# **Syllabus**

Texas Science - Grade 7 - Mrs. Dyer

Class Connect teacher: Mrs. Irish Dyer

Kmail: Teacher → (First name) Irish (Last name) Dyer

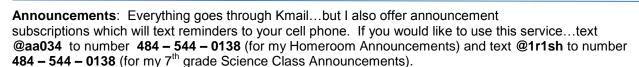
Phone number: 972 – 454 – 9187 Work email: idyer@k12.com

Work address: Texas Virtual Academy. 1955 Lakeway Drive, Suite 250B,

Lewisville, TX. 75057

Kmail is the preferred method of communication. Please leave a detailed message if calling. There is a 24 hour return contact policy, though I strive for

sooner. Thank you.



Skype Name: irish.dyer

Skype open office hours: Fridays → 9:00am – 10:00am

I can be available for a class connect, phone, or skype meeting during other times (including weekends occasionally) with advanced scheduling and confirmation.

AIP Class (7<sup>th</sup> grade homeroom): Wednesdays → 1:00pm – 3:00pm CST.

1:00pm – 2:00pm is Math AIP Class time. 2:00pm – 3:00pm is Reading AIP Class time. Attendance is mandatory for students that have this listed on their Class Connect schedule.

Class Connect Times: 7<sup>th</sup> grade Science: Thursdays → 12:00pm – 1:00pm CST.

The Class Connect Link is open from 12:00 – 1:00 CST. The first 5 minutes is open room chat time. Please come back after 3pm CST to view the recording, if you miss class or have technical issues and cannot get in. Students are expected to be in the room by 12:00 and stay until 1:00. Thank you!

Study Hall hours: Fridays → 10:00am – 11:00am

Study Hall is an open time for my homeroom students to come into my class connect classroom and ask for help on any subjects. The link for this can be found listed in the class connect schedules for my homeroom students.

6th - 8th grade website: http://k12texas6-8.weebly.com/

This is a website resource for 6<sup>th</sup> – 8<sup>th</sup> graders, learning coaches, and anyone else that would like to use it! Please let me know if you have any suggestions, input, etc...for this. Thank you!

Science Department website: http://k12texasscience.weebly.com

This website is for all science students...regardless of the grade level, learning coaches, and anyone else that would like to use it! Please let me know if you have any suggestions, input, etc...for this. Thank you!



## School Resources website: <a href="http://k12texas.weebly.com">http://k12texas.weebly.com</a>

This website is for all students...regardless of the grade level, learning coaches, and anyone else that would like to use it! Please let me know if you have any suggestions, input, etc...for this. Thank you!

## Please kmail and let me know if any of this information is unclear. Thank you!

<u>Course Description</u>: In 7<sup>th</sup> grade, science class consists of exploring the following strands from the scientific viewpoint: (A) Scientific investigation and reasoning. (B) Matter and energy. (C) Force, motion, and energy. (D) Earth and space. (E) Organisms and environments.

For a full detailed description, see this link for the 6<sup>th</sup> – 8<sup>th</sup> grade Texas Science Expectations: Texas Essential Knowledge and Skills for Science

The goal of this online course is to sufficiently cover these strands, preparing the student for 8<sup>th</sup> grade science.

**<u>Prerequisite Requirements</u>**: Course completion or grade placement.

**Online Importance:** Most lesson content is delivered online. Students are expected to complete:

- 3% a week of their OLS...in each enrolled course.
- A monthly assigned work sample submission.
- Completion of their grade level Study Island by the end of the school year.

\*\*\*Please contact the homeroom teacher immediately if you are having difficulties with any of these requirements, ASAP. Arrangements for accommodations are determined on a case-by-case basis. Supportive documentation (such as Dr. notes, if possible) are most helpful in these situations.\*\*\*

Monitoring Student Progress: Each science lesson concludes with an online or offline assessment. Each unit includes a unit review and assessment delivered either online or offline. Each semester concludes with a comprehensive semester review and assessment. Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments.

<u>Schedule for Monitoring Student Progress</u>: Student progress is monitored by both the homeroom teacher and learning coach. Online meetings with the homeroom teacher and learning coach are scheduled during Data Conferences at the end of each quarter. Concerns in between these times can be addressed via kmail, phone, or scheduled class connect meetings.

**Grading policy:** Classes follow the school's grading and attendance policies outlined in the handbook. Grades consist of 40% OLS mastery (3% a week), 20% work samples, 20% attendance to assigned class connect sessions, & 20% benchmark / STAAR / or Scantron testing.

# Required Instructional Materials: Materials K<sup>12</sup> provides:

- Online lessons and assessments: <u>K 12 OLS (On Line School)</u>, <u>Study Island</u>, <u>iStation</u>, <u>Think</u> <u>Through Math</u>, & <u>Scantron Test Site</u>
- Printed student and teacher guides
- Most experiments use commonly available materials. Specialized scientific materials (such as a test tube, bar magnets, or graduated cylinders) are provided by K<sup>12</sup>.

