

## Light Cycle

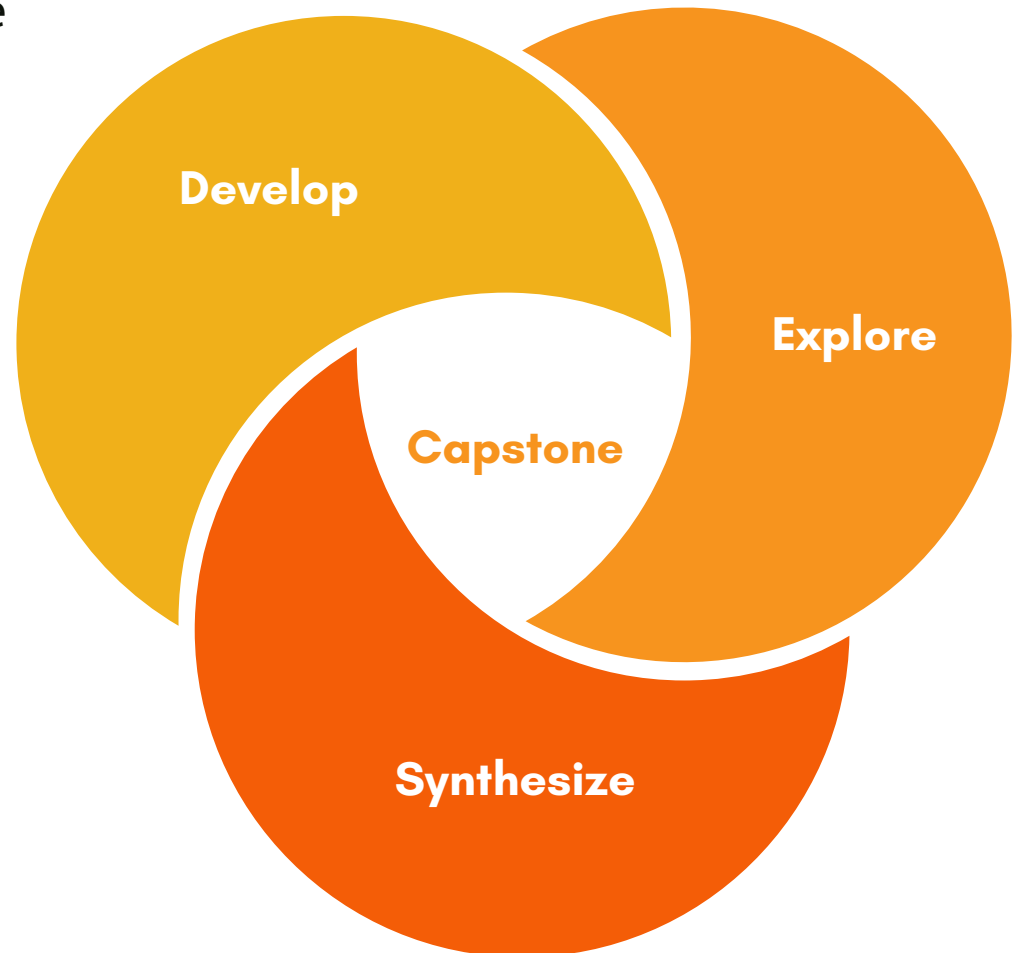
Our guide to understanding  
Competency-Based Education (CBE)  
at LightHouse Holyoke

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LightHouse has four  
interwoven **Credit Areas**  
to help guide students  
through our Competency  
Based Learning process:

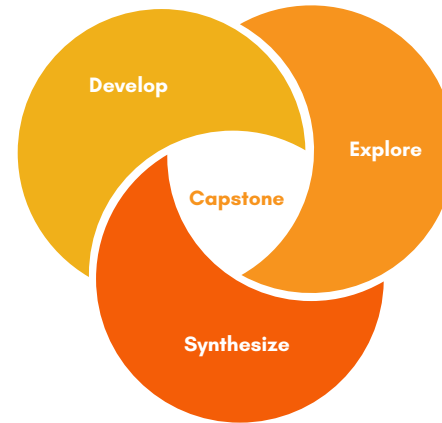
**Develop**  
**Explore**  
**Synthesize**

which together inform a  
culminating  
**Capstone** project  
which students focus on in  
their final year.



