



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

EDUCATION

PATHWAY: Early Childhood Education
COURSE: Human Growth and Development
UNIT: Prenatal/Infancy



INTRODUCTION

Annotation:

The remarkable changes that take place during the first twelve months of life make up the most concentrated period of accelerated growth and development in a person's life. Prenatal care has an important effect on the child's life. Factors in prenatal care and infant care promote healthy brain development.

Grade(s):

x	9 th
x	10 th
x	11 th
x	12 th

Time: 20 HRS

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Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

EDU-HGD-3 –

Students will explore the growth, development, and care of the newborn.

- a. Analyze the physical, emotional, social, intellectual, and moral development of the newborn.
- b. Explain the relationship of nurturing to the growth and development of the newborn.
- c. Summarize strategies for optimizing the development of newborns, including those with special needs.
- d. Describe positive care-giving techniques.

EDU-HGD-4 –

- a. Students will analyze the growth, development, and care of the infant.
- b. Analyze the physical, emotional, social, intellectual, and moral development of the infant.
- c. Analyze various theories of psychosocial and intellectual development.
- d. Determine the influences of the family and society on the infant.
- e. Summarize strategies for optimizing the development of infants, including those with special needs.
- f. Determine techniques that promote the health and safety of an infant.
- g. Determine developmentally appropriate guidance techniques during the first year of life.

GPS Academic Standards:

- ELA9RL5
- ELA9RC1
- SAP5
- ELA10RL5
- ELA10RC1
- SSPBC3
- ELA11RL5
- ELA11RC1
- ELA12RL5
- ELA12RC1



UNDERSTANDINGS & GOALS

Enduring Understandings: Enduring understandings are statements summarizing important ideas and have lasting value beyond the classroom. They synthesize what students should understand – not just know.

- Good prenatal care is essential to the health, growth, and brain function of the developing baby during pregnancy.
- Breast feeding has shown to have a magnitude of benefits for the developing child.
- Premature babies require specialized care.
- Heredity, nutrition, health, experiences, and environment all play a role in a baby's growth and development.
- Attachment between infant and parent or another primary caregiver is essential for a baby's healthy emotional and social development.
- Infants have their own unique temperaments.
- Infants learn how to behave by watching and interacting with others.
- Infants learn by playing and exploring.

Essential Questions: Essential questions probe for deeper meaning and understanding while fostering the development of critical thinking and problem-solving skills. Example: Why is life-long learning important in the modern workplace?

- What constitutes good prenatal care?
- How is breastfeeding beneficial?
- What special care do premature babies require?
- What affects a baby's growth and development?
- What are the typical characteristics of an infant?
- How do infants learn and develop?
- How does harmful prenatal care affect the infant?

Knowledge from this Unit:

- Vocabulary Terms
- Importance of prenatal care
- Risks of premature birth
- Characteristics of newborns and infants
- Milestones of typical newborns and infants
- Basics of brain development
- Characteristics of an infant care program

Skills from this Unit:

- Identify and describe the signs of physical, emotional, social, intellectual, and moral development of the newborn and infant.
- Explain the relationship of nurturing to the growth and development of the newborn.
- Describe the influence of the family on the growth and development of the newborn.
- Identify strategies for optimizing the development of newborns and infants.
- Identify developmentally appropriate guidance techniques during the first year of life.
- Identify theories of psychosocial and intellectual development.
- Describe the influences of the family and society on the infant.
- Describe techniques that promote the health and safety of an infant.
- Plan activities and interactions that help infants to develop physically, intellectually, emotionally, and socially.