- In-person State testing scheduled through the <u>Testing Nirvana site.</u>
- Access to grades / progress / individual learning plans through TXVA Grades.

#### **Optional Material:**

- Kindle. Has free textbooks for students that are either struggling and could use extra assistance, or are loving the material and would like to read on it more. You do not have to own a Kindle to read Kindle material. You can download a free Kindle app for your computer. Just click on the previous link. Some science suggestions for this app are (all of these books are free to download):
  - o Earth Science Honors for Middle School
  - o Life Science for Middle School
  - Earth Science for Middle School
- Dr. Art's Guide to Science by Art Sussman, Ph.D. <u>Available here on Amazon</u> or at your local public library. Completely optional, but highly recommended by Mrs. Dyer to supplement middle school science education.
- Enriching videos located in many places online or at your local public library's reference video section...including <u>"Through the Wormhole" with Morgan Freeman</u> and <u>"Bill Nye the Science Guy" with Bill Nye.</u>
- Supportive websites for tutorials & enrichment, including: <u>Study Jams</u>, <u>Khan Academy</u>, <u>Online Science Games</u>, & the <u>K12 Texas Science Department website</u>.

### Technical Requirements can be found at: K12 Technical FAQs

<u>Technical support:</u> You should not be having trouble with lessons or kmail. If, for some reason you cannot access these through your computer, please call technical support at <u>1-866-512-2273</u>. Also, contact my phone or email to let me know if you will be delayed in any assignments so we can make arrangements, if necessary. Lastly, always call your homeroom teacher and let them know if you are experiencing technical difficulties that are delaying your online progress.

\*\*\*PLEASE NOTE\*\*\* It is school policy that technical issues should not be a factor in delaying school progress. Please have a back-up plan, in case of technical difficulties at home. A few suggestions: computer labs at your local public library, other computers in the home, neighbor or friend with computer access, or using the free Wi-Fi located at many public places (such as Barnes & Nobles bookstore and Starbucks).

<u>Netigutte (online etiquette):</u> I will expect students to participate in class connects when directed to do so. Be respectful and courteous to all students involved in discussion boards and the virtual classroom. Foul or abusive language will <u>NOT BE TOLERATED</u>! Serious consequences will result should any protocol be violated in the discussions. Students can also be removed from class connects without credit of attendance for not participating as well. You don't want to risk your grade and course enrollment over a few misspoken words, so...THINK before you type...and remember to participate.

<u>Units</u>: The following is a brief description of each <u>unit</u>, pacing calendar to know when you should start and finish each unit, and suggested Study Island assignments that correlate with the units.

(Our first unit, we will be skipping ahead): Unit 12: Science Investigation Summary September 15<sup>th</sup> – September 26<sup>th</sup> (Study Island \*1.a. lesson 2\*, \*1.b. lesson 4\*, \*1.c. lesson 6\*, \*1.d. lesson 8\*)

How did life spring from ancient earth? What gives plants their bright green color? What is the complete genetic code for a human? Scientists figure out all these things by investigating the world around them.

They are never satisfied with the answer, "We'll never know." Scientists work hard to learn all they can about our world. In this unit, you will become a scientist and carry out your own scientific investigation.

Unit 1: Introduction to Physical Science Summary: September 29<sup>th</sup> – October 3<sup>rd</sup>.

What do you see around you? Probably your computer, a lamp, a desk, and a chair. How can you describe them? What are they made of? For about 200 years, we have known that all matter is made of atoms. That means that the computer, lamp, desk, and chair are made of atoms. In order to determine what atoms are made of, scientists do experiments. From the experiments, scientists construct descriptions, or models, of what atoms are like and use the models to predict the behavior of atoms. You will explore all that and more in this unit.

Unit 2: Energy Summary: October 6<sup>th</sup> – 17<sup>th</sup> (Study Island 3.a., end of unit)

Have you ever watched or experienced the motion of a roller coaster? Going up the steep hills, it slows down. Rolling down the big drops, it speeds up. What accounts for this type of motion? The answer is the roller coaster's energy and how it changes from the energy of its height to the energy of its motion. Throughout the ride, the roller coaster experiences the effects of how its energy changes from one form to another. In this unit, you will explore what energy is and what it does.

<u>Unit 4:</u> Air, Weather, and Climate Summary: October 27<sup>th</sup> – 31<sup>st</sup> (Study Island 4.a. to end of unit) Have you ever noticed how much everyday life is affected by the weather? Rain and sunshine can affect our moods. Snow and ice can cause cities to shut down. Worse yet – humidity can be disastrous for our hair! In this unit, you will explore the many factors involved in producing everyday weather. Learn how the atmosphere provides protection and explore climates all over the world

Unit 3: Energy and Earth's Resources Summary: November 3<sup>rd</sup> – 14<sup>th</sup>

You may not think about it that much, but you use energy all day, every day. You need energy to read this page. The machines you use need energy, too. Right now, the computer screen you are looking at is being powered by energy. Think about how much energy you use in a day, and you are just one person! There are over six billion people in the world who all use and depend on energy. Where does this energy come from, and how do we use it? This unit will help you explore, understand, and appreciate energy resources.

