



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Curriculum Development Timeline

School: Ocean Township High School

Course: Discovery Science

Department: Science

Board Approval	Supervisor	Notes
July 2013	Patrick Sullivan	Born Date
December 2017	Patrick Sullivan	Update Standards
August 2018	Patrick Sullivan	Revisions
August 2019	Patrick Sullivan	Review

Home of the Spartans!
#spartanlegacy





Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Pacing Guide			
Week	Marking Period 1	Week	Marking Period 3
1	Character/Core Values	11	Mindset/The Power of Energy/Truth
2	Goal Setting	12	Changing State or Energy
3	Routines and Habits	13	Emotions
4	<u>The Power of Action</u> -Goal Setting	14	Energy and the Body
5	Leadership	15	The Science of Mindfulness
Week	Marking Period 2	Week	Marking Period 4
6	The Power of the Body	16	The Power of You- 7 pillars of Life
7	Health/Nutrition	17	The Science of Relationships and Love
8	Health/Nutrition and Healing	18	Who Am I Now?
9	The Senses	19	Living your Best Life-Your Proposal
10	Alterations of Reality/Illusion	20	Your Legacy

*Mondays will also be Mentor Mondays, where students will have guest presenters and speakers to share their knowledge within their specific passion or area of expertise. This will give students expert knowledge and advice in regards to specific information. Students will also engage in interview style questioning from guests. This will be formulated individually and collaborated between each student's "Think Team"

*Scientific research is also continuously expressed throughout the course with the presentation of current scientific articles by each student.

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

*Students also transition into group collaboration, creation of their own groups, and leadership throughout the semester.

Core Instructional & Supplemental Materials including various levels of Texts

There is no formal textbook for Discovery science.
 These are sources of information where lessons and activities have been collected from:
 Tony Robbins training- Unleash the Power Within and correlating workbook
www.tonyrobbins.com/resources
 Human needs- <https://six-human-needs-test.herokuapp.com/>
<https://cloemadanes.com/2016/10/12/the-6-human-needs-for-fulfillment/>
 Trainings and information for beliefs and values- <http://keithkochner.com/>
 Planner worksheets and law of attraction tools- <https://manifestationplanner.com/main-productpage>
 Mindful information and tools- Certification through this course and curriculum
<https://www.mindfulschools.org/>
 Articles and research- <https://www.psychologytoday.com/>
 Emotional Guide- <https://www.discoveringpeace.com/the-abraham-hicks-emotional-guidance-scale.html>
 Practical psychology-

Time Frame	2 Weeks
Topic	
Character/ Team building What is this course- Discovery science You are the case study	
Essential Questions	
<ul style="list-style-type: none"> ● What is character? What are characteristics? ● What is judgement and how does this impact our perception and influence our reality? ● How do people create impact? ● What is the importance of self on civilization? ● How do you identify yourself? ● What makes you an individual? ● What is a team? ● Why is partaking in teamwork important? 	

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How do we attain the feeling of accomplishment?
- How do goals outline a person's vision?
- Why is it important to set goals?
- How can the mind be used to accomplish certain goals?
- How do we properly use a planner?
- Why is organization or a system necessary in order to be successful?
- How can visualization affect your outcomes?
- What is the science behind success?
- Why are motivation, determination and focus key factors within one's measurable success?
- How do we define success?
- What are vision boards and how do they pertain to your life?
- What is a life or mission statement?
- Why do writing and speaking count as action?
- How is reflection an important part of growth?
- How do practice and action align?
- How are failures and lessons aligned?
- How do we rewrite our "stories"?
- Why is leadership an important concept to understand?
- How do leaders impact the world?
- What are the characteristics of a leader?
- How does leadership impact social situations?
- How can humans become balanced between thinking, planning and action?
- Does what we focus on affects our reality?
- How does respect impact your perspective?
- What are personal traits one embodies as a team player? Leader?
- How does your character impact different environments? How does this define your role?
- How do you begin to think like a team player?
- How do you begin to understand the concept of discovery?
- How can we prove science everywhere?
- Why are humans different when compared to other species?
- What does it mean to be unbiased? Why is this important within the science community?

Enduring Understandings

- Science is proven through repetitive experimentation, which can lead to the formation of a

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

theory.

- Society is controlled by morals and governed by law.
- The character of an individual is how they identify with the world and how the world perceives them.
- The characteristics one embodies will determine specific opportunities within a society.
- Characteristics are how an individual defines themselves and the role they partake in within a community.
- Where a person focuses is where they are distributing the most energy
- Quantum physics is the scientific proof behind mindfulness.
- Goals create a person's vision because goals are the initial idea before the action of accomplishing or success is available by an individual.
- Goal setting is how we can compartmentalize tasks to be completed to optimize the rate of success.
- Goals are set in order to have a direction to realign thoughts or actions
- Goals provide guidelines for a plan of action.
- Goals are created from one's purpose or from tasks that need to be completed by individual or group aka deadlines.
- The mind is what analyzes and visualizes specific outcomes for scenarios lived within own life or surrounding society.
- Organization provides a method or way of accomplishing multiple checkpoints within a larger task
- A systematic routine is what machines are able to do but this is because they exist without emotions and feelings or human error.
- Order is hard to maintain within chaos and this also reduces the percentage of statistical error due to the separation from distraction.
- Visualization is scientifically proven to blueprint new pathways within the mind.
- Visualization can be as effective as actual practice, especially when pertaining to motor skill activities.
- Success can be measured by many different factors depending on one's beliefs or goals.
- Success can pertain to the accomplishment of a goal or purpose.
- Success can be rewarded, which interferes with societal perception and how we tangibly measure.
- Vision boards are motivators for the accomplishment of set goals and aspirations in action.
- The accomplishment of goals can be interfered with due to poor mental connection or emotional connection to the outcome of goals.
- Practicing organized achievements enhances the rate of success, especially in teens.

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Reflection is an important part of the scientific method, in order to evaluate and ensure the most successful outcomes are achieved.
- Leadership is how standards are set and how the societal masses are informed or influenced.
- An influencer or a leader can either be positive or negative, depending on the message and intention of the individual.
- Mastery comes from repetitive modeling, immersion, and spaced repetition
- The impact an individual has on a community can be expressed through exponential growth and surveying a select and random population.
- The individual within a human population has immediate and full control only on their own thinking and choice of action.
- Choice and freedom are values our country and government have been created around.
- Civilization is the organized way in which we live here in the United States, this is the general idea in which the population is governed.
- A person's identity is controlled by their viewpoints or opinions from a self to global scale.
- An individual is a single measured unit of a population.
- A team can only exist with multiple members who share a common goal of success or completion.

