

# Science - Earth and Sky

2 Semesters, 3 options available

2019/2020



Unitas Honor Academy

*Nilil sine Deo*

## COURSE OVERVIEW

This course is split into two semesters- fall and spring. The fall semester will have student looking to the distant heavenly bodies as we *Explore the World of Astronomy*. In the spring semester, students will focus their studies back down to Earth as they pursue their course of choice- (1) *What's that Bird?* Or (2) *Earth Science*.

All of our science courses have some aspect of "hands-on" learning, projects, labs, etc.

*Students can register for the fall semester, spring semester, or both for a yearlong science class credit.*

## INSTRUCTOR

Mr. & Mrs. Hutchins

unitashonor@gmail.com

## ELIGIBLE STUDENTS

Targeted for grades 4th - 6th (3rd, 7th, 8th, & 9th welcomed)

## CLASS DATES & TIMES

**CLASS MEETS ON TUESDAYS from 2:30 - 4:00**

**Astronomy - Fall Semester Dates:** August 27; September 3, 10, 17, 24; October 15, 22, 29; November 5, 12, 19; December 3, 10, 17; January 7, 14

**Birds - Spring Semester Dates:** January 21, 28; February 4, 11, 18, 25; March 3, 10, 17, 24; April 14, 21, 28; May 5, 12 (19th is last day)

**Earth Science - Spring Semester Dates:** January 21, 28; February 4, 11, 18, 25; March 3, 10, 17, 24; April 14, 21, 28; May 5, 12 (19th is last day)

*Please note that all dates are subject to change as the instructor's circumstances might dictate (illness, emergencies, etc). Any classes cancelled will be made up. Classes may be made up by rescheduling a meeting time, providing a live-online meeting, providing a recorded video, emailed lesson plans for home study, etc. Every effort will be made to accomodate the majority of families when make-up methods are determined.*

## COURSE EXPECTATIONS

**In class:** Students will be expected to listen attentively and participate actively (read aloud, pose questions, genuinely discuss, answer questions, read in class, complete and present projects, etc). Students are expected to arrive to class on time and with all home assignments completed. The teacher will facilitate learning, but due to the nature of a once-per-week class the responsibility for

staying up-to-date with classwork and assignments ultimately falls to the student. If the student finds that he or she needs additional teacher assistance, a tutoring session should be scheduled.

**Home Assignments:** Given the once-a-week nature of this class, students must complete assigned work on time and come to class meetings fully prepared. Home assignments may include reading from the text, completing written work, making flash cards, taking pictures (specifically for Bird class), and starting and/or completing projects. Home assignments should not exceed 1 hour during the course of a week.

## **SEMESTER OVERVIEW**

### ***FALL SEMESTER- EXPLORING THE WORLD OF ASTRONOMY (Aug - Jan)***

From the rugged surface of the moon to the distant and mysterious constellations, this class provides students an exciting, educational, and edifying tour! They will learn about a blue moon, the 400-year storm on Jupiter, and what is meant by “the zone of life.” With this God-honoring class, students will also:

- Discover how to locate constellations like those near Orion the Hunter from season to season throughout the year
- Find out how to use the Sea of Crises as your guidepost for further explorations on the moon’s surface
- Investigate deep sky wonders, extrasolar planets, and beyond as the glorious vista of creation comes alive!

*Core texts (required for course): “Exploring the World of Astronomy?” by John Hudson Tiner  
Supplemental Material Provided by Instructor*

### ***SPRING SEMESTER OPTION 1- WHAT’S THAT BIRD? (Jan - May)***

Using various resources, this class will introduce beginning birders of all ages to the wonders of the avian world. With profiles of 30 North American birds detailing their color, size, habitat, and calls, students will learn to identify the birds in their neighborhood. As an introductory biology class, students will also study bird anatomy and behavior. Projects include creating a bird-watching journal, building a nesting box, photography, and of course BIRD WATCHING!

*Core texts (required for course): “What’s That Bird?” set by Memoria Press  
Supplemental Material Provided by Instructor*

### ***SPRING SEMESTER OPTION 2- EARTH SCIENCE (A blend of history and science) (Jan - May)***

Blending a creationism perspective of history with definitions of terms and identification of famous explorers, scientists, and events, this course gives students an excellent initial knowledge of people and places, preparing them to continue their studies in-depth. This course brings to life people like Marco Polo and Christopher Columbus, and gives students the opportunity to read history that hasn’t been altered or erased altogether.

*Core text (required for course): “Exploring Planet Earth” by John Hudson Tiner  
Supplemental Material Provided by Instructor*

## **STUDENT ASSESSMENT**

Unitas transcripts will be issued to all students- full and part time. Homeschool parents are the final authority, however, when it comes to the final grade that goes on their child’s final record. If there is an area of growth you are desiring for your child, please let us know ahead of time. This is one way we can partner together to help your child grow and develop, and will give us a meaningful starting point for the written reflection that accompanies each transcript.

Here are ways we assess different age groups. Percentage grades that UHA awards are solely based on assessments deemed “Quiz”, “Test”, “Rubric”.

<b>Science Assessments and Grades</b>	
<b><i>Upper Elementary &amp; Lower Middle</i></b>	<b><i>Upper Middle &amp; High School</i></b>
<p>Writing Assignments: Brief and Complete  <i>(Feedback given and corrections required. Final Drafts are archived in Portfolios)</i>  <b>Reporting Method: Portfolio</b></p>	<p>Writing Assignments: Brief and Complete  <i>(Feedback given and corrections required. Final Drafts are archived in Portfolios)</i>  <b>Reporting Method: Portfolio</b></p>
<p>Quizzes that Survey General Knowledge  <i>(Shorter and more frequent than Tests. Graded for Accuracy. Percentage Grade awarded)</i>  <b>Reporting Method: Transcript</b></p>	<p>Quizzes that Survey General Knowledge  <i>(Shorter and more frequent than Tests. Graded for Accuracy. Percentage Grade awarded)</i>  <b>Reporting Method: Transcript</b></p>
<p>Units Tests that Summarize Knowledge and Retention  <i>(Graded for Accuracy. Percentage Grade awarded)</i>  <b>Reporting Method: Transcript</b></p>	<p>Unit Tests that Summarize Knowledge and Retention  <i>(Graded for Accuracy. Percentage Grade awarded)</i>  <b>Reporting Method: Transcript</b></p>
<p>Projects: Completion  <i>(Feedback given. Reflections and Documentation required for Portfolios)</i>  <b>Reporting Method: Portfolio</b></p>	<p>Projects: Completion, Accuracy, Adherence to given Rubrics  <i>(Graded according to Rubric)</i>  <b>Reporting Method: Transcript &amp; Portfolio</b></p>
<p>“Lab” Notebooks: Complete and Legible  <i>(Feedback given. Reflections and Documentation required for Portfolios)</i>  <b>Reporting Method: Portfolio</b></p>	<p>“Lab” Notebooks: Complete, Legible, Attention to Detail, Follows Rubric  <i>(Graded according to Rubric)</i>  <b>Reporting Method: Transcript &amp; Portfolio</b></p>

*Nihil sine Deo... Nothing without God.*