

Anatomy Lab Intro

Welcome!

Lab is where you will really learn anatomy. You get to see, hold, and examine the real thing, the human body! You cannot get these things listening to a lecture or reading a book. For many of you lab will be the most exciting aspect of the class.

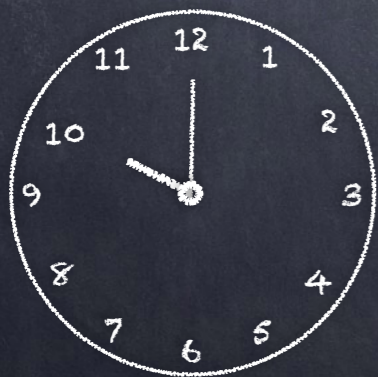
Please be respectful at all times. This doesn't mean that you can't have fun. Just remember that we have this amazing opportunity because someone donated their body for medical education and research.



Lab Introduction

Be on time to lab each week!

- The quiz starts at the beginning of lab.
- You need a note from Shawn to attend a different lab!
- We use the lab clock to determine lab start time.
- Lab start times are 10:00, 12:30, 3:00, and 5:30



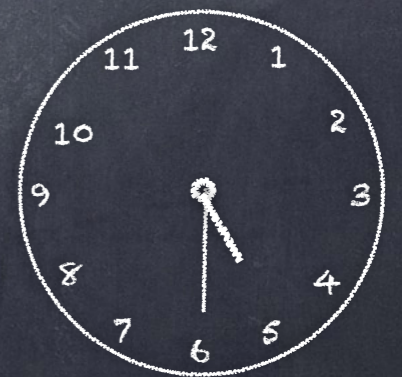
10:00



12:30



3:00



5:30

Lab Introduction

Bags and jackets must be put away!

- Hang jackets on the hooks.
- Store backpacks under your desk.
- Keep the floor clear, you will be moving around!

Find a seat!

- This will be your assigned seat for the summer.
- There will be a piece of quiz paper on the desk.
- Write your name on the quiz paper.
- Wait quietly for the quiz to begin.

Restrictions

NO CAMERAS – NO PHOTOS!

- Photographs may NEVER BE TAKEN during lab!
- Doing so will jeopardize our agreement with the Body Donor Program and we will never be able to use cadavers again!

Restrictions

CELL PHONES MUST BE TURNED OFF DURING LAB!

- There is no reason to have your phone out while a lab is in session.
- We will ask you to leave if you are using your phone during lab!

Restrictions

As you can see,
most things are
prohibited in lab!

BUT...

Water is probably
okay!



If You Feel Faint...

**PLEASE SIT DOWN! DO NOT
TRY TO LEAVE THE LAB!**

- You will be lucky to take one or two steps, then you will fall!
- Falling in the lab is last thing you want to do because...
 - you will fall head-first.
 - the tables are hard and do not move
 - there is concrete under the flooring
- The lab leaders know what to do in the event someone falls.

Cadaver Care

Very few undergraduate anatomy classes have a cadaver lab and none are as good as ours! So, appreciate our lab and take advantage of this amazing learning opportunity.

The prosections we have represent THOUSANDS OF HOURS OF DISSECTION!

- Not only do they represent countless hours of work they also represent someone who donated their body so you can learn.

NEVER POINT TO STRUCTURES WITH ANY KIND OF WRITING INSTRUMENT!

- Doing so will damage our teaching materials!

Cadaver Care

We encourage you to handle the prosecutions during lab.

- You do not need to wear gloves to do so.
- So, if you feel you need gloves please bring your own.
- The chemical we use as a wetting agent is an extremely dilute solution of 2-phenoxyethanol and water (300 parts water to 8 parts 2-phenoxyethanol).
- It is hydrophilic, antimicrobial, and hypoallergenic, and is a common chemical in cosmetics, lotions, and creams.

We have MSDS sheets for all chemicals that you might encounter during lab.