Alignment to Standards

- **9-12.HS-ETS1-2.6; 9-12.HS-ETS1-3**
- Design investigations, collect evidence, analyze data, and evaluate evidence to determine measures of central tendencies, causal/correlational relationships, and anomalous data.
- Reflect on and revise understandings as new evidence emerges
- Science is a practice in which an established body of knowledge is continually revised, refined, and extended as new evidence emerges
- Science involves practicing productive social interactions with peers, such as partner talk, whole-group discussions, and small-group work.
- Represent ideas using literal representations, such as graphs, tables, journals, concept maps, and diagrams.

Learning Activities & Key Concepts and Skills

- Understanding the concept of respect and how this impacts not only the individual's identification but also the impact one has within the community and on a global scale.

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Being guided to identify the self and the role one plays within the environment
- Characteristics that enhance the quality of life are ideal and considered optimal
- One must understand the role they are personally playing and enhance that in order to impact the community
- Curiosity is a characteristic embodied by the best scientists
- Team efforts are those that impact the community, which then compounds to impact the globe
- Human ability to collect data and implement action based on collective conclusions separates us from other known species.
- Through discovery and other forms of applied sciences, new forms of understanding and scientific proof are developed.
- Experimentation involves case studies and collected prior knowledge.
- The scientific method is a concept we use actively within our lives.
- Error within experimentation leads to new ideas, concepts and themes for improvement within the selected hypotheses.
- Being open minded and unbiased are important characteristics to embody within a discovery based inquiry
- The field of science offers explanation to the questions of life; mystery or unknown are terms used for areas where science has yet to prove or investigate.
- Evidence is used in order to formulate hypotheses, which are the basis of new scientific discoveries.

-Interviews- Students will be asked reflective questions about themselves, their perceptions, and opinions on modern day topics.

-Open analysis and response to prompt questions, which are answered within their discovery portfolios.

**** (Portfolios provide all quantitative and qualitative data collected within the classroom.)**

-Self view and World view portraits/ character reflection

-What is your name? Create a personal logo

-Role in the world identification write up

-Teach us what you love? Presentation and collaborated activity

-Find your Passion assignment

-How to complete a weekly planner, goal sheet and life blueprint

- How to set goals in the proper format
- Commitment and dedication to one's practice
- Participation in discussion
- Ability to construct blueprint and plan of action

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Ability to write life or mission statement
- Application of visualization throughout the day
- Guided check ins and reflective analysis throughout the day
- Monitoring of goals and accomplishments
- Development of new routine to implement for remainder of semester

-Greatness epidemic lecture

-The Movie- "I Am" or "The Secret"

-Development of life statement

-The Dickens Process- Limiting Beliefs- rewriting of stories

-Vision board- A Day in the Life

- Wheel of life
- 3 Pillars to Progress

-Development of Strategies

-Eliciting a Strategy

-Importance of Order and Sequence

- Completion of strategy plan

-Mastery steps

Assessments

Formative:

-Response questions- Journal entry prompts

-Discussion on what "Authentic" means; group collaboration

-Visualization of future dreams

-Fear Swap and Debunking their Fears

-Identifying passion and love

-Discussion with partners- different areas of love

Summative:

Discovery Portfolios are collected and graded periodically. This is determined by time span and style of assignment.

Benchmark:

This is given on the 2nd day of meeting in the form of a Google Form survey. Students also are given the opportunity to provide judgement for their idea of perception on the first day. Students will share and explain their reasoning for their judgement after. This will be the first debunked belief they experience within class which will set the initial tone for collaborative reasoning.

Alternative:

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Project- Teach us What you Love! Follow rubric

- Role in the World PPT
- I am's for 8 minute morning routine
- Affirmations for 5 goals

Career Education

CRP4- Communicate clearly and effectively with reason
CRP6- Demonstrate creativity and innovation
CRP7- Employ valid and reliable research strategies
CRP10- Plan education and career paths aligned to personal goals
CRP11- Use technology to enhance productivity

21st Century Skills

9.3.ST-ET.6- Apply the knowledge learned in stem to provide solutions to human and societal problems in an ethical and legal manner.
9.3.ST.SM.1- Apply science and mathematics to provide results, answers and activities
9.3.ST.SM.3- Analyze the impact science and mathematics has on society

Interdisciplinary Connections

HPE.2.1.12.A.CS1- Developing and maintaining wellness requires ongoing evaluation of factors impacting health and modifying lifestyle behaviors accordingly
HPE.2.1.12.E.CS1- Respect and acceptance for individual's
HPE.2.2.12.A.CS1- Effective interpersonal communication encompasses respect and acceptance
HPE.2.2.12.A.2- Demonstrate strategies to prevent, manage or resolve interpersonal conflicts

- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Sociology: main concepts are derived from this study of society and collective prompts for discussion

Technology Integration

8.1.12.A.1- Create a personal digital portfolio which reflects personal and academic interests
8.1.12.E.1- Produce a position statement about a real world problem by developing plan of

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

investigation with peers and synthesizing information from multiple sources

Time Frame	3 weeks
Topic	
The Power of the Mind- Routines and Habits/Communication/Goal Setting/Leadership	
Essential Questions	
<ul style="list-style-type: none">● What are the parts to the brain and how do they influence or control us?● How does the mind control the body?● How does response and stimuli influence the mind?● What are values?● What are beliefs and how are they influenced?● What does nature vs nurture mean?● Why does psychology play such an important part in human existence?● How does your belief system influence the way you live or act within your life?● What is a routine?● How are routines developed?● How do you identify healthy habits vs destructive or unhealthy habits?● How can humans change responses?● How are responses triggered?● What is communication?● What are the types of communication?● What other factors influence communication?● How do humans communicate within themselves and then to others?● How do humans communicate non-verbally?● How do messages travel from the brain and then within the body?● How do we complete tasks?● What is perspective? How is our perspective determined?● How do we measure understanding?● How is knowledge measured?● What is the difference between being knowledgeable and experienced?	

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Why is it important to be honest and express your own truth or perspective?
- How do you debate successfully?
- Why are certain topics considered controversial?
- Why is there conflictual situations between religion and science?
- How do we become unbiased if humans all possess their own belief or opinion?
- How do neurology, physiology and psychology influence each other?

