Yeye’s Academy HS Biology w/Labs Syllabus

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| Instructor Mrs. Adia Shabazz Email I can be reached through direct message on fahodishule@gmail.com Class date/time Wednesday 12:30-2:00  Students should take advantage of additional support offered by our media specialist to complete weekly homework and work with each other. | Course overview Greetings All! This will be a biology class with labs. We will study both plant and animal life. This first semester we will:   * Introduce biology * Explore cells * Explore Inheritance * Explore the history of life   Science is so much fun and so interesting! Biology is connected to all that we know and experience as living beings. Biology shows us how we are truly part of the circle of life. Biology not only helps us to better understand ourselves, but also shows us the value we have in connecting with plants, animals and the natural world around us. Biology encourages us to be better stewards of all life. Required textBiology Exploring Life 2006th Edition by Neil A. Campbell (Author), Brad Williamson (Author), Robin J. Heyden (Author)  Course materials  Materials for labs/experiments will cost about 60.00 for the school year. Most of the materials we will use, you can find in your kitchen or grocery store. Supplies you can’t find in the grocery store will have live hyperlinks in the syllabus to help you secure what your student needs. Homework and grading policy I am grateful for the opportunity to partner with families in educating your students. All assignments will have a rubric for parents to utilize to determine grades for students’ portfolios/transcripts. There will be vocabulary assignments given almost every class. They will be checked for completion, and reviewed, if we have time, during class. Answer keys can be provided and used if we don’t have time to review the worksheets in class.  Late homework (classwork and lab reports) will only be accepted up until the next class period. If you are traveling or have a circumstance that will make it difficult for you to complete your assignment it needs to be communicated in advance. Please communicate with me (Mrs. Shabazz) and group mates ahead of time if prior commitments will stop you from turning in work on time. Grading Rubric **Categories and Criteria**   | **Criteria** | **Excellent (4)** | **Good (3)** | **Satisfactory (2)** | **Needs Improvement (1)** | **Unsatisfactory (0)** | **Total** | | --- | --- | --- | --- | --- | --- | --- | | **Vocabulary Worksheets** | Demonstrates thorough understanding of all vocabulary terms with accurate definitions and usage. | Shows a good understanding of most terms with minor errors in definitions or usage. | Basic understanding of terms; some errors in definitions or usage. | Limited understanding; several errors in definitions or usage. | Little to no understanding of terms; many errors in definitions or usage. | 5 pts | | **Experiments** | Thoroughly followed procedure; detailed, accurate results; insightful analysis and conclusions. | Followed procedure with minor deviations; accurate results; good analysis and conclusions. | Adequately followed procedure; results may be somewhat inconsistent; basic analysis. | Procedure not well followed; results inconsistent; analysis and conclusions are superficial. | Did not follow procedure; results are inaccurate; minimal or no analysis. | 5 pts | | **Participation** | Actively contributes to discussions; engages in activities; consistently prepared. | Contributes to discussions and activities; usually prepared. | Occasionally participates; sometimes prepared. | Rarely participates; often unprepared. | Does not participate; frequently unprepared. | 5 pts | | **Attendance** | Perfect or near-perfect attendance; consistently punctual. | Good attendance with minor absences or tardiness. | Acceptable attendance with occasional absences or tardiness. | Frequent absences or tardiness; impacts performance. | Poor attendance or frequent tardiness; significantly impacts performance. | 5 pts |   **Total Points: 20**  **Total multiplied by 5 equals 100%** |

# Course schedule (1st Semester)

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| Week | topic | Lab supplies |
| Session 1 | Scope Biology | \*Lab Report Guide |
| Session 2 | Science of Biology | Paper/plasic/glass cup, paper clip, ~100 pennies or pebbles, 2 ziploc bags, tape, marker, 2 leaves - 1 leaf dead/old and 1 leaf alive |
| Session 3 | Process of Science: Animal Behavior |  |
| Session 4 | Chemical Basis for Life | 2 types of antacid medication (tums, rolaids, milk of magnesia, pepto bismol, etc), Ziploc bag, Hammer or full can of soup/beans, Clear cups (glass or plastic) Marker, Tape, graduated cylinder, Water, Spoons, Pipette or Straw, \*[pH Paper](https://www.amazon.com/pH-1-14-Extensive-Storage-Testing-Monitoring/dp/B0811PYS6T/ref=sr_1_3?crid=1GVUP387OPSNO&keywords=ph+paper&qid=1656597547&sprefix=ph+paper%2Caps%2C122&sr=8-3), vinegar |
| Session 5 | Chemical Basis for Life |  |
| Session 6 | Molecules of Life |  |
| Session 7 | Lab - Enzymes | 2 cheesecloth squares or coffee filters, 2 funnels, 2 plastic cups, 2 spoons, kitchen scale (optional), unsweetened apple sauces, tape, marker, 2 graduated cylinders or tablespoons, pipette, [\*pectinase enzym](https://www.amazon.com/TAPCRAFT-Tapcraft-Pectic-Enzyme-1oz/dp/B07Z75H7QC?pd_rd_w=ExDH6&content-id=amzn1.sym.bc622850-a717-4d94-96c3-7cc183488298&pf_rd_p=bc622850-a717-4d94-96c3-7cc183488298&pf_rd_r=BR1F7HMX6FM9VDEMB5HH&pd_rd_wg=s9noK&pd_rd_r=e81fde71-6b3f-4938-9335-f29ee5ecd412&pd_rd_i=B07Z75H7QC&psc=1&ref_=pd_bap_d_rp_1_i)e, paper towels, stopwatch |
| Session 8 | Tour of the Cell | Student Teaching |
| Session 9 | Tour of the Cell | Student Teaching |
| Session 10 | Tour of the Cell | Student Teaching |
| Session 11 | Working Cell: Energy from Food | Student Teaching |
| Session 12 | Working Cell: Energy from Food | Student Teaching |
| Session 13 | Working Cell: Energy from Sunlight |  |
| Session 14 | Cellular Basis of Inheritance |  |
| Session 15 | Patterns of Inheritance | \*Alien Genotype Table |
| Session 16 | Lab - Genotype | \*[Alien Phenotype Table](https://drive.google.com/file/d/1R--sL7QUQjWGto4ndvKpB7u5nKgDatds/view?usp=sharing), construction paper different colors (orange and green must be included), scissors, tape, glue,markers, crayons, or coloring pens, pencil, two coins. |