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☐ Pre-test
- ☒ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☒ Unit test
- ☒ Group project
- ☒ Individual project
- ☐ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☒ Self-check rubrics
 - ☐ Self-check during writing/planning process
 - ☒ Journal reflections on concepts, personal experiences and impact on one's life
 - ☒ Reflect on evaluations of work from teachers, business partners, and competition judges
 - ☐ Academic prompts
 - ☐ Practice quizzes/tests
- ☒ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☒ Observe students role playing
- ☐ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☐ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☒ Partner and small group discussions
 - ☒ Whole group discussions
 - ☒ Interaction with/feedback from community members/speakers and business partners
- ☐ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☐ Application of skills to real-life situations/scenarios
- ☐ Post-test

Attachments for Assessment:

[Theorist Quiz.doc](#)

Assessment(s) Description/Directions:

Many textbooks come with a test generator for assessments; ExamView Pro is one example.



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Identify and review the unit vocabulary.

Reflex

motor sequence

object permanence

temperament

attachment

separation anxiety

developmental milestones

stimulating environment

gross motor skills

fine motor skills

neuron

axon

myelin

dendrite

synapse

neurotransmitter

4. Write the word “baby” on the chalkboard. Have the students brainstorm a list of images or ideas that they associate with the word. Then ask them to think about the overall attitudes toward infancy that their responses suggest. (elements: 3a-e, 4a-f)
5. Ask students to write their impressions of newborns. They should describe what they think newborns look like, how newborns act, and what newborns can do. Have the students discuss their impressions in class. Collect the written work and return it to students after they study the chapter. Students can use it to compare to their more informed impressions of newborns. (elements: 3a)
6. Instruct students to write descriptions of a child’s physical development during the first year. How do heredity, nutrition, illness, and activity affect development? (elements 3a-e; 4a,c,d,e,f)
7. Bring to class an unusual or outdated item that most students will be unfamiliar with (or “invent” an item of your own). Ask students what they think the item is, what it’s for, and how it works. Then tell them to imagine the entire world is made up of such intriguing and mysterious objects. Tell them this is how an infant sees the world. (elements: 3a,b)
8. Get copies of developmental checklists that pediatricians use and share those with students. (elements: 3a,4a)
9. Have students create a pictorial chart showing the key physical developments of infancy. Students may use their own art work or cut out pictures from old magazines. (elements: 3a)

10. Have students make a large poster entitled “Infant Development We Can See.” The chart should have the headings *Age*, *Skeletal Growth*, and *Motor Skills*. Students should also list ages 3, 6, 9, and 12 months. As students study the unit, they should list the average length, average weight, and expected deciduous teeth for each growth period. To address motor skills, students should write phrases describing the expected head-to-foot and center-to-extremities developmental milestones. (element: 4a)
11. Show the Newborn/Infant Development PowerPoint. (elements: 3a,4a)
12. Critical thinking discussion: Ask students to think about the complete helplessness of an infant. Why is a sense of trust so important for an infant’s emotional development? What might cause an infant to lack trust in the environment? What problems might this lead to in later life? (element: 3d)
13. Have students play the part of infants representing each of the three temperament types. (elements: 3a,b)
14. Panel discussion: Invite several parents to discuss expressions of love between parents and infants. Parents should discuss ways they show love to their children as well as ways the infants show love to them. (elements: 3a-e; 4a,c,d,f)
15. Have students interview parents whose children were born twenty or more years ago. What ideas about infant development were current when their children were infants? Which of these ideas do the parents think are still valid? What might they do differently if they were parents of an infant today? (element 3e)
16. Have students bring in baby pictures of themselves. Teacher also participates. “Guess who the baby is” game. Variation: Guess who the baby is through an autobiography. (element: 3a)
17. Invite parents of infants to “Baby Day.” Usually there are a few faculty members that would love to participate. Prepare room appropriately and have a class period of questions/answers. Parents usually just love to talk and talk about their babies...but a prepared list of points to remember may be helpful. Ask parents to talk about: hardest thing about raising an infant, easiest, most rewarding, scariest, milestones, temperament, etc. (elements: 3b-d)
18. Instruct students to write a newspaper article on the difference between providing an enriched environment for babies and teaching babies directly. (element: 4d)
19. As an individual or small-group project, suggest that students make the materials for one or more “games,” such as a mobile, wind chime, face hoop, play quilt, or sound can. Students can then donate their projects, with instructions and safety rules, to an infant program, parent, or hospital. (elements: 3b-d)
20. Guest speakers: March of Dimes representative, pediatrician, midwife, neonatal nurse, LeLeche League representative, post partum doula, etc... (elements: 3a-e, 4a-f)
21. Students research games for infants to demonstrate for the class or in small groups. These games can also be incorporated into “Baby Day.” (elements: 3d-f)
22. www.promom.org Go to 101 benefits. Divide by small groups. Students illustrate the benefits of breastfeeding on poster board. At end of class, 101 benefits have been presented. (elements: 3b-d)