Enduring Understandings

- Neurology is the study of the brain and its counterparts
- Identified parts of the brain are in control of specific functions within the body.
- The body is connected from cellular level to organism level; this is also supported by organization and structural function within the characteristics of a living organism
- Response to stimuli is another characteristic to life; 8 in total
- The nervous system is in control of the responses within the body
- The mind consists of 2 parts which run the entire organism; subconscious and conscious
- The repetition for a measured amount of time creates a new habit; which is also formed consciously or subconsciously.
- Organisms communicate in many different ways.
- Humans communicate differently because of emotions and human empathy will sway specific results
- Controversial means that certain situations create a large amount of human emotion, usually because large populations are having their beliefs countered.
- Topics that include many opinions create larger areas for debate
- Environment of an organism does influence how communication occurs
- Human communication is understood through practice and is guided through social collaboration.
- Human communication influences the level of understanding between other individuals.
- Compromise is an agreement between two opposing forces of influence or study.
- Perspective is something only humans endure because of their conscious ability to experience and reflect
- Knowledge and wisdom are insufficiently measured by formal assessment; growth is determined by progress or expansion of understanding of specific concepts.
- Science is proven by facts and is able to be measured by multitudes of data.
- A person can manipulate brain neuroplasticity through repetition of new thoughts and beliefs

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- A new habit can be formed within 30 days of repetition
- Humans response from the subconscious mind can be influenced by false beliefs or beliefs no longer in alignment to fears humans today face

Alignment to Standards

9-12.HS-ETS1-3; MA.9-12.N-Q.A.3 - [Standard] - *Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.*

- Science is a practice in which an established body of knowledge is continually revised, refined, and extended as new evidence emerges
- Science involves practicing productive social interactions with peers, such as partner talk, whole-group discussions, and small-group work.
- Represent ideas using literal representations, such as graphs, tables, journals, concept maps, and diagrams.
- Mathematical tools and technology are used to gather, analyze, and communicate results.

Learning Activities & Key Concepts and Skills

- Ability to determine the subconscious mind and conscious mind
- Abstract thinking for scenarios or hypothetical situations
 - Uncovering of belief systems within the student
 - Uncovering of conflicting beliefs of subconscious
 - Formation healthy habits and replacement of unhealthy habits
 - Collaboration on old beliefs and new beliefs
- Comparative analysis of population beliefs and values
 - Discovery of individual belief system and core values in alignment to the individual
 - Guidance and assistance in replacing “stories” formed by one’s perception within the mind
- Being able to identify Fear vs Love Perception
- Lecture of Power of the Mind
- Identification of the Parts of the Brain
- Determining Core Values and Beliefs
 - 3 Elements of Practical Psychology
 - 6 Human Needs lecture and examples
 - 6 Human needs exercise and collaboration
 - Beliefs and Modeling

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Fear vs Love
- Introduction to Neuro Conditioning Lecture and Exercise
- The Power of Belief
- The Power of Change
- The Science Behind Momentum
- Decision Making
- The Science behind Proper questioning

Assessments

- *Please see rubrics for each assignment, provided for each student prior to assignment completion

Formative: Response questions- Journal entry prompts

- Label the Body Group Activity
- Completion of surveys and reflective questioning
- Formation of hypotheses and Analytical conclusion questions

Discussion with partners- different areas of love

Summative: Discovery Portfolios are collected and graded periodically. This is determined by time span and style of assignment.

Benchmark:

Alternative: Project- Fear Swap

- The Power of Belief
- Human Needs Test
- Practical Psychology Packet
- 8 minute morning routine
- Affirmations for 5 goals

Career Education

CRP4- Communicate clearly and effectively with reason
CRP6- Demonstrate creativity and innovation
CRP7- Employ valid and reliable research strategies
CRP10- Plan education and career paths aligned to personal goals
CRP11- Use technology to enhance productivity

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

21st Century Skills

9.3.ST-ET.6- Apply the knowledge learned in stem to provide solutions to human and societal problems in an ethical and legal manner.

9.3.ST.SM.1- Apply science and mathematics to provide results, answers and activities

9.3.ST.SM.3- Analyze the impact science and mathematics has on society

Interdisciplinary Connections

HPE.2.1.12.E.CS2- Develop a personal stress management plan to improve/maintain wellness

HPE.2.2.12.A.CS2- Effective communication is the basis for strengthening interpersonal interaction

- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Anatomy and Physiology: the constructive breakdown of the brain
- Sociology: main concepts are derived from this study of society and collective prompts for discussion

Technology Integration

8.1.12.E.1- Produce a position statement about a real world problem by developing plan of investigation with peers and synthesizing information from multiple sources

8.1.12.D.4- Research and understand the positive and negative impacts of one's digital footprint

Time Frame	3 weeks
------------	----------------

Topic

Power of the Body/ Nutrition/ Health and Wellness

Essential Questions

- How is the body formed and replenished?
- How are the systems within the body connected?
- How is action created within the body?

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How is energy conducted through the body?
- How is potential energy converted into kinetic energy within the body?
- What are nutrients?
- How does biochemistry underline the basis for nutritional understanding?
- How does organic chemistry play a role in the molecular makeup of the human?
- How does the mind influence the construction of the physical body?
- How does being mindful to wellness affect the quality of life within a human?
- How do organisms who no longer physically compete meet their needs for survival?
- What nutrients are essential to the chemical makeup of the human body?
- How are we physically comparative to other species?
- What is energy?
- How do diet and wellness align within the human species?
- What components or factors influence our wellness?
- How does American diet or daily habits differ from other societies?
- How does diet align with preventative care?
- How does the body heal itself?
- What systems are involved with immunity and repair?
- What systems are controlled by the subconscious mind?
- What methods are used to heal the body?
- What is the difference between illness and disease?
- What is the importance of awareness to one's body?
- How does placebo effect influence the measurement of success within treatments?
- How does the mind influence the healing within the body?
- What does a balanced life look like?
- What does a balanced diet look like?
- What is stress?
- Why is stress a global issue?
- What are some disruptions within the body controlled by stress?
- How does stress affect the body's ability to function?
- What is homeostasis and how is this related to diet and the internal environment of the body?
- What are diseases?
- What are the comparisons between eastern and western medicine?
- What are the fields of science that pertain to wellness?
- How do pharmaceuticals influence the economy?

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How does the government regulate health care?
- Why is medical insurance necessary?
- What is homeopathic therapy?
- What is alternative medicine?

Enduring Understandings

- The body is made from an organized compilation of systems
- The body includes support systems that ensure rejuvenation of cells, energy and repair.
- The body is made up of cells which then organize themselves up to a full organism.
- The instructions on how to make the body are contained within cells and is called DNA
- The energy used within the body is referred to as ATP
- ATP is derived from the chemical breakdown of molecules within the body from food source to element.
- Chemical reactions are continuously happening within the body which enable the body to complete specific necessary tasks to maintain survival
- Competition is a need for survival within the animal kingdom; also a symbiotic relationship.
- Homeostasis is necessary for the conduction of systems, in turn ensuring survival
- The organs within the body are negatively affected from acidic environments.
- Humans' quality of life are measured by the balance of needs that ensure survival.
- In order for case studies to be accepted by the scientific community it must be repeated within an approved environment
- A case study must include an experimental group and a control or placebo group, which provide qualitative and qualitative evidence.
- Chemistry supports the elemental and nutritional proof necessary to maintain an operating body.
- Understanding the scientific advancements within food and how they affect the body
- Choosing beneficial nutritional choices supports the efficacy of the body, which also affects the mind.
- The brain is the logical center and is affected by the available supply of nutrients within the body.
- Thoughts create energy, which signal neurons within the brain to complete specific energetic message transfers within the brain and nervous system.
- Brain activity is measurable using various modes of technology.
- Stress releases specific adrenal inhibitors which interfere with the homeostasis of the body.

