



# Odyssey Charter School

1350 Wyoming Drive S.E. • Palm Bay, Florida 32909 • 321-345-4117

## NOV / DEC 2017 NEWSLETTER

*"Committed to academic excellence and the education of the whole child"*

### OUR MISSION FOR EVERY CHILD

The mission of Odyssey Charter School is to work in partnership with the family and community, with the aim of helping each child reach their full potential in all areas of life. We seek to educate the whole child with the understanding that each person must achieve a balance of intellectual, emotional, physical, spiritual and social skills as a foundation for life.

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### SCHOOL-BASED LEADERSHIP TEAM

Ms. Constance Ortiz

**Founder**

Monica Knight, PhD

**Principal/Site Administrator**

Dr. Rose Harrison

**Curriculum and Instruction Manager**

Austin Reynolds

**Dean of Students**

Sean Dillon

**6th Grade Dean of Curriculum**

Marisa Moore

**6th Grade Dean of Students**

Paul Galloway

**Athletic Director**

### Note from Dr. Knight:

Dear Odyssey Charter Jr/Sr High Titans and Titan families,

Welcome to another amazing year for the Odyssey family. Odyssey Charter Jr/Sr High School has grown 250 students this year and we added the 6th grade to our middle school and 12th grade to our high school. With this growth, we have added some innovative programs like Engineering 3, Digital Art and Design, Gaming and Simulation 3, Marching Band, Musical Theatre, Anthropology, and numerous AP, Honors, and dual enrollment opportunities. We have also added new activities/clubs, like Chess, Big Bro/Sis Mentoring of OPA students, Anime Ultimate Frisbee, Odyssey of the Mind, and more. We hope to start a Model UN Team in the spring. Even though these extra-curricular activities have been added, we remain committed to academics first and foremost.

As a high-performing, college-prep school focused on academic excellence, it is an expectation that students attend tutoring before school and on Saturdays as often as possible. In some cases, students are required to attend based on their performance levels. Teachers at Odyssey strive to meet the needs of the students by building exciting and rigorous lessons and students are expected to maintain notebooks for their courses, take notes in class, participate in daily lessons through discussion and activity, complete required class and homework, study at school and home to prepare for tests/quizzes, and complete projects, labs and other activities to demonstrate their learning. In addition, students in grades 6-8 should be working on 45 minutes of Reading and Mathematics each week at home on iReady, a new diagnostic tool to help students with core classes

We would appreciate your support in helping our students meet our high expectations for student performance. Please also remember to check your child's Edline grades and ask for a parent conference or communication if you have any questions. Together, we can ensure that all Odyssey students reach their full potential and Odyssey schools continue to outperform surrounding elementary, middle, and high schools.

It is an honor to serve your students and your family. If you have any questions, need assistance contacting a teacher, or have an idea how to engage families more in our school, please call me directly at 321-446-6659.

Monica Knight, Ph.D.  
Principal/Site Administrator

# Science and STEAM Departments

Hollis Hoier, Science-STEAM Department Chair

## Research:

The Introduction to Research class for middle school students is learning the basic components of the science research method steps. Initially, these students are learning the basics of technical writing as a process of informational technology, using flash drives, their email and student Odyssey accounts to capture and retain each phase of scientific reporting. The high school, or Senior Research (9-12), students are completing and submitting their research plans describing the purpose, research questions and experimental design components of their upcoming research experiments.

## Biotechnology:

Currently, the Introduction to Biotechnology students are learning the cellular biology and chemistry of life basic concepts required for understanding the subcellular/ molecular world of biotechnology. The Biotech 1 class is currently working on laboratory math skills needed for making biotechnology solutions and understanding how to do procedures requiring proportionality/ratio and concentration problems. These skills will be put to the test in a series of upcoming solutions labs using volumetric measuring equipment from micropipettes to graduated cylinders.

## Anatomy & Physiology:

The A & P students are quickly moving through the anatomy overview and body navigation terms as well the chemistry of life topics. We are about to launch into a week of using molecular model kits constructing simple organic compounds. From there, we will be moving into the study of basic body systems starting with cells, specific tissues and membranes, the skin and the skeletal system. A STEAM connection will include the basic skeletal muscles and their functions as they relate to the mechanics of yoga and other working body poses and movements.

