**2024-2025 Weekly Lesson Planning Document**

Template for the following:

Science, Social Studies, CTE, World Languages,

HPELW, Fine Arts, JROTC

Week of Monday, \_\_\_\_\_03/03\_\_\_through Friday, \_\_03/07/2025

**EDUCATOR’S NAME:** \_\_\_\_\_\_\_Dr. Amar K. Pani\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **SUBJECT:** \_\_\_\_\_\_\_\_\_\_Human Anatomy & Physiology (Honors) Honors\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- |
|  | **MONDAY** | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY** |
| **Chapter 15:** Respiratory System**Page Number(s): 346-379** It’s suggested to use your curriculum map. | **Intro to Digestive System** | **Digestive System Structures** | **Intro to Digestive System Functions** | **Digestive System Disease** | **Digestive Lab-work** |
| **TN Standard(s):**Grade level standard (including standard notation and language). Which State Standard is your lesson addressing? This should also be on your Whiteboard Protocol. | **HAP.LS1.24** Model the sequential organization of the alimentary canal and its accessory organs in order to describe the physiological role of each. \*This standard sets the flow of learning for this unit; setting the expectation that the standards that follow should be bundled in a manner that provides students with a holistic and sequential understanding of the anatomy and physiology of the alimentary canal.  **HAP.LS1. 23** Diagram the progression of lipid transport from the digestive system, through the lymphatic system, and into cardiovascular circulation.**HAP.LS1.25** Analyze gastrointestinal wall histology and explain the anatomical architecture that supports efficient absorption and transport of molecules into cardiovascular or lymphatic circulation.  **HAP.LS1.26** Investigate the actions of major digestive enzymes and hormones and identify their sources.  **HAP.LS1.27** Describe the role of the hepatic portal system in coupling the digestive and cardiovascular systems.  |
| **Objective (s):**What specifically should students be able to do at the end of the lesson? The objective is standards-based.Write the objective in student friendly terms. For example, I can multiply binomials.This should also be on your Whiteboard Protocol. What do you want students to know, understand and be able to do as a result of this lesson? The objective should be written using the stem…**I CAN….** | **Week#1-I CAN** model the sequential organization of the male and female urinary tracts IOT describe the physiological role of blood filtration and waste excretion from the body.  **Week#2-I CAN** identify the parts of a nephron and describe how they assist IOT analyze the homeostatic mechanisms through urine formation.  | **I CAN** model the sequential organization of the male and female urinary tracts IOT describe the physiological role of blood filtration and waste excretion from the body.  **I CAN** identify the parts of a nephron and describe how they assist IOT analyze the homeostatic mechanisms through urine formation.  | **I CAN** model the sequential organization of the male and female urinary tracts IOT describe the physiological role of blood filtration and waste excretion from the body.  **I CAN** identify the parts of a nephron and describe how they assist IOT analyze the homeostatic mechanisms through urine formation.  | **I CAN** model the sequential organization of the male and female urinary tracts IOT describe the physiological role of blood filtration and waste excretion from the body.  **I CAN** identify the parts of a nephron and describe how they assist IOT analyze the homeostatic mechanisms through urine formation.  | **I CAN** model the sequential organization of the male and female urinary tracts IOT describe the physiological role of blood filtration and waste excretion from the body.  **I CAN** identify the parts of a nephron and describe how they assist IOT analyze the homeostatic mechanisms through urine formation.  |

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| --- | --- | --- | --- | --- | --- |
| **Possible Misconception (s):**What misconception(s) are you anticipating during this lesson? | 1.Spicey food cause stomach ulcers?2.Celiac Disease is the childhood disease?3.Bowel regularity means bowel movement.4.Cirrhosis is caused by alcohol consumption.5. Digestion happens in the stomach only? | 1.Spicey food cause stomach ulcers?2.Celiac Disease is the childhood disease?3.Bowel regularity means bowel movement.4.Cirrhosis is caused by alcohol consumption.5. Digestion happens in the stomach only? | 1.Spicey food cause stomach ulcers?2.Celiac Disease is the childhood disease?3.Bowel regularity means bowel movement.4.Cirrhosis is caused by alcohol consumption.5. Digestion happens in the stomach only? | 1.Spicey food cause stomach ulcers?2.Celiac Disease is the childhood disease?3.Bowel regularity means a bowel movement?4.Cirrhosis is caused by alcohol consumption.5. Digestion happens in the stomach only? | 1.Spicey food cause stomach ulcers?2.Celiac Disease is the childhood disease?3.Bowel regularity means a bowel movement?4.Cirrhosis is caused by alcohol consumption?5. All Digestion happens in the stomach only? |
| **Literacy-Based DO NOW:** This literacy-based activity should be ready for students to begin working on upon entering class. Students should have an opportunity to read, write, and/or speak. |  |  |  |  |  |
| **Agenda for the Day**Simple outline of lesson segments or activities that is time stamped.Teacher/class should take 2 minutes or less to review.  | * Do Now *(8 minutes)*
* Review Learning Objective *( minutes)*
* Item 3 *( minutes)*
* Item 4 *( minutes)*
* Item 5 *( minutes)*