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- The endocrine system is negatively affected by stress, which interferes with hormonal balance.
- Preventative lifestyles enhance quality of life and predicted life span
- American diet and lifestyle is correlated to the percentage of disease and illness within our society
- Pharmaceuticals is the #1 income producing category within the United States.
- Treatments provided by governmental agencies must be scientifically supported and funded/approved by FDA.
- Eastern medicine is based on homeopathic therapies and principles.
- Homeopathy is not considered scientific because of the variant flaws within the claim of the category.
- Using the term cure is science based and must include statistical evidence and support

Alignment to Standards

9-12.HS-LS1-6.6.1; 9-12.HS-PS1-4.PS1.B.1; MA.9-12.N-Q.A.2 - [Standard] -
Define appropriate quantities for the purpose of descriptive modeling

- Design investigations, collect evidence, analyze data, and evaluate evidence to determine measures of central tendencies, causal/correlational relationships, and anomalous data.
- Chemical equilibrium is a dynamic process that is significant in many systems, including biological, ecological, environmental, and geological systems. Chemical reactions occur at different rates. Factors such as temperature, mixing, concentration, particle size, and surface area affect the rates of chemical reactions
- Cellular function is maintained through the regulation of cellular processes in response to internal and external environmental conditions.
- Describe how a disease is the result of a malfunctioning system, organ, and cell, and relate this to possible treatment interventions (e.g., diabetes, cystic fibrosis, lactose intolerance).
- Use mathematical formulas to justify the concept of an efficient diet
- Evolution occurs as a result of a combination of the following factors: Ability of a species to reproduce; Genetic variability of offspring due to mutation and recombination of genes; Finite supply of the resources required for life; Natural selection, due to environmental pressure, of those organisms better able to survive and leave offspring

Learning Activities & Key Concepts and Skills

- Familiarity and understanding of the anatomical organization within the body
- Identification of the organs and the systems they belong to

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Balancing a diet
- Identifying nutrients
- Analyzing of food labels and nutritional facts
- Researching symptoms and correlating them with specific imbalances within the body
- Being aware of which symptoms are aligned with specific illnesses or diseases
- Understanding what preventative measures can be practiced to enhance their quality of life
- Using environmental factors and identifying the risks to specific systems
- Collaboration of a meal plan
- Comparative analysis of specific nutritional choices
- Creating a balanced individual meal plan and budget food list
- Biochemistry lecture
- Essentials to Wellness lecture
- Western vs Eastern medicine presentation creation and collaboration
- Digestion lab
- Meal plan guide
- What the Health movie
- Emotions and Food as an Addiction lecture
- The Philosophy of Health lecture
- What is Health activity?
- The Health behind Cells
- The Body's Response to Poison
- 8 Gifts of A Vital Life
- Lymphatic system analysis
- The Power of Water lecture
- The Imbalanced pH
 - Alkaline vs acidic foods
 - pH lab
 - Taste test
- The science behind food
 - Sugar: A Secret addictive
 - What is the dairy industry up to?
 - Who is in charge here?

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Assessments

Formative:

Daily discussions on topics being presented

DO Now- Is reflection on daily entries and then collaboration with class

This style allows students to see their ideas and thoughts are similar to everyone's in class

Summative:-*Please see rubrics for each assignment, provided for each student prior to assignment completion

Benchmark:

Alternative:

Creation of a wellness plan

Eastern vs Western medicine presentation

Analysis and conclusion of nutrition, lymphatic and pH labs

Completion of analysis questions and sheets

Nutritional journal

Response questions to movie

Career Education

- CRP3- Attend to personal health and financial well-being.
- CRP5- Consider the environmental, social, and economic impacts of decisions
- CRP7- Employ valid and reliable research strategies

21st Century Skills

9.3.ST.2- Use technology to acquire , manipulate, analyze and report data

9.3.ST-SM.2- Apply science and mathematical concepts to the development of plans, processes and projects that address real world problems.

Interdisciplinary Connections

- HPE.2.1.12.B- Nutrition
- HPE.2.1.12.C- Disease and Health Conditions
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception. Also, to understand the reasoning behind decision making and food.

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Sociology: main concepts are derived from this study of society and collective prompts for discussion
- Health: importance of maintaining an optimal body to maintain optimal health; the different areas of wellness.
- Physical education: The importance of fitness, stretching and yoga practices, the art of walking and mindful breathing

Technology Integration

8.1.12.C.1- Develop an innovative solution to a real world problem or issue in collaboration with peers.

Time Frame

2 weeks

Topic

The Senses, Illusions, Alteration of Reality and Mindset

Essential Questions

- What are the senses of the body?
- How are the senses connected?
- How does the surrounding environment influence the accuracy of the senses?
- How does the mind control the senses?
- How do the senses affect our response system?
- How are certain senses impaired?
- Can we improve or enhance our senses?
- How can we manipulate the senses?
- What role does technology play on our senses?
- How has the human body adapted to change?
- What is an illusion?
- How do we measure reality?
- What is meant by alternate, virtual and simulated reality?
- How does your mindset alter your reality?
- How can your perception be altered?

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How do optical illusions work?
- How is critical thinking manipulated and what is a riddle?
- How does an IQ test work?
- What happens to the brain when narcotics are consumed?
- What happens to the body when narcotics are consumed?
- How does emotional pain interfere with your perception of reality?
- What are the side effects of consistent abuse?
- How does neuroplasticity play a role in treatment for narcotic abuse?
- How can monitoring mindset contribute to healing?
- How can structuring mindset contribute to forming healthy habits?
- How does your mindset subconsciously control you?
- How has social media contributed to changes in our standards or expectations?
- How does advertising and marketing influence our ideals?
- How can we determine an illusion from a manipulative trick?
- Is mind control regulated? How does hypnosis work?
- What is NLP?
- Can you reprogram your perception?