Lab Manual

The Lab Manual is designed to be used with Human Anatomy Interactive Atlas to help you prepare for the lab quizzes and practical exams. How you print it is up to you. It is available as a free download on the course website.

courses.biology.utah.edu/smiller/2325/labManual.pdf

Human Anatomy

Lab Manual

Sixth Edition

Summer Term

Mark Nielsen
University of Utah

Lab Manual

Orientation

This 2-page section provides you with a quick orientation to the lab. It includes a brief explanation of the purpose of the lab in the study of anatomy and some general lab information.

Orientation

Welcome to the human anatomy laboratory that accompanies the lecture in Biology 2325 - Human Anatomy. This lab provides you with a rare opportunity to explore anatomy using dissected human cadavers. Exploring cadavers is the true approach to learning anatomy, that is, experiencing anatomy in its three-dimensional reality. There is no better way to learn this subject. In lecture you will use your sense of hearing to listen and learn and your visual sense to see two-dimensional illustrations throughout the lecture. The lab opens the door to additional senses — those of touch, three-dimensional vision, and even the unique smell of a cadaver lab. This allows you to gain a total exposure to the design of the human body.

You may have asked yourself as you were registering for this class, what can I expect in the anatomy lab? How do I prepare for lab? What is expected of me? The following information will help answer these questions and provide guidelines for a successful learning experience.

1. Each lab will begin with a visual quiz that will require approximately 10 minutes to administer. There will be a total of eleven quizzes during the semester. All will count towards your grade. The quizzes are administered at the beginning of lab, so be on time. Questions will not be repeated for latecomers. You must attend the lab for which you are registered. **Only, under extenuating circumstances, and with Professor's written approval, can you take a quiz in another lab, or for that matter attend another lab time.**
2. The quizzes are visual tests that you will take at the beginning of the lab session. The quiz will cover the material that you will study in the lab. The purpose behind quizzing students on material they will be studying in the current lab is to encourage students to come to lab prepared. Years of experience, have demonstrated that this helps students get the most out of their lab experience. The CD, *Human Anatomy Interactive Atlas*, that accompanies your books contains numerous cadaver photographs that you will study in preparation for the lab quizzes. These cadaver photographs correspond to lecture material from the previous week and are similar to the cadaver materials you will study in the lab. Each photograph is a professionally prepared dissection to not only help you prepare for the lab, but also to allow you to take the lab home with you. By having access to these excellent photographs, you can study the cadavers from the lab without being in the lab.
3. Attendance is required as the lab is 30% of the course grade. The lab time should be used wisely. Again, history demonstrates that the students who perform best in the course are those who come prepared for lab, work hard, and do not waste time in the laboratory.



Lab Manual

Tips

This 2-page section provides you with a number of tips and learning strategies that will help you get the most out of your lab experience. It also provides some information regarding other resources might be helpful to you both before and after you have attended your lab session for the week.

Tips

The following techniques will be useful in learning anatomical concepts throughout this course. Before each lab, review this list and apply the appropriate concepts to the lecture material.

1. **Hands on!!:** Exploration and touching of cadaver parts is essential. The more you handle and examine cadaver parts the more familiar you will become with orienting, recognizing, and discovering specific anatomical structures.
2. **Palpation:** This is the process of exploring structures with your hands on your own or someone else's body. Realize that your own body is a human anatomy review sheet (anatomy can be fun with a partner, too). Palpation can be used to study bony landmarks, muscles, tendons, ligaments, vessels, and nervous structures. Whenever you are learning a new anatomical structure, try and palpate it on your own body.
3. **Etymology:** Many anatomical terms are derived from Latin and Greek roots. Often terms that look foreign to you are actually very descriptive. The term might describe the size, shape, action, or location of the anatomical structure being named. By dissecting a term's Latin or Greek origin you can make memory associations that help with learning the anatomical structures. For examples of this approach, look at the chapters Anatomical Nomenclature and Anatomical Etymology in the *Human Anatomy Lecture Manual*.
4. **Traces:** A trace is a sequential path of chambers, vessels, tubular structures, valves, or nervous structures through which a substance or impulse passes as it travels from one region of the body to another. When learning systems, such as the cardiovascular, respiratory, digestive, urinary, or nervous systems, traces provide an excellent technique for identifying the structures in an ordered fashion. This is an excellent way to see if you understand the big picture. Learning a trace through a system will help you reinforce the sequential relationship between the structures of that system. **Remember you can trace molecules from one system to another across diffusion or transport barriers, such as an oxygen molecule from the alveolar air spaces in the lungs to the pulmonary capillaries that surround those air spaces!**