<u>Unit Review:</u> <u>Units 1 – 3 Review</u> November 24<sup>th</sup> – 28<sup>th</sup>

Unit 4: Air, Weather, and Climate Summary: December 1<sup>st</sup> – 5<sup>th</sup>. (Study Island 4.a. to end of unit)

Have you ever noticed how much everyday life is affected by the weather? Rain and sunshine can affect our moods. Snow and ice can cause cities to shut down. Worse yet – humidity can be disastrous for our hair! In this unit, you will explore the many factors involved in producing everyday weather. Learn how the atmosphere provides protection and explore climates all over the world

<u>Unit 5:</u> <u>Earth and Its Moon Summary:</u> December 8<sup>th</sup> – 12<sup>th</sup> . (Study Island 4.b. end of unit)

Getting smarter means discovering more and more about what's around you. Babies are only aware of their cribs, young people are aware of their immediate surroundings and adults know more about the world. In this unit you will attempt to understand your place in the entire universe.

Unit Review: Units 1 - 5 Review December 15th - 19th

Unit 7: Organisms on Earth Summary: January 5<sup>th</sup> – January 23<sup>rd</sup> (Study Island 5.e. end of unit)

From giant redwoods to tiny algae, and from lumbering elephants to "no-see-'em" gnats, the diversity of life on earth delights, startles, and amazes. But all living things share some common characteristics. What are the characteristics of life? What is the chemical basis for life? What molecules support life? In this course you'll explore these questions and more.

Unit Review: Units 1 - 7 Review January 26<sup>th</sup> - 30<sup>th</sup>

<u>Unit 8:</u> <u>Living Systems Summary</u> February 2<sup>nd</sup> – 27<sup>th</sup> . (Study Island \*5.a. lesson 1\*, \*2.b lesson 6\*, \*5.b. lesson 8\*, \*5.d. lesson 12\*)

Organisms must meet many challenges to survive. The systems in multicellular organisms are like the different parts of a computer. Just as all the parts of a computer must function individually so that the computer will work, all the systems in an organism work together in a coordinated manner to keep the organism alive. What are these systems? How are they related? This unit will explore living systems and how they function.

<u>Unit 9:</u> Interdependence of Life Summary: March 9<sup>th</sup> – 13<sup>th</sup> . (Study Island \*5.c. lesson 3\*, \*5.f. lesson 6\*, \*2.a. lesson 9\*, \*5.g. lesson 16\*)

Look at everything in this aquarium. How do you think each of the organisms in the aquarium survives? If you were to draw a diagram of the interactions that take place in an aquarium, you would see a complex series of relationships. In the living world, no organism can survive by itself. Living things depend on other organisms and their environment to supply them with their needs.

Unit Review: Units 1 - 8 Review March 23rd - 27th

<u>Unit 9:</u> Interdependence of Life Summary: April 6<sup>th</sup> - 17<sup>th</sup> (Study Island \*5.c. lesson 3\*, \*5.f. lesson 6\*, \*2.a. lesson 9\*, \*5.g. lesson 16\*)

Look at everything in this aquarium. How do you think each of the organisms in the aquarium survives? If you were to draw a diagram of the interactions that take place in an aquarium, you would see a complex series of relationships. In the living world, no organism can survive by itself. Living things depend on other organisms and their environment to supply them with their needs.

Unit 10: Genetics Summary & Reteach Time: April 27<sup>th</sup> – May 1<sup>st</sup>.

Individuals that reproduce sexually have many characteristics that make them different from each other. In this unit, you will learn about the mechanisms responsible for these differences.

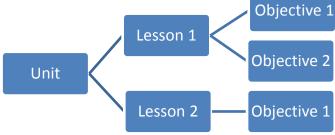
Unit 11: Semester 2 Review: May 18<sup>th</sup> – 22<sup>nd</sup>.

Unit Review: Yearly Review & Final Exam: May 25<sup>th</sup> – 29<sup>th</sup>

Objectives: Each unit has multiple lessons to master. Each lesson has multiple objectives. These objectives can be located at the beginning of each lesson in the OLS, or found by going \*Curriculum\* → \*Science\* → TX Science 7\* → choose a unit, then click on the green tab inside the main screen that says \*Objectives\*. The objectives will be listed under the lesson they are found. You can follow these steps for any online course you'd like to see the objectives for and can be quite useful when needing to understand specifically what

a student is supposed to be learning during a specific lesson.

(Please see the following model for a visual representation of this) →



Please do not hesitate to contact me if you have any questions! I'm here to help!

Sincerely,

Auch Dyer