Enduring Understandings

- The senses within the body are sight, touch, taste, hear and smell.
- The senses are connected through the body's other systems, especially the nervous system.
- The sense of smell and taste are directly connected, without smell, we would not taste.
- Environmental factors such as pollution have affected our senses.
- Humans have adapted to the environment but have also removed ourselves from the environment, which has impacted our senses.
- Through the use of our senses, we create our reality or perception of the world.
- The stimuli we receive through our senses alerts our central nervous system, which creates a response throughout the body.
- The nervous system processes the information collected through the senses, which gives us explanation to why or what is occurring.
- Certain technology has given humans the ability to repair or make accommodations for damaged senses.

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Through meditation and visualization the senses can be isolated and focused on individually, providing peak performance
- Overuse of technology has altered our response time and negatively influenced certain senses.
- Because of technology, there has been applications developed and global communication has been enhanced.
- Human development has been impacted by environmental changes.
- Food modification and product development through engineering have altered the natural evolution of the human body
- Vestigial structures show how organisms have reduced unnecessary anatomy or sense structure.

Alignment to Standards

9-12.HS-ETS1-2.6; 9-12.HS-ETS1-3; *MA.9-12.N-Q.A.2 - [Standard] - Define appropriate quantities for the purpose of descriptive modeling.*

- Interpretation and manipulation of evidence-based models are used to build and critique arguments/explanations.
- Use scientific principles and theories to build and refine standards for data collection, posing controls, and presenting evidence.
- Logically designed investigations are needed in order to generate the evidence required to build and refine models and explanations.
- Refinement of understandings, explanations, and models occurs as new evidence is incorporated.
- Science involves practicing productive social interactions with peers, such as partner talk, whole-group discussions, and small-group work.
- Engage in multiple forms of discussion in order to process, make sense of, and learn from others' ideas, observations, and experiences

Learning Activities & Key Concepts and Skills

- Understanding the proper responses to balanced senses
- Observing optical illusions
- Collaboration of others perspectives
- Understanding the viewpoint of others
- Identifying the alterations
- Ability to critical think and reflect
- Abstract analysis

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Create a survey
- Create their own optical illusion
- Discussion and response to analytical riddles and problems
- Researching mental health, psychosis, and delusion
- What Reality do you live in?
- Lecture on Narcotics
 - IQ Test
 - Personality test
 - Optical illusion lab
 - Virtual reality lab
 - Where is your mind?
 - Neuroplasticity research presentation
 - Manipulation of the Sense lab

Assessments

Formative:

All lectures and new topics are started with individual reflection in their journals but then information and data are shared in an open forum style. This allows students to experience other perspectives and voice their opinion. This allows students to see how many of us think alike

Summative:

Benchmark:

Alternative:

Mindset control plan
Mindset presentation
Narcotic explanation

Career Education

CRP2- Apply appropriate academic and technical skills
CRP6- Demonstrate creativity and innovation

21st Century Skills

9.3.ST-SM.4- Apply critical thinking skills to review information, explain statistical analysis, and to translate, interpret and summarize research and statistical data.

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Interdisciplinary Connections

- HPE.2.2.12.A.2- Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts.
- HPE.2.2.12.A.1- Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others.
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Health: the side effects of narcotic intake
- Instructional technology/ STEAM- creation of optical illusions
- Sociology: main concepts are derived from this study of society and collective prompts for discussion

Technology Integration

- 8.2.12.C2- Analyze a product and how it has changed or might change overtime to meet human needs and wants
- 8.2.12.C.3- Analyze a product for its safety, reliability, economic considerations, environmental concerns, ergonomics.

Time Frame	2 weeks
Topic	
The Power of Energy- Curiosity, Truth and Changing Your State	
Essential Questions	
<ul style="list-style-type: none">● What is energy?● Why is energy important?● How is energy everywhere?● What is energy made from?● How do we measure energy?● How do we replenish energy?	

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- What are the scientific laws to energy?
- How did we discover energy?
- What are the forms of energy and how are they determined or categorized?
- What does it mean to be curious?
- How do we discover the truth of what is? How does science prove and offer truth?
- How does science negate belief?
- How do we measure human energy?
- How do we determine the truth?
- How do we measure the truth?
- Why do we manipulate the truth?
- How does lying affect humans?
- What does it mean to change your state?
- What are different options for changing your state?
- How does the changing of state influence the emotions or feelings within the body?

Enduring Understandings

- Energy is defined as the amount of work able to be completed, whether mentally or physically.
- Energy is also defined as the power from chemical or physical resources in order to provide other forms of energy to the earth.
- Energy is what runs machines that keep our world running but it is also what rely on for life
- If an organism has no energy it is dead
- If a machine does not produce energy, it is broken or malfunctioning
- Energy is measured in wavelengths
- Energy is measured in joules
- Energy is replenished through the consumption or use of resources, whether renewable or nonrenewable
- Energy was discovered and formulated into laws by scientists, especially Albert Einstein who stated $E= mc^2$
- Energy has been around since the beginning of time but technological advancements allowed is to study it and its different forms
- Curiosity is a characteristic that is connected to the consistent questioning of circumstances
- Curiosity allows us to prove or disprove ideas using the scientific method

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Truth is why we seek answers, to understand the reasoning behind specific circumstances
- Truth is manipulated in order to appeal to the societal masses or the individual being deceived
- Truth or understanding of situations creates an open minded and well rounded thought process within an individual
- Changing state is when we can alter the flow of energy in our body, which impacts the perception or receiving center of the brain
- Changing state switches the neurotransmitter pathways within the brain
- Changing state allows stagnant energy or an overflow of energy to be released without it manifesting in the physical body

Alignment to Standards

9-12.HS-PS1-2; 9-12.HS-ETS1-3; MA.9-12.N-Q.A.2 - [Standard] - *Define appropriate quantities for the purpose of descriptive modeling*

- Refinement of understandings, explanations, and models occurs as new evidence is incorporated.
- Reflect on and revise understandings as new evidence emerges.
- Science is a practice in which an established body of knowledge is continually revised, refined, and extended as new evidence emerges.
- Represent ideas using literal representations, such as graphs, tables, journals, concept maps, and diagrams
- Energy may be transferred from one object to another during collisions.
- It takes energy to change the motion of objects. The energy change is understood in terms of forces

Learning Activities & Key Concepts and Skills

- How to inquire properly
- How to ask well rounded questions
- Ability to collect and analyze responses
- Ability to measure energy using different techniques
- The identification of different forms of energy
- Researching new technologies and devices
- Presentation of data and analysis/conclusions
- Ability to seek or research the truth within global or even personal topics or issues
- Participation in changing own state and collaborating findings

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Solar design models
 You can't handle the truth?!
 Let's change state
- Modes of state change

Assessments

Formative- Discovery journal responses. Students also take google form questionnaires in order to participate anonymously in class data collection