Lab Manual

Labs

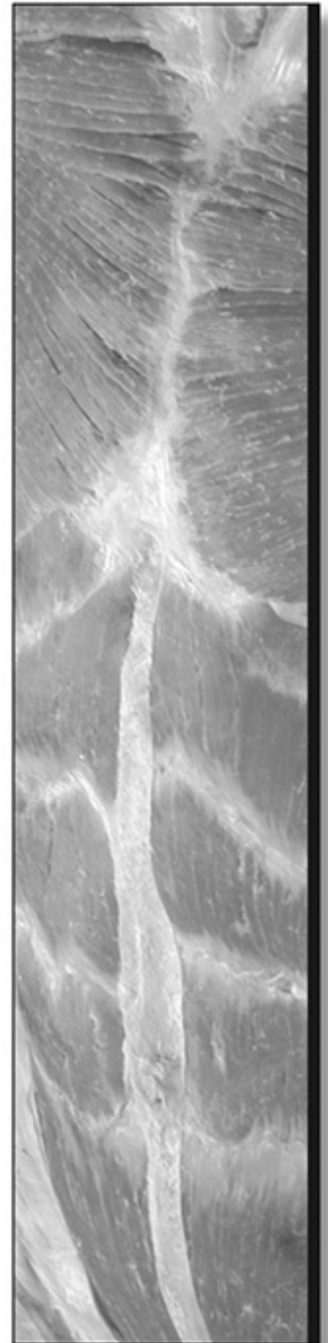
This 3-page section provides you with the general format the lab manual follows for each of the lab sessions. It includes a thorough explanation of each subsection of the lab.

Labs

The next chapters in this manual are outlines of the weekly laboratories. They are designed to help you accomplish three important tasks: 1) to prepare for the lab; 2) to benefit maximally from the time you spend in the lab; and 3) to summarize what you should learn during lab. These chapters are concise and to the point. Use them to learn what is expected. Doing so will help you get the most out of the laboratory. Each chapter follows a consistent layout that has the following topics or headings:

