

Biology Pacing Guide

Teachers of Biology must become familiar with and implement the NYS *Process Strands*: The process strands (problem solving, relationships, processes, mechanisms, models and applications of biological concepts). These process strands help students in attaining science literacy, generate explanations, exhibit creative problem solving, and make informed decisions on the living environment and scientific inquiry.

34.1, 34.2, 34.3, 34.4

Human Reproduction, Meiosis and Embryology is the 3rd of 7 units within the Biology course. Key Idea 4: The continuity of life is sustained through reproduction and development.

3 Weeks	Content Bands & Student Expectations	Performance Indicators – Major understandings	Essential question(s), Textbook connection, Suggested Labs/Activities	Vocabulary
Unit 3 Human Reproduction, Meiosis & Embryology	<p>Human Reproduction</p> <p>Reproductive Anatomy Students will be able to describe the structure and function of the male and female reproductive systems.</p> <p>Reproductive Processes Students will be able to explain the role of hormones in the reproductive process.</p> <p>Meiosis Students will be able to describe how haploid cells develop into mature gametes. Compare autosomes to sex chromosomes; body cells to sex cells; and mitosis to meiosis.</p> <p>Fetal Development Students will be able to explain how the embryo gets nourishment and how the mother and fetus affect each other's health.</p>	<p>P.I. 4.1</p> <p>4:4.1.a,c, e-h 1:1.2.a 4:2.1.e</p> <p>4:4.1.d</p>	<p>Essential Question: How do humans pass on their genetic information?</p> <p>Textbook Connection: Chapters 6.1, 6.2</p> <p>Suggested Labs/ Activities: Human Sex Cells Hormones in the Human Menstrual Cycle Modeling Meiosis Miracle of Life Video</p> <p>Textbook Connection: 34.1, 34.2, 34.3, 34.4</p>	<p>Reproductive system Ovum Ovary Uterus Estrogen Fallopian tube Testis Testosterone Ovulation Menstrual cycle Zygote STI Embryo Placenta Fetus Gamete Fertilization Meiosis Sperm</p>

Enduring Understanding: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science as it pertains to Biology.