Summative: *Please see rubrics for each assignment, provided for each student prior to assignment completion

Benchmark:

Alternative:

Energy questionnaire
Entries and presentations of energy experiments
Self-run machines activity

Career Education

CRP7- Employ valid and reliable research strategies
CRP8- Utilize critical thinking to make sense of problems and persevere in solving them

21st Century Skills

9.3.ST-SM.2- Apply science and mathematical concepts to the development of plans, processes and projects that address real world problems
9.3.ST-SM.3- Analyze the impact that science and mathematics has on society

Interdisciplinary Connections

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- HPE.2.1.12.E.2- Analyze how new technologies may positively or negatively impact the incidence of conflict or crisis
- HPE.2.12.E.CS2- Stress management skills impact an individual's ability to cope with different types of emotional situations
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Sociology: main concepts are derived from this study of society and collective prompts for discussion
- Physics- identifying forms of energy
- History- comparative data from 100 years ago and now

Technology Integration

TECH.8.1.12.F - *Collect and analyze data to identify solutions and/or make informed decisions.*

Time Frame	2 weeks
Topic	
Emotions	
Essential Questions	
<ul style="list-style-type: none">● What are emotions?● What are feelings and how are they different than emotions?● How is the mind and body directly affected by feelings and emotions?● What are the different categories of emotions?● What triggers different emotions and feelings within the body?● How can changing state affect our emotions?● What does emotion stand for?● How does language and verbiage affect emotions and feelings?● How do we express different feelings?● How do feelings change our perceptions?	

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Why are feelings and emotions important to understand?
- How do feelings affect our ability to react logically?
- How do emotions express themselves in the body?
- How do emotions influence the health of an individual?
- How do focus and energy align?
- How are responses measured?
- What is the scale or levels of emotions?
- How can emotions change the physical state of an individual?
- How do vibrations of energy manifest in the body?
- How do events or circumstances influence our feelings?
- How do specific emotions correlate to specific disease or illnesses?

Enduring Understandings

- Emotions are physically felt and create a physical response in the body
- The meaning of emotion depends on the individual
- Emotional responses can be manipulated by changing the mental meaning we attach to specific feelings
- Feelings are developed within the brain and are triggered by experience and emotions are how these feelings are felt or how they physically change the body
- Emotions vary in levels of vibration and how they register energetically within the body
- Emotions are triggered by chemical responses in the brain
- Feelings can be sensed
- Emotions are affected by the mind and body
- Feelings last longer than emotions
- Moods are a combination of factors, from environmental, physiological, and mental state
- Language and the use of words can trigger emotions
- Certain words create emotional responses within individuals based on experiences
- Emotion also stands for energy in motion
- Physical responses are triggered by feelings and emotions by neurological chemicals
- Certain emotions create measurable responses within the body
- Specific areas of the body are affected by specific thoughts because they create physical change
- The mind can control the amount and which chemical is released in the body
- The reptilian part of our brain, the basal ganglia, contributes to false responses in the

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

body

- Certain ailments and diseases are triggered by the oldest area of our brain
- Our instinct can interfere with our logic
- Our instinct can release chemicals that are unnecessary to the situation we are in.

Alignment to Standards

9-12.HS-LS1-6.6.1; 9-12.HS-LS2-2.5.1; 9-12.HS-ESS2-7.7

- It takes energy to change the motion of objects. The energy change is understood in terms of forces
- New traits may result from new combinations of existing genes or from mutations of genes in reproductive cells within a population.
- The principles of evolution (including natural selection and common descent) provide a scientific explanation for the history of life on Earth as evidenced in the fossil record and in the similarities that exist within the diversity of existing organisms.
- Natural and human activities impact the cycling of matter and the flow of energy through ecosystems.
- Natural ecosystems provide an array of basic functions that affect humans. These functions include maintenance of the quality of the atmosphere, generation of soils, control of the hydrologic cycle, disposal of wastes, and recycling of nutrients.

Learning Activities & Key Concepts and Skills

- Students will be able to identify own feelings and emotions
- Ability to identify different or the range of emotions expressed
- Being able to identify emotions based on body language
- Being able to identify the feelings based on verbiage and sense of energy
- Understanding how certain environments influence feelings and emotions
- Identifying the connection between emotions and physical state
- Modeling emotions
- The Movie- Inside Out
- Charades
- Lecture on emotions and feelings
- Emotions vs Feelings

Assessments

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Formative:

Discovery science journal entries

Summative:

Please see rubrics for each assignment, provided for each student prior to assignment completion

Benchmark:

Alternative:

Story writing using emotions
Inside Out responses

Career Education

CRP3- Attend to personal health and financial well being
CRP4- Communicate clearly and effectively and with reason
CRP8- Utilize critical thinking to make sense of problems and persevere in solving them

21st Century Skills

9.3.ST-ET.6- Apply the knowledge learned in the study of STEM to provide solutions to human and societal problems in an ethical and legal manner.
9.3.ST.2- Use technology to acquire, manipulate, analyze and report data

Interdisciplinary Connections

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- HPE.2.1.12.E- Social and Emotional Health
- HPE.2.2.12.A.CS2- Effective communication encompasses respect and acceptance of all individuals regardless of sexual orientation, religion, culture, etc
- HPE.2.1.12- All students will acquire health promotion concepts and skills to support a healthy lifestyle
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Sociology: main concepts are derived from this study of society and collective prompts for discussion
- Performing arts: students abilities to act out emotions based presented feelings

Technology Integration

8.1.12.F.1- Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal, and or social needs

Time Frame	1 week
Topic	
The Science of Mindfulness	
Essential Questions	
<ul style="list-style-type: none">● What is mindfulness?● How can we practice mindfulness in our daily routine?● How can science prove an enhancement in the quality of life when mindfulness is practiced?● What are the benefits of mindfulness?● What are the tools and practices used to be a mindful individual?● How can we prove or exhibit mindfulness through self-experimentation?● How does mindfulness enhance health?● How can individual mindfulness influence society or the way information is presented to	

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

the world?

Enduring Understandings

- Mindfulness is the ability to concentrate or stay focused on the present moment
- Mindfulness allows for you to be in a state of flow, which enhances accuracy while completing a task
- Being mindful reduces mental and emotional imbalances
- Mindfulness has been proven to reduce the negative statistics pertaining to the health and wellness of people, especially youth or teens
- Quality of life is measured by emotional, mental and physical well being
- Science has created a platform to provide routine behaviors to create a systematic method to practice mindfulness
- Since an individual can only ensure the survival of one's self, mindfulness allows individuals to enhance or raise their own awareness, which can influence surrounding individuals

Alignment to Standards

9-12.HS-LS1-3.3.1; 9-12.HS-ESS2-7.7; 9-12.HS-ESS3-5

- Scientific, economic, and other data can assist in assessing environmental risks and benefits associated with societal activity.
- New traits may result from new combinations of existing genes or from mutations of genes in reproductive cells within a population.
- Predict the potential impact on an organism (no impact, significant impact) given a change in a specific DNA code, and provide specific real world examples of conditions caused by mutations
- Stability in an ecosystem can be disrupted by natural or human interactions.
- Biological communities in ecosystems are based on stable interrelationships and interdependence of organisms.