Collaborative learning stations

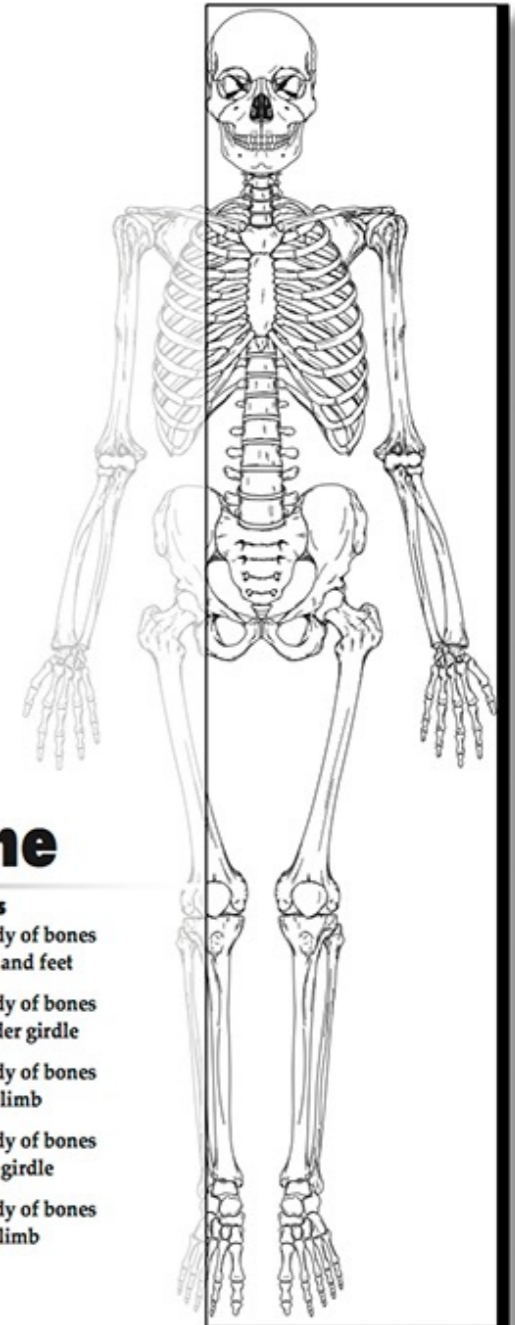
In the lab the students are divided into groups of six to eight people and each group is assigned a teaching assistant for that lab. The lab consists of five of these groups. Within the lab there are five collaborative learning stations. Each group will start at one of the collaborative learning stations, where they will explore and learn anatomy under the tutelage of a teaching assistant. After approximately 20 minutes, the groups will rotate to a different station. By the end of the laboratory session each group will have visited each of the five learning stations. The learning stations are interactive, hands-on explorations of bones and human cadavers. The cadavers are professionally dissected to illustrate the relevant anatomy for the lab. This is a wonderful opportunity to explore anatomy in the third dimension. Learning anatomy on the cadavers will broaden the perspective you gain from the two dimensional approach of lecture. During these sessions do not sit back passively, instead, actively become involved in the lab so you can maximize your learning experience. In each of the lab chapters that follows, the learning stations for that lab will be listed in this collaborative learning section.



Lab Manual

Laboratory One

Laboratory One begins on page 9 of the Lab Manual. The five Collaborative Learning Stations associated with the lab are listed on the title page for each lab session. Look these over to get an overview of what you will be doing in the lab.



Laboratory One

Collaborative Learning Stations

1. Appendicular skeleton– study of bones and landmarks of the hands and feet
2. Appendicular skeleton– study of bones and landmarks of the shoulder girdle
3. Appendicular skeleton– study of bones and landmarks of the upper limb
4. Appendicular skeleton– study of bones and landmarks of the pelvic girdle
5. Appendicular skeleton– study of bones and landmarks of the lower limb

Lab Manual

Quiz Prep

To learn how to prepare for the weekly quiz find the section called Structures to Identify for the Quiz, for lab one turn to page 11.

This section clearly states what you will need to do to prepare for the quiz at the beginning of the lab. Everything you need to study to do well in the lab will be outlined in this section.

Laboratory One

5. Be able to orient the bones as they would appear in the fully articulated skeleton.
6. Understand the relationships between neighboring bones, i.e., learn the names of the articular surfaces of the bones. These landmarks are easily identified by their smooth, bearing-like surfaces. Surfaces which in life are covered with articular cartilage.
7. Identify all the landmarks indicated for each bone in the *Human Anatomy Study Guide and Workbook* and on the "Basic Labels" button on

Structures to Identify for the Quiz

To encourage you to prepare for the lab so that you can get the most out of your laboratory experience, there will be a quiz at the beginning of each lab. To prepare for the quiz in this lab, you should do the following:

Required knowledge and skill will help you begin the learning process. For this reason, the more you prepare for the lab, the more you will benefit. Realize that to fully learn the information covered in this lab, you will need to do additional homework after you leave the lab. Use the CD and the *Human Anatomy Study Guide and Workbook* to further pursue your lab studies after the lab is over.

