

Syllabus

Anatomy & Physiology

Heritage Academy A University-Model School®

The mission of Heritage Academy, a Certified University-Model School®, is to partner with Christian parents to prepare college-worthy, character witnesses for Jesus Christ.

Heritage Academy juniors and seniors who have maintained a GPA of 3.0 may apply to receive dual credit for this course from Moberly Area Community college. The Corresponding Moberly Area Community College Course is *Biology 101: General Biology Lecture & Lab*, which generates 4 units of college credit that is directly transferable to the University of Missouri and fulfills the University's College Biology Requirement.

I. Course Purpose and Content

The overall purpose of this course is to refine skills in observation, recording, and drawing logical and useful conclusions from collected data. Successful students will:

- Review and apply previously presented concepts related to cell structure and function, identification and classification of living organisms, basic genetics, and cellular reproduction;
- Identify and describe the components of a native Missouri ecosystem, compare various theories regarding the origins and diversity of life on earth, describe the basic anatomy and function of selected plant and animal systems, and compare and contrast the basic structure and function of typical organisms from each of the five biological kingdoms.

Units that address to the following topics will comprise course content for the semester:

- Ecology
- Botany & Plant Taxonomy
- Cell Biology
- Advanced Genetics
- Origins
- Biodiversity
- Comparative Anatomy & Physiology

Pre-requisites: Students must be in eleventh or twelfth grade and have satisfactorily completed high-school-level biology and chemistry courses.

II. Worldview Integration

Heritage Academy is committed to teaching subjects in such a way that students develop a Biblical worldview out of which to think and act. The following are key essential truths which relate to the study of Advanced Biology: God created all things, living and nonliving, to work together for His purposes. The integration of form and function, and the integration of living organisms and non-living systems reflects His creativity and perfect design.

"But now ask the beasts, and let them teach you; And the birds of the heavens, and let them tell you. Or speak to the earth and let it teach you, And let the fish of the sea declare to you. Who among these does not know that the hand of the Lord has done this, In whose hand is the life of every living thing and the breath of all mankind?" Job 12:7-10

"Nature is God's workshop. The sky is His resumé. The universe is His calling card. You want to know who God is? See what He has done. You want to know His power? Take a look at His creation. Curious about His strength? Pay a visit to His home address: 1 Billion Starry Sky Avenue" (*The Great House of God*, Max Lucado).

III. Required Text & Supplies

Please reference *Required Text Book List* and *Course Supplies List* for the appropriate academic year to identify the textbooks and supplies students will need for this course. Both the Required Text Book List and Course Supplies List are accessible online.

IV. Course Guidelines/Student Responsibilities

A. Attendance

During on-campus class periods, we will focus on elements of the course that are difficult to complete in a home setting (e.g., experiments, demonstrations, and group discussions). Students are expected to attend class and contribute positively to the classroom environment. Attendance is imperative as concepts cannot be learned if a student is absent. Tardiness is disruptive to other class members. Please arrive on time and prepared. All absences and tardies are considered unexcused unless accompanied by a note from a parent or guardian. Please remember that three tardies generate one absence.

As communicated in Heritage Academy's Family Manual, a passing grade awarded at the end of the semester generally requires that a secondary student has attended at least forty-two class periods during the semester. Failure to meet this minimum attendance requirement may result in an F being awarded and recorded on the student's transcript.

Students are expected to be in attendance during all on-campus class periods. As communicated in Heritage Academy's Family Manual, a passing grade awarded at the end of the semester generally requires that a secondary student has attended at least forty-two class periods during the semester. Failure to meet this minimum attendance requirement may result in an F being awarded and recorded on the student's transcript.

B. Absences and Late Work

In the case of planned absence(s), homework that is due during the student's absence must be completed and submitted to the instructor in advance.