Learning Activities & Key Concepts and Skills

- Ability to measure mindfulness
- Determining the best mindset to accomplish certain tasks
- Evaluating the enhancements within one's own life
- Recording changes in behavior or efficacy in the completion of tasks

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Teach others and collaborate a mindful lesson
- Lecture on the science of mindfulness
- What's on your mind?
- Mindful race
- Mindful moments
- Mindful planner
- Balanced mind

Assessments

Formative:

Accuracy and completion of daily tasks
Journal reflective responses

Summative:

*Please see rubrics for each assignment, provided for each student prior to assignment completion

Benchmark:

Alternative:

What's on your mind?
Mindful race
Mindful moments
Mindful planner
Balanced mind

Career Education

CRP1- Act as a responsible and contributing citizen and employee
CRP3- Attend to personal health and financial well being
CRP4- Communicate clearly and effectively and with reason
CRP10- Plan education and career paths aligned to personal goals
CRP12- Work productively in teams while using cultural global competence

21st Century Skills

9.3.ST-SM.4- Apply critical thinking to review information, explain statistical analysis, and to translate, interpret and summarize research and statistical data.

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Interdisciplinary Connections

- HPE.2.2.12.A- Interpersonal Skills
- HPE.2.1.12.E- Social and Emotional Health
- HPE.2.1.12.A- Personal Growth and Development
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- Health: Being present allows the mind and body to function at optimal health
- Physical Education- the ability to complete concentration games
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Sociology: main concepts are derived from this study of society and collective prompts for discussion

Technology Integration

8.1.12.A.3- Collaborate in online courses, learning communities, social networks or virtual worlds to discuss the resolution of a problem

8.1.12.C.1- Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or an online community

Time Frame	2 weeks
------------	----------------

Topic

The Power of You, Technology and Relationships

Essential Questions

- What is your power?
- What is your purpose?
- What do you strive for?
- How can you use technology to benefit your life?
- How has social media changed the way we view our lives?
- What are the pros and cons of technology?
- How can the internet answer everything?

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How can you become connected and disconnected at the same time?
- How does marketing influence the way we use our phones?
- How can we advocate for the world through the use of technology?
- Why is it important to understand the relationships around us?
- What are the different categories of relationships?
- How can relationships become unhealthy?
- What are the prerequisites for relationships?
- How does intimacy contribute to our emotional health?
- How do relationships influence who we are individually?
- What are the misconceptions of relationships?
- How do we heal from ended relationships?
- Why is communication so important in relationships?
- What are the most important relationships to acquire?
- How do our human needs heavily influence our relationships?

Enduring Understandings

- An individual only has power to influence others, not control.
- The purpose of an individual varies due to their awareness of themselves and what their truth is
- An individual is in alignment with their purpose when passion and joy are achieved emotionally
- Humans strive for success and acceptance, which are just understatement of love
- Technology has become a huge influence on the way society lives day to day
- In the world, there are more people who have cellular devices than toilets
- Social media is a platform that interferes with response systems and create emotional chemical releases similar to narcotics
- Technology's effects rely on use, consistency, and emotional and mental states
- Technology can be a trigger and creates virtual realities
- Social media can influence the behavior of individuals
- Social media has changed reality and the standards of living
- Technology has changed the way we communicate, which is creating conflict with our emotions
- Relationships are important to have because they offer connection, which humans need to thrive in life

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Support systems offer individual perspectives that can be used when emotions or feelings are interfering with the mental balance
- Relationships and emotions vary depending on each individual's experience
- Relationships and symbiosis are important to human survival
- Relationships create the foundation for food chains and food webs within an ecosystem
- Human relationships are different than other organisms because of emotional conflict
- Relationships can help or hurt an individual's progress of discovery
- Healthy relationships offer guidance, growth and conflict resolution
- Communication is needed in relationships due to the variant perspectives and experiences of individuals

Alignment to Standards

9-12.HS-PS1-2; 9-12.HS-ETS1-2.6; 9-12.HS-ETS1-3

- Design investigations, collect evidence, analyze data, and evaluate evidence to determine measures of central tendencies, causal/correlational relationships, and anomalous data.
- Scientific reasoning is used to evaluate and interpret data patterns and scientific conclusions
- Reflect on and revise understandings as new evidence emerges.
- Science is a practice in which an established body of knowledge is continually revised, refined, and extended as new evidence emerges.
- Science involves practicing productive social interactions with peers, such as partner talk, whole-group discussions, and small-group work.
- Ensure that instruments and specimens are properly cared for and that animals, when used, are treated humanely, responsibly, and ethically
- Differences in the physical properties of solids, liquids, and gases are explained by the ways in which the atoms, ions, or molecules of the substances are arranged, and by the strength of the forces of attraction between the atoms, ions, or molecules.

Learning Activities & Key Concepts and Skills

- Ability to monitor and evaluate technology used
- Identifying true wants and needs
- Using social media
- Researching technological influence on human behavior
- Surveying the student body and staff
- Creating a technological app that will support their mission
- Ability to analyze and reflect on the relationships of their life

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- The Power lecture
- Relationships lecture
 - Where did your power go?
 - App usage and review
 - Relationships wheel
 - Your better half is yourself
 - What are your boundaries?
 - Who do you rely and why?

Assessments

Formative:

Surveys
Relationship wheel

Summative:

Please see rubrics for each assignment, provided for each student prior to
Assignment completion

Benchmark:

Alternative:

What do you love about you presentation

Career Education

CRP5- Consider the environmental, social and economic impacts of decisions

CRP6- Demonstrate creativity and innovation

CRP11- Use technology to enhance productivity

21st Century Skills

9.3.ST-SM.2- Apply science and math concepts to the development of plans, processes, and projects that address real world problems

9.3.ST-SM.3- Analyze the impact that science and math has on society

Interdisciplinary Connections

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

HPE.2.1.12- All students will acquire health promotion concepts and skills to support a healthy and active lifestyle

HPE.2.1.12.C.2- Develop strategies to impact local, state, national, and international public health efforts

HPE.2.1.12.C.3- Determine the emotional , social, and financial impact of mental illness on family, community, state

- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily
- IT: using of technology
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Health: forming healthy boundaries and relationships
- Sociology: main concepts are derived from this study of society and collective prompts for discussion

Technology Integration

8.1.12.C.1- Develop an innovative solution to a real world problem or issue in collaboration with peers and experts; can present through social media

8.1.12.D.5- Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs

Time Frame

4 weeks (including final)

Topic

Living Your Best Life, Who Am I now, and Final Reflections (project)

Essential Questions

- What does it mean to live you best life?
- How can we measure if we are living our best life?
- How can you enhance the life of others by being the best version of yourself?
- Why doesn't everyone live their best life?
- What does a balanced life look like?
- How have you personally changed throughout this course?
- What changes have been made to your life?