Structures to Identify for the Quiz

To encourage you to prepare for the lab so that you can get the most out of your laboratory experience, there will be a quiz at the beginning of each lab. To prepare for the quiz in this lab, you should do the following:

1. Be able to identify all the bones of the appendicular skeleton on the photographs in Appendicular Skeleton Module of the *Human Anatomy Interactive Atlas* CD. You should be able to identify each of the following bones:

Clavicle	Os coxae
Scapula	Ilium
Humerus	Ischium
Radius	Pubis
Ulna	Femur
Scaphoid	Patella
Lunate	Tibia
Triquetrum	Fibula
Trapezoid	Talus
Trapezium	Calcaneus
Capitate	Navicular
Pisiform	Cuboid
Hamate	Lateral cuneiform
Metacarpals	Middle or intermediate cuneiform
Phalanges of hand	Medial cuneiform
	Metatarsals
	Phalanges of foot

2. Be able to identify whether you are looking at the anterior aspect of each bone or the posterior aspect of the bone.

Lab Manual

Quiz Prep

Follow each outlined point. You will always be directed to specific photos on the Human Anatomy Interactive Atlas CD.

In this case, the first point instructs you to be able to identify all the named bones of the appendicular skeleton on the Appendicular Skeleton Module of the Human Anatomy Interactive Atlas CD.

Laboratory One

5. Be able to orient the bones as they would appear in the fully articulated skeleton.
6. Understand the relationships between neighboring bones, i.e., learn the names of the articular surfaces of the bones. These landmarks are easily identified by their smooth, bearing-like surfaces. Surfaces which in life are covered with articular cartilage.
7. Identify all the landmarks indicated for each bone in the *Human Anatomy Study Guide and Workbook* and on the "Basic Labels" button on the *Human Anatomy Interactive Atlas* online. Realize that these landmarks are either surfaces of articulation with other bones or points of soft tissue attachment for muscles and ligaments. Learning these landmarks now will prove to be very beneficial when you study muscle

1. Be able to identify all the bones of the appendicular skeleton on the photographs in Appendicular Skeleton Module of the *Human Anatomy Interactive Atlas* online. You should be able to identify each of the following bones:

Internet Time Online and the Human Anatomy Study Guide and Workbook to further pursue your lab studies after the lab is over.

Structures to Identify for the Quiz

To encourage you to prepare for the lab so that you can get the most out of your laboratory experience, there will be a quiz at the beginning of the lab. To prepare for the quiz in this lab, you should do the following:

1. Be able to identify all the bones of the appendicular skeleton on the photographs in Appendicular Skeleton Module of the *Human Anatomy Interactive Atlas* online. You should be able to identify each of the following bones:

2. Be able to identify whether you are looking at the anterior aspect of each bone or the posterior aspect of the bone.

Clavicle	Os coxae
Scapula	Ilium
Humerus	Ischium
Radius	Pubis
Ulna	Femur
Scaphoid	Patella
Lunate	Tibia
Triquetrum	Fibula
Trapezoid	Talus
Trapezium	Calcaneus
Capitate	Navicular
Pisiform	Cuboid
Hamate	Lateral cuneiform
Metacarpals	Middle or intermediate cuneiform
Phalanges of hand	Medial cuneiform
	Metatarsals
	Phalanges of foot

Lab Manual

Quiz Prep

Second, it tells you that you should be able to tell if you are looking at the anterior or posterior aspect of each bone,

When you initially select a bone on the Human Anatomy Interactive Atlas CD, it will tell you what view you are looking at.

Laboratory One

5. Be able to orient the bones as they would appear in the fully articulated skeleton.
6. Understand the relationships between neighboring bones, i.e., learn the names of the articular surfaces of the bones. These landmarks are easily identified by their smooth, bearing-like surfaces. Surfaces which in life are covered with articular cartilage.
7. Identify all the landmarks indicated for each bone in the *Human Anatomy Study Guide and Workbook* and on the "Basic Labels" button on the CD. Realize that these landmarks are either surfaces of articulation with other bones or points of soft tissue attachment for muscles and ligaments. Learning these landmarks now will prove to be very beneficial when you study muscle anatomy later in the semester.