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**Dr. Keith Herold**

## Marine Science:

We are analyzing water chemistry of both fresh and marine systems in the laboratory: chemical testing for carbon dioxide, ammonia-nitrogen, nitrates, and oxygen concentration. Prelab discussions about how estuary systems affect marine organisms by washing down river nitrogen compounds that create blooms of algae and other phytoplankton; ocean water, pond water, tap-water, aquaponics water are being tested.

We also just finished a unit about migration patterns and how they are monitored. This includes satellite sensor systems and terminology. Along with migrations, we learned some basic external nomenclature of fins.

Before learning about migration, we covered Oceanographically, which includes learning about the areas of the ocean floor and intertidal areas like the Plate Tectonics theory; the formation of the oceans, names, tides, currents of the world and some marine ecosystems.

## \*Biology1:

Currently, we have a molecular molecule building activity stemming out of our recent study on cellular respiration. Students assemble a glucose chain and ring structures, pyruvic acid, methanol, ethanol, octane, and decanol with a molecular class set. As stated, we recently finished cellular respiration of gaining energy out of food (glucose) in both aerobic and anaerobic fermentation: Krebs cycle, glycolysis and electron transport mechanisms studied. Prior to this, photosynthesis was covered including the Calvin cycle and the complete trail of processes a plant goes through to make oxygen. At the beginning of the school year, we studied the Nature of Science: "what is science and the scientific method?" We used the scientific method with cell structures and organelles in eukaryotic and prokaryotic cells. A protozoan laboratory was given with student made cultures of multiple types of microscopic micro-organisms; we also learned about the parts and use of the compound microscope.

• **Biology is an End of Course (EOC) tested class (testing commences May 2018) and is REQUIRED for graduation from a Florida high school.** PLEASE help your student with notebook organization, homework assignments, and test preparation (which is ongoing).



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**Nicole Hoier, Ed.S**

## Science, Sixth Grade:

Sixth grade scientists are learning all about systems, whether they are natural or man-made. First, however we must think like a scientist, so through observation students are learning to interpret quantitative and qualitative data. Math is found in everything, so student teams have researched the importance of Math in Science, and then presented team findings to their classmates via Microsoft PowerPoint, through drawings and lists in addition to speaking from a script! Everyone has been amazed at how much information they found and how mathematics really is responsible for the tools and conveniences we all enjoy today! Each sixth grader is anxiously waiting for his or her chance to earn a spot on both Science and Engineering field trips before the winter holiday, these trips are as follows:

1. Barrier Island Center (Melbourne Beach (November 2nd, November 3rd )FREE
2. Kennedy Space Center Visitor Center (Engineering Design Competition) 12/5, 12/11, \$7 per person



Elizabeth Guslawski

## Science, 7th Grade:

Students are describing, and analyzing the rock cycle to identify patterns as they relate to surface events and subsurface events. As a prerequisite, students needed to be able to explain convection in the mantle, and the relationships between density, heat and pressure. We are currently creating in-depth flow charts of the rock cycle to show the stages of the rock, and how the rock changes from one type to another. Students will eventually be able to determine the stage of a rock by the observable characteristics each of the physical rocks studied in class possess.

Jessica Cole

## Science, 8th Grade:

In 8th grade science, we have just finished learning about The Periodic Table. We talked about Dimitri Mendeleev and how he arranged the Periodic Table not only by increasing atomic mass, but also by the properties of the elements. Before this we discussed chemical and physical properties and worked on calculations for density, mass, and volume. Eventually, with this information, students should be able to observe the physical properties of an object, use calculations, and also use other chemical properties to determine the object's substance.

Botany/STEM Science: In Botany, we have learned about cells and what cells are made of. We also covered a few of the processes that cells perform and the hierarchy of organisms from the cellular level all the way up to the organism. We studied Darwin's Theory of Evolution and The Endosymbiosis Theory and hypothesized where we believe that plants evolved from and why. We also covered the types of plant tissue and their functions. We are now moving on to the parts of plants and flowers in order to begin learning about photosynthesis as a process, how photosynthesis is completed, and what the products and reactants are in photosynthesis. The students have been planting seeds on the farm and learning about nutrients required for plants to grow.

Mr. Plaza

## Chemistry:

Currently, the chemistry students are learning how to do electronic configurations. In the previous couple of weeks, all the students learned and practice how to form compounds, either ionic or covalent. If everything is made out of elements the different substances are made from compounds. Students are treating elements like people; this helps them understand behaviors, properties (characteristics) and trends. With the use of technology learning tools, like Plickers and Edpuzzle, they are reinforcing what they learn in the classroom. Then, each student is going to teach the class using a PowerPoint presentation about a different element, this allows them to learn from the teacher, develop research practices, and teach each other. After these lessons, we will be ready for the chemistry laboratory.