# Light Cycle

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## Credit Areas

Credit areas are overlapping and circular. We suggest students begin by focusing on the competencies in **Develop**, and progress on to **Explore** and **Synthesize** over time, ultimately culminating in a final **Capstone** project. But students will often be working in multiple areas at varying depths simultaneously.

**Develop:** Essential base skills and understandings primarily focused inward on self. This base supports future higher level skills and will be deepened over time.

**Explore:** From a base skill set begin to expand outward into collaboration and larger community connection.

**Synthesize:** Combine skills from Develop (inward) and Explore (outward) into higher level thinking and critical analysis while beginning to prepare for a final capstone project.

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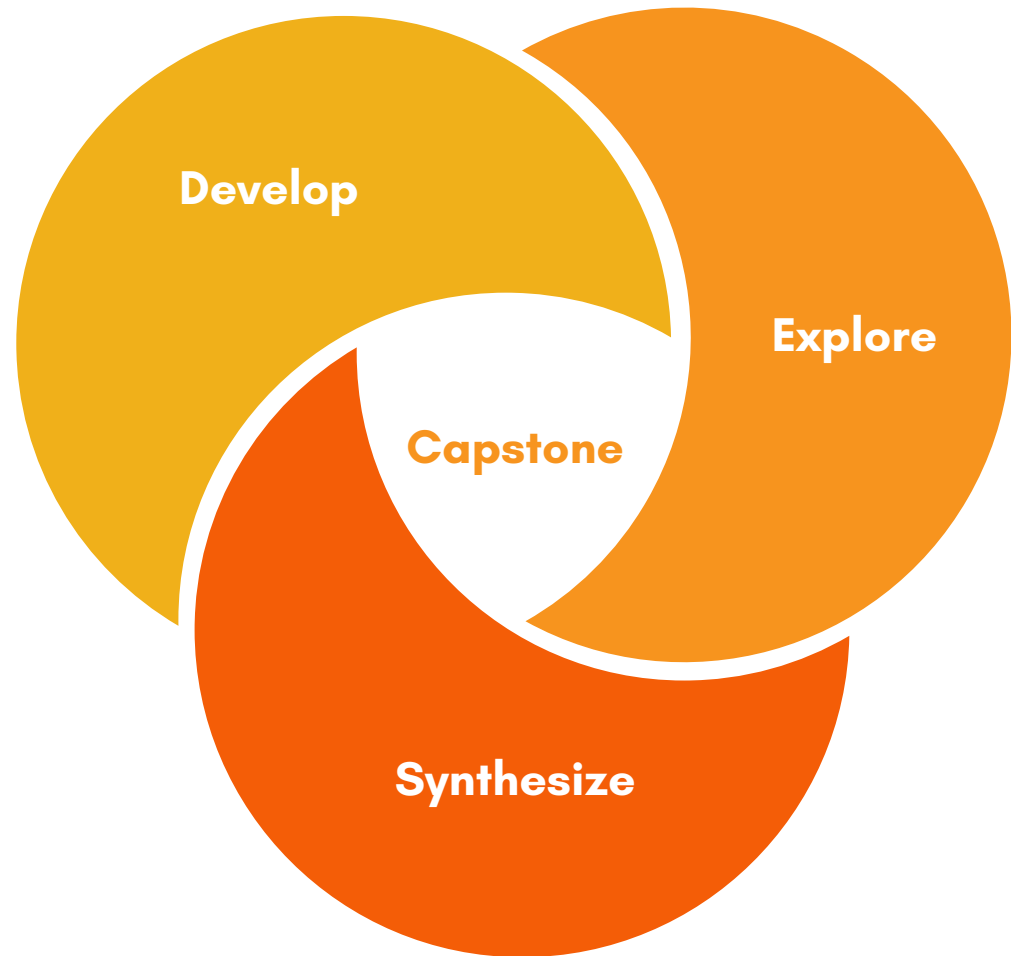
Within the four Credit Areas, LightHouse organizes learning into **four competency areas:**

