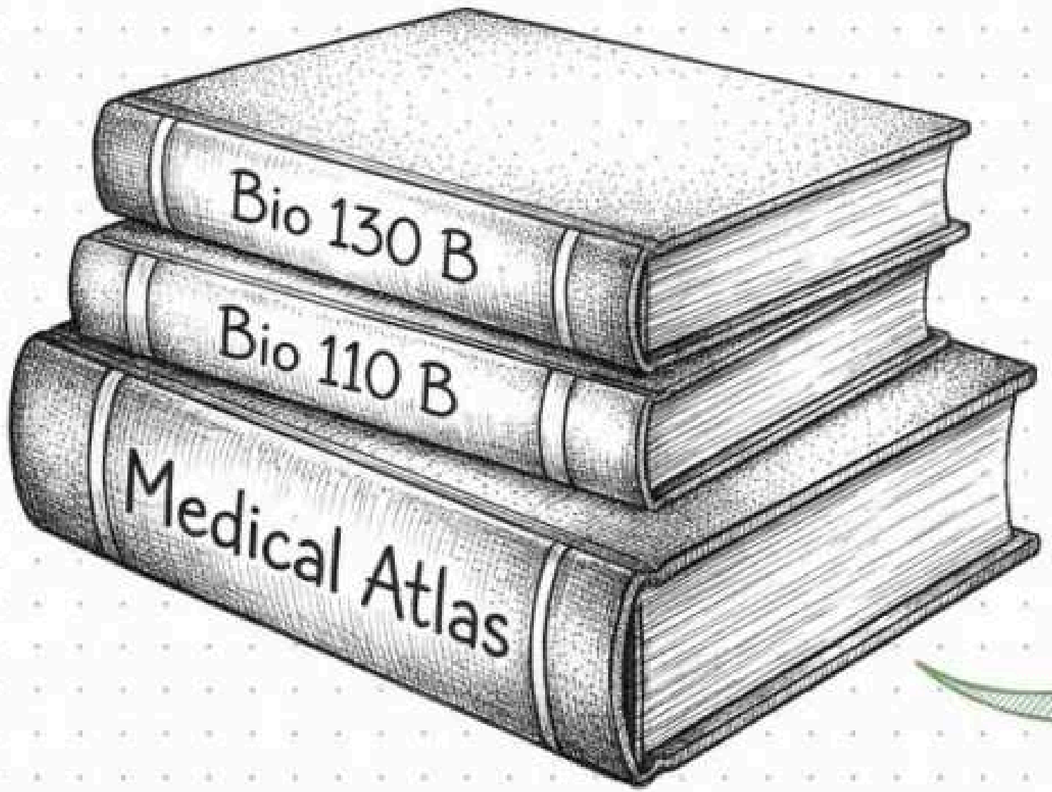
L4: Abdomen & Pelvis (Digestive organs, kidneys, pelvic organs)

L5: Head & Neck (Wiring of the nervous system)

L6: The Limbs & Clinical Anatomy (Fractures, nerve injuries)

Recommended Background & Tools

¶ 0.7



Prerequisites

The Academy's Human Anatomy (Bio 130 B) and Introduction to Biology (Bio 110 B). (Familiar vocabulary will show you how medical students actually use it).