Dr. Grimaldi

## Physics:

Students have been working diligently on mechanics and kinematics as the subject matter is turning to the mathematical construct of radiation... We are learning to transfer the associated math into Excel spreadsheets. Much cross-curricular education is taking place as the students seem challenged, yet academically entertained.

## Intro to Engineering Design:

Students are continuing to hone their skills in the technical drawing section. We are drawing one and two point perspective sketches as well as isometric sketches. The emphasis is shifting towards measurement and statistics as these tools will be needed to construct our cube puzzles slated for the end of October.

## Aerospace Engineering:

Students have learned about the history of flight, physics of flight and navigation techniques. We are soon to delve into topics such as jet engine types and performance, and pros and effective wing design.



## Globally Local Partnerships: Brazil, FIT, and Odyssey Charter Jr. / Sr. High Students

Our OCS Jr. / Sr. High STEAM & Florida Institute of Technology (FIT) partnership is really rolling! On October 6, Ms. Hollis Hoier, OCS Science-STEAM Department chairperson, and her Biotechnology students put together a meet up with a group of Brazilian students connected via Brazil Florida Chamber of Commerce <http://www.brazilflorida.org/> and coordinator Jefferson D. Michaelis.

This is the first of two visits happening during the current school year. During these partnerships, 14 visiting high school science students are taught basic Biotechnology laboratory skills while investigating Indian River Lagoon water samples. While our OCS Jr. / Sr. High science students taught each of the three lab station activities, the Brazilian students immersed in science inquiry discussing the hands-on science explorations as each station group got to know each other.

As a yearbook reporter on assignment covering this international event in learning adventures, I was able to step in and take pictures while another representative, Tyler Centeio-Borde, conducted the interviews. Before I walked into the lab, I had doubts on how well the event would actually turn out. But, as soon as I opened the lab door, I was positively astounded! Ms. Hoier was standing off to the side talking to one of the Brazilian representatives and I watched as her students took charge of the entire situation. While moving about and talking to the students and Brazilian representatives that oversaw the event, I was happy to discover that the whole event was run by my fellow Odyssey peers. Each OCS Jr. / Sr. High student team (consisting of 3-4 students) was teaching a lab station to a small group of the Brazilian students. Every single OCS Jr. / Sr. High presenter was explaining and demonstrating with amazing confidence as the visiting students looked on and participated with intense interest. One of the student leaders, Jessica Woolery, a fellow senior, stated that it was a fun, challenging experience to create global comradery using science – Brazil and Palm Bay seemed like neighboring towns, and FIT our community for like-minded learning. She also said that she looks forward to the next event and hopes she can learn even more from these types of global/ STEAM integrated partnerships. As an active member of Odyssey Charter School Jr. / Sr. High, I am happy to see the school growing and evolving for the better. I hope that this kind of experience continues to expand into other subject areas. Perhaps there will be even larger events that in turn will help both Odyssey and other schools around the world feel closer together!

- Josh Christianson  
Senior, Odyssey Charter Jr. / Sr. High School

## Mathematics Department

The Junior/Senior High School Math department is excited and prepared to begin another successful year with their students at OCS! We are pleased to have four new teachers in our department this year: Ms. Dorette Thompson teaching 7th grade; Ms. Rachel Eisenhauer teaching 8th grade; Ms. Elizabeth Zimmer teaching Intensive Math with co-teacher, Mr. Norman Rodham

We also welcome back: Mrs. Kathy Jacobs teaching Geometry and Geometry Honors, Mrs. Audrey Padilla teaching Algebra and Algebra Honors, Mrs. Courtney Harris (FKA: Courtney Williams) teaching Algebra II, Trigonometry, and AP Statistics.

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## Go MathemaTITANS!

The math department teachers will all be requiring that each student create and maintain an "Interactive Notebook," which contains notes, graphic organizers, foldables, etc. as part of their grade. Students in grades 7 through 9 will be using i-Ready (an online program) as a major tool to track student performance learning the Florida State Standards. i-Ready provides individualized online instruction targeted to each student's needs. Students in grades 10-12 will be using Study Island (another online program) as a tool for instruction and practice, in addition to college and career ready math skill-sets. Study Island is an internet-based computer program where students learn and practice the skills necessary to be successful in the course. All students are expected to work on i-Ready or Study Island at home as part of their grade on a weekly basis. i-Ready and Study Island are both major tools to help students master the state standards in preparation for our Florida State Assessments (grades 7-8 FSA's) and End of Course Exams (Algebra and Geometry EOC's), which will take place at the end of the year, around early May.