A student who is unexpectedly and unavoidably absent due to ill health must submit late assignments within two course periods after the student's return to school. **When an unexpected absence must occur, please be sure to notify the school office and the instructor of the students' absence as quickly as possible, preferably before the involved class occurs. This contact may occur by phone or by email.**

Late work that is submitted simply "late" will be graded and penalized with a **ten percent grade reduction for each course period that it is late**; homework will not be accepted more than three course periods (1 week) past its due date, unless previous arrangements between the teacher and the student's parent have been agreed to in light of peculiar circumstances that are occurring beyond the family's control.

If a student must be absent during a laboratory procedure, written work with a similar point value or an alternative procedure with similar point value will be assigned.

C. Student Conduct and Preparation for Learning

For the sake of promoting a safe and focused learning environment, the student is expected to do the following throughout the course of the semester:

- 1) Arrive on time to each class period with the appropriate class materials available for access (e.g., organized notebook with dividers and filed materials, paper, writing tools, texts, and other tools as directed)
- 2) Arrive prepared to submit completed at-home assignments at start of each class period.
- 3) Arrive ready to listen, learn, take notes, and participate in teacher-directed classroom discussions and activities.
- 4) Ask for clarification or further explanation when a concept or direction remains unclear.
- 5) Demonstrate a spirit of cooperation, kindness, and respect toward the teacher and fellow classmates, demonstrating respect to Heritage Academy's Code of Conduct.
- 6) Refrain from horseplay or irresponsible behavior, particularly during laboratory exercises. **Note: Students will only be warned once if their classroom behavior is irresponsible or distracting. They will be removed from the classroom, with a zero grade for the day, for the second infraction. Maintaining safety in the classroom - during lab exercises, especially - must be a priority for all.**
- 7) Help keep the classroom area clean and orderly.

- 8) Cooperate with the parent-educator and the Heritage Academy teacher to complete homework in a timely fashion
- 9) Communicate concerns regarding schoolwork to both the Heritage Academy teacher and the parent-educator, so that these concerns can be addressed quickly.
- 10) On the whole, conduct himself or herself in a manner that is worthy of Christ and reflects the life of the Holy Spirit in him/her: “. . . that you may live a life worthy of the Lord and may please Him in every way: bearing fruit in every good work, growing in the knowledge of God, being strengthened with all power according to His glorious might so that you may have great endurance and patience, and joyfully giving thanks to the Father, who has qualified you to share in the inheritance of the saints in the kingdom of light” (Colossians 1:12).

D. At-Home (Satellite Classroom) Investment

Daily home-assignments will be outlined on the weekly Home-Communication Sheet the student will receive each Monday. The student can expect to invest approximately 2.5 to 4 hours each week completing coursework at home in preparation for class periods.

Course assignments may include any of the following:

- **Reading**
- **Completing questions, problems from the text, or handouts given by the teacher in class.**
- **Memorization Work** (e.g. definitions, formulas, dates, scripture verses, etc.)
- **Lab Exercises:** preparing for experiments or finishing lab write-ups.

- **Maintenance of Course Binder:** The contents, divided by subject divider pages, should include weekly homework sheets, completed homework assignments, class notes, lab write-ups, and returned examinations. Students may choose to maintain a separate file at home which contains work from completed chapters. *They will need to keep completed work to prepare for the comprehensive semester finals.*
- **Writing:** All short essay assignments must be typed, double-spaced, in 12-point font, and include a full heading and title. Margins should be 1 inch.
- **Conducting Research /Completing Special Projects:** Students may be directed to research various topics throughout the semester for the purpose of presenting information or arguing a point. This may include web work. Plagiarism is never acceptable.
- **Dialog:** Student may be instructed to discuss and/or explore certain topics or concepts with a parent. These assignments will be given purposefully and should not be dismissed.
- **Preparation for Tests:** Students may be instructed to review notes, various texts, previously completed tests, scripture verses and/or to complete review questions and practice problem etc, in preparation for tests.
- **Other Assignments:** additional types of assignments may be given throughout the semester at the discretion of the instructor.