Item 6 *( minutes)***Curricular Resources** **Textbook**: *Applied Anatomy & Physiology*: *A Case* *Study Approach* * Chapter 8, pp. 272 – 303

 **Suggested Activities** **Engage** * [CK-12: The Digestive System](https://www.ck12.org/book/CK-12-Life-Science-For-Middle-School/section/17.3/)
* [The Teaching Channel: Demonstrating Biology: It Takes Guts](https://www.teachingchannel.org/video/biology-digestion-lesson-video)
* [Khan Academy: The Digestive System](https://www.khanacademy.org/science/biology/crash-course-bio-ecology/crash-course-biology-science/v/crash-course-biology-127)
* [TED-Ed: How Your Digestive System Works](https://ed.ted.com/lessons/how-your-digestive-system-works-emma-bryce#review)
* [The Digestive System Interactive](https://junior.edumedia-sciences.com/en/node/117-the-digestive-system)
* [Gizmos: The Digestive System](https://www.explorelearning.com/index.cfm?method=cResource.dspDetail&ResourceID=1050)
* [Designing a Digestive System](https://ngss.nsta.org/Resource.aspx?ResourceID=380)
* Crash Course: Digestive System[, Part 1](https://www.youtube.com/watch?v=yIoTRGfcMqM&list=PL8dPuuaLjXtOAKed_MxxWBNaPno5h3Zs8&index=34) • Crash Course: Digestive System[, Part 2](https://www.youtube.com/watch?v=pqgcEIaXGME&list=PL8dPuuaLjXtOAKed_MxxWBNaPno5h3Zs8&index=35)
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 **Explore** **EMC AA&P Workbook & Laboratory Manual**: **Chapter 13: The Digestive System, pp. 241-265** • Laboratory Activity 1: Microscopic  | * Do Now *(8 minutes)*
* Review Learning Objective *( minutes)*
* Item 3 *( minutes)*
* Item 4 *( minutes)*
* Item 5 *( minutes)*

Item 6 *( minutes)* | * Do Now *(8 minutes)*
* Review Learning Objective *( minutes)*
* Item 3 *( minutes)*
* Item 4 *( minutes)*
* Item 5 *( minutes)*

Item 6 *( minutes)* | * Do Now *(8 minutes)*
* Review Learning Objective *( minutes)*
* Item 3 *( minutes)*
* Item 4 *( minutes)*
* Item 5 *( minutes)*

Item 6 *( minutes)* |  |
| **Beginning of Lesson****I Do****Science:** Engage & Explore | **Engage**:* [The Urinary System](https://www.youtube.com/watch?v=H2VkW9L5QSU) (video) |Bozeman Science|
* [The Urinary System, part I](https://www.youtube.com/watch?v=l128tW1H5a8) (video) |Crash Course A&P|
* [The Urinary System – An Introduction](https://www.youtube.com/watch?v=dxecGD0m0Xc) (video) |FuseSchool|
* [Meet the Kidneys](https://www.khanacademy.org/science/health-and-medicine/human-anatomy-and-physiology/introduction-to-the-kidneys/v/meet-the-kidneys) (video) |Khan Academy|
* [Urination](https://www.khanacademy.org/science/high-school-biology/hs-human-body-systems/hs-the-digestive-and-excretory-systems/v/urination) (video) |Khan Academy|
* [Urinary System](https://www.edumedia-sciences.com/en/media/450-urinary-system) (simulation) |EduMedia|
* [Waste Not, Want Not](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/152559) (activity) |CPALMS|
 | **Explore**:**EMC AA&P Workbook & Laboratory Manual**: **Chapter 14 The Urinary System, pp. 266-286** * Laboratory Activity 1: Urine Chemical Analysis, pp. 280-281 **Investigations:**
* Case Study Investigation #14, pp. 497, 503, 504, 512, 521
* A Case Study: Using Diuretics to Treat Hypertension, pp. 528-529

189-190**Curricular Resources** **Textbook**: *Applied Anatomy & Physiology*: *A Case* *Study Approach* * Chapter 8, pp. 272 – 303

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 **Explore** **EMC AA&P Workbook & Laboratory Manual**: **Chapter 13: The Digestive System, pp. 241-265** • Laboratory Activity 1: Microscopic  | **Explain**: * A Brief History of Urinalysis, p. 508
* Testing for Illegal Substances Using Urinalysis, p. 509

Is Drinking Urine Healthy? p. 511* Hemodialysis, p. 515
* Robotic Removal, p. 516
* Science and Social Ethics, p. 517

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 **Explore** **EMC AA&P Workbook & Laboratory Manual**: **Chapter 13: The Digestive System, pp. 241-265** • Laboratory Activity 1: Microscopic  | **Elaborate*** The Dangers of Overhydration, p. 520
* Laboratory Activity 2: Microscopic Examination of Urine Sediment, pp. 282-283 (Lab Manual)

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 **Explore** **EMC AA&P Workbook & Laboratory Manual**: **Chapter 13: The Digestive System, pp. 241-265** • Laboratory Activity 1: Microscopic  | **Evaluate*** **•**  Chapter 14: The Urinary System-Concept Check; pp. 498, 503, 504, 506, 512, 514, 521
* Chapter 14: The Urinary System-Study Guide; pp. 525-527

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