Parents can help their students master these standards by taking an active role in monitoring their progress on i-Ready or Study Island. Please remind your students to practice using the program weekly, ask questions regularly about their progress, and have them physically show you the program to demonstrate their mastery levels of each practiced skill. Mastery of each objective is continuously averaged as the student practices, and indicated as a percentage. Pay special attention to the percentages your student achieves for each practiced objective. If students are struggling with a particular objective or perform below a 70%, there are lessons embedded in the program as well as Khan Academy video tutorials to help them increase their level of mastery. Students are expected to review these embedded lessons and use the videos as remediation, and then continue to practice the objective until they reach their goal. If students continue to struggle with the objectives after reviewing the lessons, morning tutoring is available every day in the Math department (classroom varies) from 8:30am to 8:55am. This tutoring program is also available for homework help. If you have any questions or concerns, always feel free to contact your child's math teacher by e-mail or phone.

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## Social Sciences:

**Chief Cuddeback**

### Civics:

Citizen Titans lead the way! As each day passes in 7th grade Civics, students take charge of the learning environment. Recently, natural leaders emerged while engaged in a timeline chart activity. Student leaders steered the class through Enlightenment philosophers and their theories on government to the writing of the Declaration of Independence and the Constitution of the United States of America. The Civics classroom encourages and fosters students to develop a depth of knowledge on subjects that influence their daily lives. Current events are included in lessons developing individual understanding of difficult topics in today's political and social issues. The cooperative, student-led learning environment in Civics allows students to personally grow their knowledge through the use of fact-based information.

Civics class is fully automated this year. Students use a variety of computer applications to learn the curriculum while Chief reinforces the material through classroom instruction and activities. The use of automation during the day is essential. Students take their state standardized exams on computers and using technology today should be as transparent as paper and pencil. Using technology has enhanced student understanding and depth of knowledge as evidence by their grades. It is without doubt the coolest class in school.



**Ms. Warren**

## Digital Art:

We created GIF animations, recolored black and white photographs, created movie posters, and perspective drawings of a city.



## Anthropology:

Students are collaborating on group projects about primatology.

## Painting:

We are studying fauvism and creating expressive self-portraits using acrylics.

## Junior High 2D Studio Art:

We are practicing observational drawing skills in handmade visual journals and creating mixed media self-portraits.



**Mr. Hoffman**

## Orchestra:

We are practicing to perform in our annual winter concert. We have chosen to perform Leonard Cohen's, Hallelujah (one of Ms. Constance's favorite pieces), Carol of the Bells, The Little Drummer Boy and Honor and Glory, a song which honors the first responders during our recent hurricane catastrophes.

## Choir:

Our Choir is preparing to perform Hallelujah and Carol of the Bells for our winter concert. The choir is diligently practicing for our spring musical, The Music Man. We are also preparing to be judged at Brevard's Musical Performance Assessment. We are planning to attend a performance of The Music Man at the Titusville Playhouse.

## Musical Theater:

The musical theater group is hard at work on learning their roles in our spring performance of The Music Man. We are also planning to attend a performance of The Music Man at the Titusville Playhouse.



Mr. Tucker

## Intro. to Gaming

We are learning keywords in coding such as variables, Boolean, arrays, and if statements. We are currently applying these words by making a Hockey game. The midterm will require students to form a team of their choosing and make their own game, requirements are: win conditions, score, an opponent or a computer with artificial intelligence.

## English Language Arts (ELA) Department:

This year, the ELA department has chosen at least one novel for students to read during a unit of learning...