23. Make a batch of home made chocolate chip cookies and buy a package of store-bought cookies. Place on separate plates. Tell the students that you wanted them to have a treat b/f beginning today's topic. Tell them they may only have 1 cookie b/c you need the rest for the next class. However, have enough of each variety for every student in the class (or almost) to have one of them. Remarkably, every time, the home made cookies are wiped out, and the store-bought cookies are left. Give them a minute or two to enjoy then enter into a dialogue about how you are not surprised they chose the home made cookies....the fresh ingredients, the love, etc....Ask students why they wanted the home made...Tailor the conversation to help students see the connection with the treat to breastfeeding.(elements: 3b-d)
24. Show the Breast v. Bottle PowerPoint. (elements: 3b-d)
25. Discuss prenatal development and the importance of taking care of oneself during pregnancy. (elements: 3a-d, 4a-f)
26. Ask students to interview a pediatrician or pediatric nurse about the impact of prenatal care on a newborn's health. (elements: 3a-d, 4a-f)
27. Show the DVD "Cooing, Crying, Cuddling" and have students complete the worksheet. (elements: 3a,b,d; 4a,d,f)
28. Begin a chart called "Our Brains Are Wired." List *Newborns* as the stage of development and describe what parts of the brain are wired at birth. If needed, have students conduct Internet searches to help them complete the chart. (elements: 3a,b,d)
29. Have students create a model of the brain using modeling clay. Encourage students to distinguish appropriate parts of the brain by using different colored clay. (elements: 3a,d; 4a,d)
30. Help students visualize the developing brain power of infants with the use of a circuit and light bulbs. Demonstrate how closing the circuit allows the bulb to light up, and draw a comparison with the pathways between neurons in a baby's brain. (elements: 3a,d; 4a,d)
31. Show the Neuroscience PowerPoint and review using the Neuroscience Quiz Show. (elements: 3a,d;4a,d)
32. Show the Building Babies Brain PowerPoint. (elements 3a-d;4a,c-f)
33. Show the video "First Years Last Forever" and then have students complete the First Years Last Forever worksheet. (elements: 3a-d; 4a,c-f)
34. Show the "Begin with Love" video and have students take notes on the key components that are mentioned in the video. (elements: 3a-d; 4a,c-f)
35. Ask students to think about a moment in their own lives when they had to learn something new, starting with the simplest motions or elements and moving to more complex motions or strategies. Have students describe this memory in a personal narrative. (element: 3a)

36. Have groups of students brainstorm a list of motor skills. Then ask them to categorize the skills as either gross motor skills or fine motor skills in a two-column chart. (element: 3a)
37. Divide students into groups. Each group will conduct their own mini-debates. Half of each group should prepare arguments supporting the idea that “nature,” or heredity has more influence on the way an infant will grow and develop, and the other half should do the same with the “nurture” argument. After the mini-debates, ask the class to offer their opinions on the subject and to discuss which side was easier to defend and why. (elements: 3c, 4c)
38. Arrange students into small groups. Assign each group an infant age, such as one to two months, three to four months, and so on. Each group is responsible for finding out what safety concerns exist because of the infants’ motor skills at their particular age. Groups can prepare a “Safety First” skit that would teach parents and caregivers about the potential safety issues for their infants. Students should explore what parents and caregivers can do to avoid these safety hazards. (element: 4e)
39. Use the manikins from Realityworks to illustrate Shaken Baby Syndrome, a Drug Affected Baby and Fetal Alcohol Syndrome. (elements: 3e, 4e,f)
40. Have students work in groups of three and research one theory of development for the Theorist Project. Have one student create a PowerPoint, one student performs a dramatization of the theorist, and one student creates a poster. (element: 4b)
41. Have students complete the Theorist Quiz. (element: 4b)