If by the end of the lab session you have not learned all the information outlined in these objectives, do not worry. The lab will introduce you to the required knowledge base and help you begin the learning process. For this reason, the more you prepare for the lab, the more you will benefit. Realize that to fully learn the information covered in this lab, you will need to do additional homework after you leave the lab. Use the CD and the *Human Anatomy Study Guide and Workbook* to further pursue your lab studies after the lab is over.

Structures to Identify for the Quiz

To encourage you to prepare for the lab so that you can get the most out of your laboratory experience, there will be a quiz at the beginning of each lab. To prepare for the quiz in this lab, you should do the following:

1. Be able to identify all the bones of the appendicular skeleton on the photographs in Appendicular Skeleton Module of the *Human Anatomy Interactive Atlas* CD. You should be able to identify each of the following bones:

2. Be able to identify whether you are looking at the **anterior aspect** of each bone or the **posterior aspect** of the bone.

Triquetrum
Trapezoid
Trapezium
Capitate
Pisiform
Hamate
Metacarpals
Phalanges of hand

Fibula
Talus
Calcaneus
Navicular
Cuboid
Lateral cuneiform
Middle or intermediate cuneiform
Medial cuneiform
Metatarsals
Phalanges of foot

2. Be able to identify whether you are looking at the anterior aspect of each bone or the posterior aspect of the bone.

Lab Manual

Quiz Prep

Third, it tells you that you should be able to identify the landmarks that are marked with an asterisk on the bone illustrations in the Human Anatomy Study Guide and Workbook. It then lists all the landmarks with an asterisk. You should be able to identify all of the landmarks in the list below the paragraph (the list is partially obscured by the call out).

3. Using the illustrations of the appendicular skeleton in the *Human Anatomy Study Guide and Workbook*, be able to identify the bony landmarks marked with an asterisk on the bone photos on the CD. We are breaking you in gradually and not trying to overwhelm you. By the end of the lab you should know all the bony landmarks listed on the following pages, but for the quiz you should be able to identify the following bony landmarks:

On Clavicle:
Acromial end
Sternal end
Conoid tubercle

On Scapula:

On Os Coxae:
Iliac crest
Acetabulum

On Femur:
Head

3. Using the illustrations of the appendicular skeleton in the *Human Anatomy Study Guide and Workbook*, be able to identify the bony landmarks marked with an asterisk on the bone photos on the CD. We are breaking you in gradually and not trying to overwhelm you. By the end of the lab you should know all the bony landmarks listed on the following pages, but for the quiz you should be able to identify the following bony landmarks:

Lab Manual

Quiz Prep

Finally, it says you should be able to use the terminology covered in the Anatomical Nomenclature chapter of the lecture manual (pages 1–13). These are the pages I told you to read last week.

What you need to do is to be able to use them with the photos of the bones in the Human Anatomy Interactive Atlas CD

3. Using the illustrations of the appendicular skeleton in the *Human Anatomy Study Guide and Workbook*, be able to identify the bony landmarks marked with an asterisk on the bone photos on the CD. We are breaking you in gradually and not trying to overwhelm you. By the end of the lab you should know all the bony landmarks listed on the following pages, but for the quiz you should be able to identify the following bony landmarks:

4. Be able to use the terminology covered in the Anatomical Nomenclature chapter of the lecture manual with the photos of the bones on the CD.

On Humerus:
Head

On Radius:
Head
Styloid process

On Ulna:
Radial notch

On Tibia:
Tibial tuberosity
Medial malleolus

4. Be able to use the terminology covered in the Anatomical Nomenclature chapter of the lecture manual with the photos of the bones on the CD.

Prep for Lab Quiz

Other Sections of Manual

Under the heading Structures to Identify in the Lab you see the lists the structures that you will see as you move from one station to the next during lab. These are the bony landmarks you will be held accountable for after you have been through the first lab. The TAs will try to get through them all. If they can't they will help you learn how to learn them on your own.