- **Ms. Vincente, Grade 6:** *Yankee Doodle Boy*, by: Joseph P. Martin
- **Ms. Oates, Grade 7:** *The Odyssey*, by: Homer
- **Ms. Williams, Grade 8:** *Tangerine*, by: Edward Bloor
- **Ms. Beckwith & Ms. Wilson, Grade 9:** *Catcher in the Rye*, by: J. D. Salinger
- **Mrs. Pitts, Grade 10:** *The Alchemist*, by: Paulo Coelho
  - o **Grade 11:** *The Crucible*, by: Arthur Miller
  - o **AP Language & Composition:** *The Great Gatsby*, by: F. Scott Fitzgerald
- **Ms. Wilson, Grade 12:** *1984*, by: George Orwell
  - o **AP English Literature & Composition:** *Othello*, by: William Shakespeare

In addition, we have developed cross-curricula learning experiences using The Great Courses®, a compilation of expertly-developed content delivered by world-renowned University Professors, and include: Documentaries, commentaries, and activities based on a wide range of real-world scenarios linked directly to classroom learning, and developed to **support the Florida State Standards for Literacy Across all Disciplines**, some examples follow:

- *Roots of Human Behavior* – connecting Psychology, ELA, Biology, and Anatomy & Physiology
- *Unexpected Economics* – connecting Mathematics, Economics, and Business
- *Great Scientific Ideas that Changed the World* – Mathematics, World History, ELA, and Physics (and other sciences)
- *Civil Liberties and the Bill of Rights* – aligns content in: Civics, US History, US Government, Economics, and Argumentation & Logic

## Notes from the Dean's Office:

- Students are looking great in their Odyssey Polo's. Please remember club and team shirts are only to be worn on Fridays.
- Detentions will be given for students who are excessively late to class (more than 3 a week). Students should be checking into class and getting a pass for the restroom.
- Remember Transportation changes cannot be made over the phone (Jessica Lunsford Act). To ride another bus or get off at another stop for any reason, a new bus registration must be filled out and approved by Director of Transportation. This takes 48 hours.
- Cell Phones should be off and out of sight during the school day. The school is not responsible for loss, theft, or damage of personal electronic devices.

## FALL 2017 CALENDAR

### NOVEMBER:

- 11/14 Title I Math Night
- 11/15 Early Release Day
- 11/15 OCS Jr./ Sr. High Clubs commence – See club sponsors for specific meeting days / times
- 11/17 Fabulous Fall Affair: Grades 7-12, 6pm-9pm \$5.00 per ticket
- 11/22 Holiday- NO SCHOOL
- 11/23 Holiday- NO SCHOOL
- 11/24 Holiday- NO SCHOOL
- 11/29 Early Release Day
- 11/30 College Tours: The Art Institute of Ft. Lauderdale and Florida Atlantic University (FAU): 7:30am – 5pm, Sponsored by Mrs. K. Pitts

### DECEMBER:

- 12/2 Ocean Reef Beach Festival, located in Satellite Beach, FL., 11am-3pm, Sponsored for the second consecutive year by Mr. J. Elting.
- 12/2 Support our OCS Jr./ Sr. High Marching Band. They will be participating in the Palm Bay Light Parade.
- 12/5 OCS Jr./ Sr. High's: Chorus, Beginning Band and Orchestra's Winter Concert: 6:30pm – 7:30pm, Led by Ms. M. Varnadoe, Mr. G. Hoffman & Mrs. C. Thomas
- 12/6 Early Release Day
- 12/7 OCS Jr./ Sr. High's: Wind Ensemble, Symphonic Band, and Orchestra's Winter Concert: 6:30pm – 7:30pm, Led by Ms. M. Varnadoe & Mr. G. Hoffman
- 12/11 Space Week: Kennedy Space Center Field Trip, Grade 6, Sponsored by Ms. N. Hoier
- 12/13 Early Release Day
- 12/15 Bio-Tility Experience, University of Florida (UF) Field Trip, 6:15am – 7:30pm, Sponsored by Ms. H. Hoier
- 12/19 – 12/21 Semester 1 Exams (NOTE: All exam days end at the early release dismissal time, 2:45pm)
- 12/22 -1/5 Holiday NO SCHOOL

### JANUARY:

- 1/8 Students return

### Grievance Procedures

- Step 1: Request Teacher conference to clarify issue
- Step 2: Contact Principal if unresolved with the teacher
- Step 3: \*\*Contact Board Designated Parent Representative
- Step 4: Contact the President of the Governing Board
- Step 5: Present issue at the next monthly Board Meeting if unresolved
- Step 6: Seek mediation with the Sponsor

\*\*Ms. Cindy Gilmore has been designated by the OCS Board of Directors as the Representative to Facilitate Parental Involvement, provide access to information, assist parents and others with questions and concerns, and resolve disputes according to charter requirements. Ms. Gilmore can be reached at cgilmore@greenappleschools.com or 321-676-8737.