Attachments for Learning Experiences:

[Newborn-Infant Development.ppt](#)

[Baby Day rubric.doc](#)

[Breast v bottle.ppt](#)

[cooing,crying,cuddling.doc](#)

[first last forever.doc](#)

[Neuroscience power point.ppt](#)

[Neuroscience quiz show.ppt](#)

[Building Baby's Brain.ppt](#)

[Theorist project rubric.doc](#)

[Theorist Project.doc](#)

Notes & Reflections:

The teacher may see that it is necessary to discuss prenatal development to show how a mother's behavior during pregnancy can affect the growth and development of the newborn.

Each teacher will find the best activities that work for her/him. The activities listed under Sequence of Instruction are not suggestions for an order in which to present them to the class. These are a variety of suggestions and not all activities may be used. Text readings, study guides, and supplemental lectures are not listed. It is recommended that every teacher use techniques and learning activities in each class that support multiple learning styles.



UNIT RESOURCES

Web Resources:

- www.promom.org

Materials & Equipment:

- “Cooing, Crying, Cuddling: Infant Brain Development” DVD, Ball State University, The Child Care Collection
- “The First Years Last Forever” video – I Am Your Child video series
- “Begin With Love” video, CIVITAS
- “The Miracle of Life” video
- Magazines
- Guest Speakers – March of Dimes representative, pediatrician, neonatal nurse, LeLeche League representative, post partum doula, etc.
- Cookies – homemade and store bought
- Shaken Baby Syndrome Simulator, Drug-Affected Demonstrator, and Fetal Alcohol Syndrome Manikin from Realityworks, Inc. 1-800-830-1416

Textbooks:

- *The Developing Child* 4, 6, 7, 8, 9
- *Foundations of Early Childhood Education* 11
- *The Child Care Professional*, 4, 25
- *Working With Young Children* 5, 29

Suggested Videos/Software for this Unit:

- “Learn the Signs. Act Early” CD, CDC, www.cdc.gov/actearly
- “Ages & Stages” MB&A Training on Demand CD, 877-655-7139
- “The Incredible Human Brain” video
- “The Secret Life of the Brain” PBS Home video, www.pbs.org
- “Building Brains: The Sooner, the Better” ABC news videos
- “The Brain: Effects of Childhood Trauma” video, Magna Systems 800-203-7060

- “7 Amazing Discoveries” Eric Jensen/Corwin Press 800-818-7243
- “Ready to Learn” video – I Am Your Child video series
- “Your Healthy Baby” video – I Am Your Child video series
- “I Am Your Child” ABC Distribution Company
- “The Fabulous FAS Quiz Show” video, March of Dimes
- “Cocaine’s Children” video, March of Dimes
- “Shaping Youngest Minds” video, Learning Seed
- “SIDS: Reducing the Risk” video, ChildSecure, LLC, <http://www.childsecure.com>
- “To Be A Father” DVD, Parents in Action For Children series
- “Stop Smoking Now” DVD, Parents in Action For Children series
- “A Life in the Making” video
- “Prenatal Development” video
- “Development & Discovery” video
- “Emotional Development of Children” video
- “Language Development” video, Magna Systems
- “Look! I’m Talking” video, Baby Senses Series

Professional Readings/Resources for Instructor:

<http://www.uen.org/Lessonplan/LPview?core=20>

What 21st Century Technology was used in this unit:

<input checked="" type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input checked="" type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input checked="" type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input checked="" type="checkbox"/>	Website		