Laboratory One

Structures to Identify in the Lab

Clavicle

- ☐ Acromial end
- ☐ Sternal end
- ☐ Conoid tubercle
- ☐ Impression for costoclavicular ligament

Scapula

- ☐ Spine
- ☐ Acromion
- ☐ Glenoid cavity
- ☐ Coracoid process
- ☐ Infraspinous fossa
- ☐ Supraspinous fossa
- ☐ Subscapular fossa
- ☐ Inferior angle
- ☐ Superior angle
- ☐ Infraglenoid tubercle
- ☐ Supraglenoid tubercle
- ☐ Lateral border
- ☐ Medial border

Humerus

- ☐ Head of humerus
- ☐ Greater tubercle
- ☐ Lesser tubercle
- ☐ Intertubercular groove
- ☐ Deltoid tuberosity
- ☐ Trochlea
- ☐ Capitulum
- ☐ Medial epicondyle
- ☐ Lateral epicondyle
- ☐ Olecranon fossa

Ulna

- ☐ Olecranon
- ☐ Trochlear notch
- ☐ Coronoid process
- ☐ Ulnar tuberosity
- ☐ Radial notch
- ☐ Head of ulna
- ☐ Styloid process of ulna

Radius

- ☐ Head of radius
- ☐ Radial tuberosity
- ☐ Styloid process of radius

Carpal Bones

- ☐ Scaphoid bone
- ☐ Lunate bone
- ☐ Triquetrum bone
- ☐ Pisiform bone
- ☐ Trapezium bone
- ☐ Trapezoid bone
- ☐ Capitate bone
- ☐ Hamate bone

Metacarpal bones

Phalanges of the hand

- ☐ Proximal phalanx
- ☐ Middle phalanx
- ☐ Distal phalanx

Os Coxa

- ☐ Acetabulum
- ☐ Obturator foramen
- ☐ Greater sciatic notch
- ☐ Ilium
- ☐ Iliac crest
- ☐ Anterior superior iliac spine
- ☐ Anterior inferior iliac spine
- ☐ Iliac fossa
- ☐ Auricular surface for sacrum
- ☐ Iliac tuberosity
- ☐ Anterior gluteal line
- ☐ Posterior gluteal line
- ☐ Inferior gluteal line
- ☐ Ischium
- ☐ Ischial spine
- ☐ Ischial ramus
- ☐ Lesser sciatic notch
- ☐ Ischial tuberosity
- ☐ Pubis
- ☐ Pubic crest
- ☐ Pubic tubercle
- ☐ Pectineal line
- ☐ Pubic symphysis
- ☐ Superior pubic ramus
- ☐ Inferior pubic ramus

Lab Manual

Other Sections of Manual

On the last page of each lab you will see a section called After the Lab is Over. What follows are tips for reviewing the material as you study using the your lab manual and the Human Anatomy Interactive Atlas CD.

Laboratory One

After the Lab is Over

The Marriott Library has bone boxes that you can check out to study the bones. You can check the bones out from the general reserve desk and use them within the library.

Tips for reviewing bone material

Bone orientation

Be able to orient any bone and determine whether it is a right or a left bone. Try to do it with your eyes closed by feeling for prominent surface landmarks that you learned during the lab.

Landmarks

Every osteological landmark has a descriptive name and the Latin and Greek origins of these words can be very helpful learning aids. For example, in Latin the greater tubercle means the 'bigger bump'. Knowing the etymology of these words can help you use association techniques when learning the terminology to improve long term memory.

Take advantage of the opportunity to use the bone boxes at the library and during anatomy office hours and review the bony landmarks. Pair up with a partner and quiz each other. Take turns pointing to the bony landmarks and asking each other their names. This will help you prepare for the bone practical exams that you will take in some of the later labs in the semester.

Landmarks I need to review this week

In the space to the right, compile a list of the osteological landmarks from Lab 1 that you feel you need to focus on during your review opportunities.