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- How has this impacted the people around you?
- How can we measure growth?
- What tools have been implemented to create this standard for life?
- How can growth continue after discovery science?
- When does personal growth end?
- How can you implement what you have learned in the future?
- Knowing what you know now, how can you enhance the OTHS community?
- What changes do you think that can be made within our school to enhance the lives of other students?
- What is your legacy or what do you wish to leave for others?
- How do you influence others?
- What do you think are the most important concepts that you have learned throughout this course?

Enduring Understandings

- Living one's best life is determined by making the most appropriate decisions for each individual
- Choices that enhance the vitality, quality of your own life and that of others, and sense of fulfillment are precursors to living a life of design
- Choices are made by an individual which is why boundaries, self-worth, and purpose must be determined
- Changes are constantly happening in any environment
- Adaptations are consistently necessary to continue survive
- Personal growth is a continuous practice due to our environments and experiences
- Major areas of life must be met in order to feel balanced
- Balance is different for each individual depending on the focus for their personal life
- Collaboration, belief and encouragement are detrimental to one's structure
- Reflection and action are ways to implement best choices in the future
- Legacy is determined by one's impact on others
- People influence each other with their beliefs, thoughts, actions and power.
- ***Variant answers depending on the level of participation, engagement and the commitment of each student.

Alignment to Standards

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

9-12.HS-LS2-2.5.1; 9-12.HS-PS1-4.PS1.B.1; 9-12.HS-ETS1-2.6

- Design investigations, collect evidence, analyze data, and evaluate evidence to determine measures of central tendencies, causal/correlational relationships, and anomalous data.
- Scientific reasoning is used to evaluate and interpret data patterns and scientific conclusions
- Reflect on and revise understandings as new evidence emerges.
- Science is a practice in which an established body of knowledge is continually revised, refined, and extended as new evidence emerges.
- Science involves practicing productive social interactions with peers, such as partner talk, whole-group discussions, and small-group work.
- Differences in the physical properties of solids, liquids, and gases are explained by the ways in which the atoms, ions, or molecules of the substances are arranged, and by the strength of the forces of attraction between the atoms, ions, or molecules.
- There is a relationship between the organization of cells into tissues and the organization of tissues into organs. The structures and functions of organs determine their relationships within body systems of an organism.

Learning Activities & Key Concepts and Skills

- Application of the tools and information presented throughout the course
- How to maintain decision making skills that are beneficial to self-growth and leadership
- How to create and implement a school wide or communal project that enhances the lives of others
- How to determine their own legacy and measure accomplishments achieved
- Measuring the efficacy of their plans and ideas
- Collaborating with classmates
- Showing mastery within certain practices
- ** See rubric for final project
- Creation and implementation of best life plan
- Lecture on how to live your best life
- Lecture and collaboration on a balanced life
- Reflection video
- Mentor reach out
- Mentor reach up
- Communal project
- Comparative analysis of reflections throughout the year

Assessments

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Formative:

-Discovery Portfolio responses

Summative:

-Completion and final paper

-Final project presentation and implementation

Benchmark:

*Please see rubrics for each assignment, provided for each student prior to assignment completion

Alternative:

-Best life plan

-Reflection videos

Career Education

CRP1- Act as a responsible and contributing citizen and employee

CRP4- Communicate clearly and effectively with reason

CRP6- Demonstrate creativity and innovation

CRP7- Employ valid and reliable research strategies

CRP9- Model integrity, ethical leadership and effective management

CRP10-Plan education and career paths aligned to personal goals

CRP12- Work productively in teams while using cultural global competence

21st Century Skills

9.3.ST.2- Use technology to acquire, manipulate, analyze and report data

9.3.ST.6- Demonstrate technical skills needed in chosen STEM field.

9.3.ST-SM.4- Apply critical thinking skills to review information, explain statistical analysis, and to translate, interpret and summarize research and statistical data

Interdisciplinary Connections

Home of the Spartans!
#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- HPE.2.1.12.A- Personal Growth and Development
- HPE.2.2.12.B- Decision Making and Goal Setting
- HPE.2.2.12.C- Character Development
- HPE.2.2.12.D- Advocacy and Service
- HPE.2.1.12.E- Social and Emotional Health
- Math: Percentages, statistics, and all quantitative data
- Language Arts: writing components daily, final paper
- Psychology: concepts of thinking and how the mind controls our thoughts and perception
- Sociology: main concepts are derived from this study of society and collective prompts for discussion
- IT- creation of reflection videos

Technology Integration

8.1.12.D.1- Understand appropriate uses for social media and the negative consequences of misuse.

8.1.12.D.4- Research and understand the positive and negative impact of one's digital footprint.

8.1.12.D.5- Analyze the capabilities and limitations of current and emerging resources and assess their potential in all needs

Modifications (ELL, Special Education, At-Risk Students, Gifted & Talented, & 504 Plans)

ELL:

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher models reading aloud daily
- Provide peer tutoring
- Use of Bilingual Dictionary
- Guided notes and/or scaffold outline for written assignments
- Provide students with English Learner leveled readers.

Supports for Students With IEPs:

- Allow extra time to complete assignments or tests
- Guided notes and/or scaffold outline for written assignments
- Work in a small group

Home of the Spartans!

#spartanlegacy



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications

At-Risk Students:

- Guided notes and/or scaffold outline for written assignments
- Introduce key vocabulary before lesson
- Work in a small group
- Lesson taught again using a differentiated approach
- Allow answers to be given orally or dictated
- Use visuals / Anchor Charts
- Leveled texts according to ability

Gifted and Talented:

- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Propose interest-based extension activities
- Expose students to beyond level texts.

Supports for Students With 504 Plans:

- Follow all the 504 plan modifications
- Text to speech/audio recorded selections
- Amplification system as needed
- Leveled texts according to ability
- Fine motor skill stations embedded in rotation as needed
- Modified or constrained spelling word lists
- Provide anchor charts with high frequency words and phonemic patterns

Home of the Spartans!
#spartanlegacy