Digestive System Anatomy

You should be able to identify the following structures and organs in the human models and in figures and diagrams.

**Mouth and Pharynx**
- Hard palate
- Soft palate
- Uvula
- Sublingual gland
- Parotid gland
- Submandibular glands
- Nasopharynx
- Oropharynx
- Epiglottis

**Esophagus**
- Cardiac and pyloric sphincters

**Stomach**
- Cardia
- Fundus
- Pylorus
- Greater curvature
- Lesser curvature
- Cardiac sphincter
- Pyloric sphincter
- Greater and lesser omenta
- Rugae

**Small intestine**
- Duodenum
- Common bile duct
- Hepatopancreatic ampulla
- Hepatopancreatic sphincter
- Plicae circulares
- Villi
- Mesentery
- Jejunum
- Ileum
- Ileocecral valve

**Liver and gall bladder**
- Lobe
- Falciform ligament
- Hepatic portal vein
- Common hepatic duct
- Cystic duct

**Pancreas**
- Pancreatic duct
- Observe spleen in close proximity to pancreas

**Large Intestine**
- Cecum
- Appendix
- Ascending colon
- Transverse colon
- Descending colon
- Sigmoid colon
- Rectum
- Anus
- Hastrae
- Internal and external anal sphincters
Digestive system histology

Identify the following structures and features of the digestive tract using the lab manual atlas, lab electronic resources, and prepared microscope slides.

Tooth
- enamel
- dentine
- pulp cavity

Salivary glands
- Secretory units: mucous cells and serous demilunes
- Duct

Esophagus
- Mucosa: stratified squamous epithelium, lamina propria, muscularis mucosae.
- Submucosa: esophageal glands may be visible.
- Muscularis externa: there will probably be a combination of smooth and skeletal muscle.
- Adventitia: note that esophagus has no serosa.

You should be able to ID a slide of the gastroesophageal junction.

Stomach
- Mucosa: simple columnar epithelium, note goblet cells; gastric pits; lamina propria.
  - gastric glands: note general area where mucous neck cells, parietal cells, chief cells, enteroendocrine cells are present
  - lamina propria
  - muscularis mucosae

- Submucosa
- Muscularis externa: view oblique, circular, longitudinal smooth muscle layers.
- Serosa

Small intestine
- Mucosa: villi, simple columnar epithelium, goblet cells, intestinal crypt; note lamina propria with capillaries and lacteals
- Submucosa: Peyer's patches and duodenal glands
- Muscularis externa: circular and longitudinal smooth muscle layers

Liver
- Lobule: central vein, triad region.
- Hepatocytes
- Sinusoids: try to ID Kupffer cell.
Pancreas
Acini
Ducts
Islets of Langerhans

Large intestine
Mucosa: simple columnar epithelium with large numbers of goblet cells; also should be able to differentiate from small intestine
Submucosa
Muscularis externa: circular and longitudinal smooth muscle layers.
Examine slide of colo-rectal junction noting the transition from simple columnar epithelium of mucosa to stratified squamous epithelium