The *Human Anatomy Study Guide and Workbook* contains additional unlabeled illustrations of the bones. These are provided for you to use as study aids to test your knowledge of the landmarks. During the first laboratory session you covered these landmarks with a teaching assistant. Now test yourself and make sure that you can identify them on your own. If you desire to spend additional time handling the actual bones, you can look at the bones at the library or in the laboratory during office hours.

Upper Limb Landmarks

Lower Limb Landmarks

Future Quizzes

Review Questions

On the second quiz, there will be seven structures to identify from the photos indicated under Structures to Identify for the Quiz section of lab two and three review structures to identify from the Structures to Identify in the Lab section of lab one. In all subsequent labs there will be five structures from the current lab and five structures that will come from prior labs.

Laboratory One

Structures to Identify in the Lab

Clavicle

- ☐ Acromial end
- ☐ Sternal end
- ☐ Conoid tubercle
- ☐ Impression for costoclavicular ligament

Scapula

- ☐ Spine
- ☐ Acromion
- ☐ Glenoid cavity
- ☐ Coracoid process
- ☐ Infraspinous fossa
- ☐ Supraspinous fossa
- ☐ Subscapular fossa
- ☐ Inferior angle
- ☐ Superior angle
- ☐ Infraglenoid tubercle
- ☐ Supraglenoid tubercle
- ☐ Lateral border
- ☐ Medial border

Humerus

- ☐ Head of humerus
- ☐ Greater tubercle
- ☐ Lesser tubercle
- ☐ Intertubercular groove
- ☐ Deltoid tuberosity
- ☐ Trochlea
- ☐ Capitulum
- ☐ Medial epicondyle
- ☐ Lateral epicondyle
- ☐ Olecranon fossa

Ulna

- ☐ Olecranon
- ☐ Trochlear notch
- ☐ Coronoid process
- ☐ Ulnar tuberosity
- ☐ Radial notch
- ☐ Head of ulna
- ☐ Styloid process of ulna

Radius

- ☐ Head of radius
- ☐ Radial tuberosity
- ☐ Styloid process of radius

Carpal Bones

- ☐ Scaphoid bone
- ☐ Lunate bone
- ☐ Triquetrum bone
- ☐ Pisiform bone
- ☐ Trapezium bone
- ☐ Trapezoid bone
- ☐ Capitate bone
- ☐ Hamate bone

Metacarpal bones

Phalanges of the hand

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- ☐ Middle phalanx
- ☐ Distal phalanx

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- ☐ Acetabulum
- ☐ Obturator foramen
- ☐ Greater sciatic notch
- ☐ Ilium
- ☐ Iliac crest
- ☐ Anterior superior iliac spine
- ☐ Anterior inferior iliac spine
- ☐ Iliac fossa
- ☐ Auricular surface for sacrum
- ☐ Iliac tuberosity
- ☐ Anterior gluteal line
- ☐ Posterior gluteal line
- ☐ Inferior gluteal line
- ☐ Ischium
- ☐ Ischial spine
- ☐ Ischial ramus
- ☐ Lesser sciatic notch
- ☐ Ischial tuberosity
- ☐ Pubis
- ☐ Pubic crest
- ☐ Pubic tubercle
- ☐ Pectineal line
- ☐ Pubic symphysis
- ☐ Superior pubic ramus
- ☐ Inferior pubic ramus

Additional Resources

Workbook

The Human Anatomy Study Guide and Workbook is a valuable resource. After you have gone through your notes for each lecture you should try to answer the questions in the Workbook.

- There are exercises for each lecture topic.
- The exercises are similar to exam questions.
- Do the exercises after every lecture!
- Do not get behind!

Additional Resources

Pelvis Model

The pelvis is a region that requires a little extra work. A former TA made a model that has been extremely helpful when learning this region.

- The pelvis model is in the back of the workbook.
- It is accompanied by a set of instructions.
- You will have to build it prior to lab 6.
- The pelvis model is due at the beginning of lab 6.