F. Assessments

- Laboratory exercises, in-class cooperative learning procedures, and assigned research activities.
- Written and laboratory practical examinations will be utilized.
- Unannounced quizzes may be utilized as needed.
- Comprehensive final exams will be given at the end of each semester, in keeping with Heritage Academy's Semester Exam Schedule

G. Grades

| Grade Apportionment | | Grading Scale | | | |
|---------------------|-----|----------------|--------------|--------------|-------------------|
| Labs/Homework | 40% | 100-95.... A | 86-83B | 76-73.... C | 69-60.... D |
| Tests | 45% | 94-90 A- | 82-80.... B- | 72-70.... C- | 59 or belowF |
| Semester Exam | 15% | 89-87 B+ | 79-77.... C+ | | |

The course grade the student is awarded at the end of the semester will indicate the grade that will also appear on the student's transcript. To receive high school credit for this class, the student must achieve a percentage grade of 70% or above, translating to a letter grade of C- or above and fulfill attendance requirements.

V. Parent Responsibilities

A. Embrace the University Model

University-Model Schooling at Heritage Academy is driven by two guiding principles:

- to preserve and strengthen God-ordained family relationships;
- to offer students the opportunity to achieve a high degree of academic excellence.

Heritage Academy operates as a University-Model School®, designed for families who want their students to flourish from a life anchored in the home yet still gain from the best aspects of traditional, classroom education. Courses offered at Heritage Academy occur every-other-day so that students may realize the benefits of qualified teachers and a focused learning community, yet continue to experience home as the primary, consistent base where parents remain their foremost guides for spiritual, social, academic, and character formation.

Parents, please consider ways you may maximize the benefits University-Model Schooling offers to your family. How can you as parents utilize the at-home study time this model provides to nurture deeper relationship and impart the faith, values, and life-patterns you desire your student to embrace?

B. Fulfill Parent Roles

Within the University-Model School®, **parents commit to fulfill a specified role related to each course** in which their student is enrolled, as prescribed by the course's description. Each role identifies specific responsibilities that the teacher relies on the parent to perform, thus facilitating effective home/school partnership whereby students are assured of receiving needed support. For this course, Heritage Academy has designated parents the role of **"Guide for Independent Study."**

This course mimics that of a junior college program, where independent study skills and disciplined planning for completing homework assignments are necessary. You, as parents, have the opportunity to monitor the independent schoolwork performed by your student, while there may still be occasional times that you are asked to provide particular guidance. Practically, this will require the parent to review the homework sheet several times a week, initial it if work has been done appropriately, and encourage the student to keep up with their homework. In addition, most chapter and unit tests will be completed at home under the parent educator's supervision.

Parents are also asked to fulfill the role of **"Project Assistant."** Parents may need to help their student by purchasing simple materials for laboratory exercises or organization and setup of experiments at home. Students will be working with a lab partner, so parents may need to provide opportunities for their student to meet with their partner for completion of projects outside of class meeting times.

C. Monitor Gradelink and View Seven-Week and Thirteen-Week Gradelink Reports

As your student earns grades for completed tests, quizzes, and various projects and homework assignments, these will be recorded on **Gradelink.com** for you to view at your convenience. My general goal will be to post grades online within a week of their being awarded.

In Gradelink, missing assignments will also be noted. Please take time to follow your student's progress on Gradelink so that you can quickly recognize and explore/address areas of patterns of difficulty or concern that may appear and affirm positive accomplishments.

Gradelink Reports, which will include parent-directed comments related to your student's behavior and progress in class, will be ready for parents to view at the seven-week and thirteen-week point in the semester.

Please contact the office if you have not received your Gradelink login information.

D. Attend Parent/Teacher Fellowship

I hope you will take time to come to Parent/Teacher Fellowship scheduled during the 7th week of each semester. This will give you and I brief opportunity to connect face-to-face and discuss your student's progress, making the most of the partnership that is so vital to students' success within the University Model[®].

VI. Contacting the Instructor

Teacher contact information will be provided on the weekly communication sheets that will be distributed in class; it may also be found in the school directory.