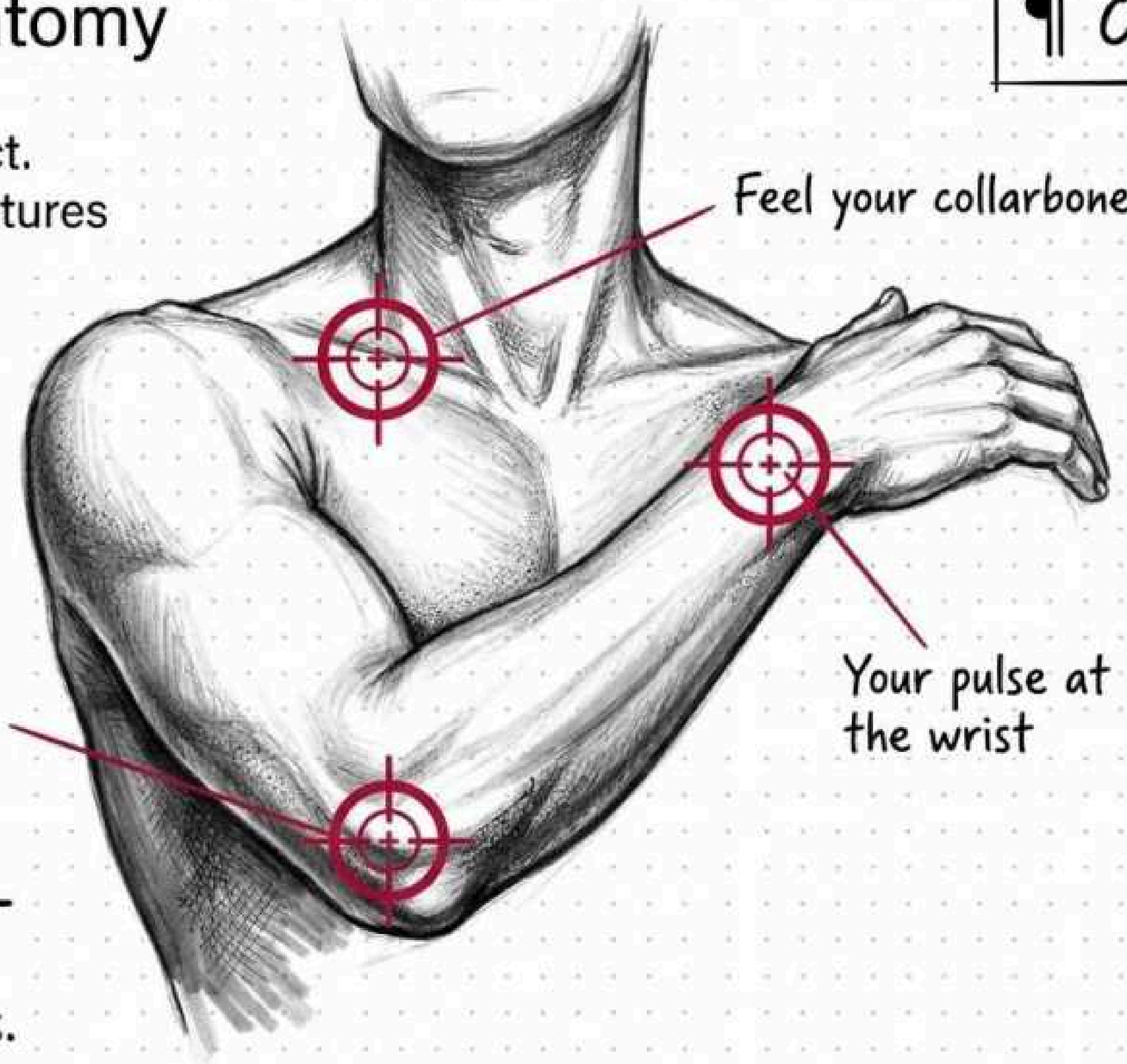
Actionable Tool

Keep a good anatomical atlas (or a free online atlas) open beside you while following along.

Practical Tip: Surface Anatomy

¶ 0.8

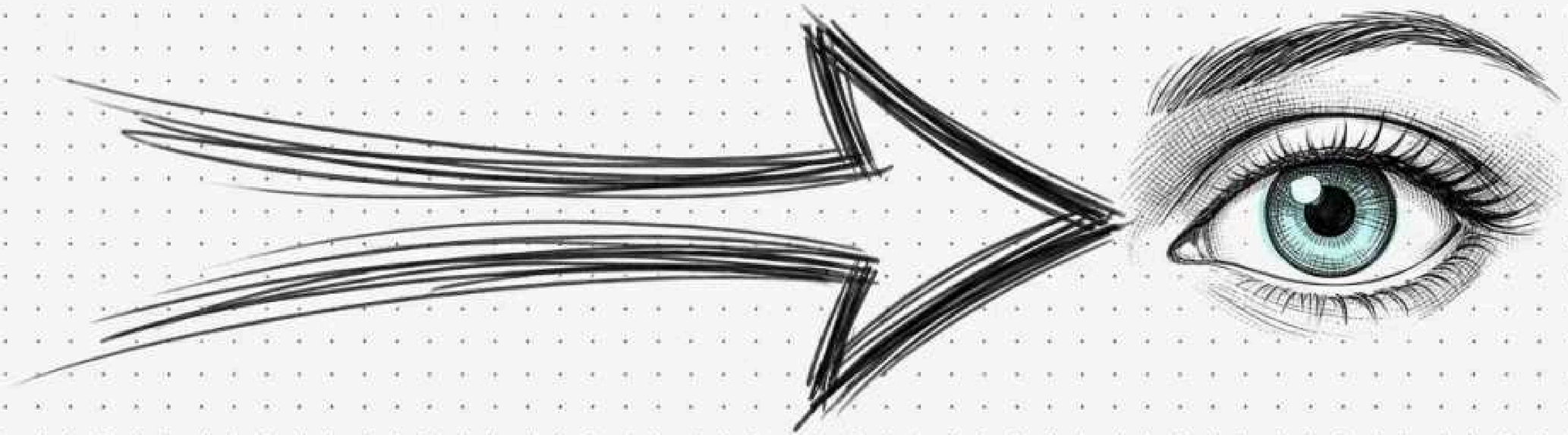
Anatomy is a visual and physical subject.
As you listen, physically touch the structures
on your own body where you can.



Takeaway: This practice turns abstract
words into unforgettable physical realities.

¶0.9

Ready to Begin



Questions or feedback?

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Next: Let us learn the language of anatomy, in Lecture One.