**Community**

**Reflection**

**Self-Direction**

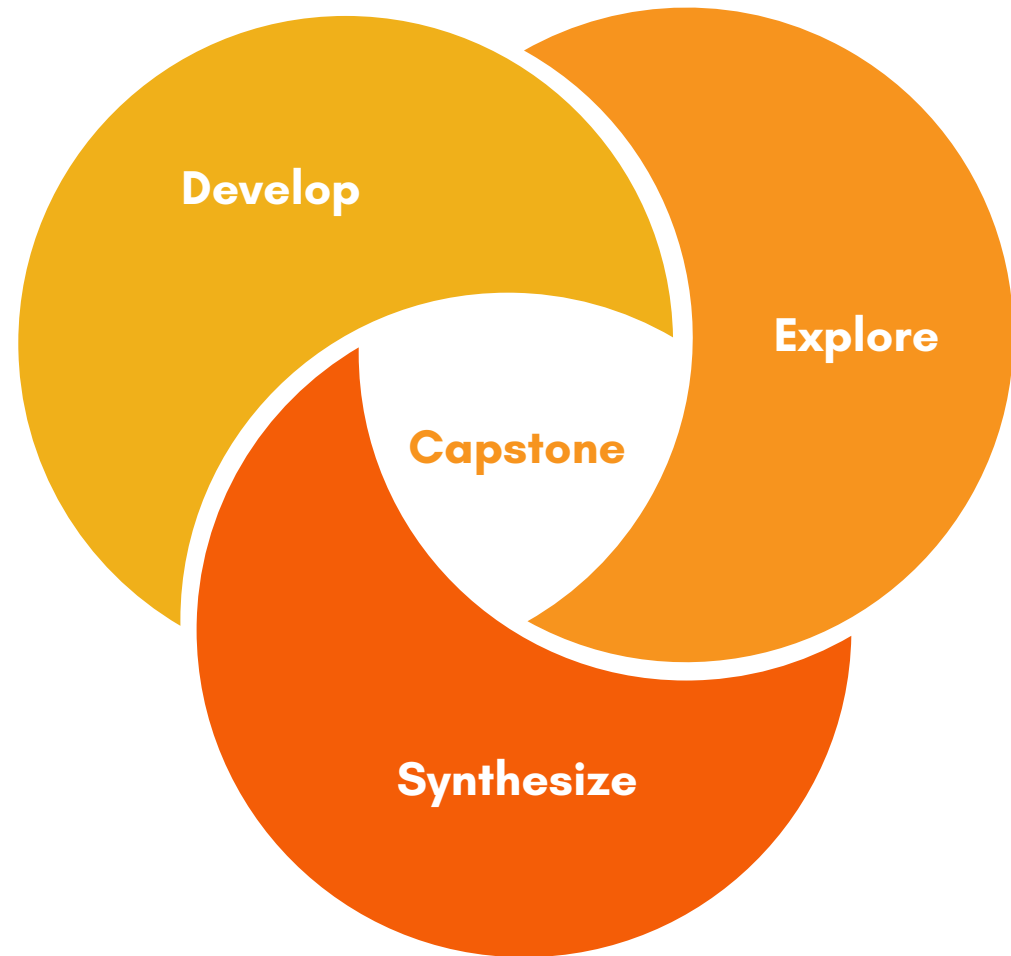
**Knowledge and Understanding**



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Within these four competency areas, **Community, Reflection, Self-Direction, and Knowledge and Understanding**, students are supported to develop a host of specific competency skills, most of which are **foundational**, meaning they are required to graduate, and some are **advanced**, meaning they are supported for students who choose to excel beyond expectation.



# Light Cycle

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## Competencies

### Community

Experiential Learning  
Collaboration  
Global Thinking  
Environmental Awareness  
Social Justice Concepts  
Community Leadership  
Advanced Social Sciences  
Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

### Self Direction

Problem Solving  
Financial Literacy  
Voice  
Perseverance  
Understand Self as Learner  
Public Speaking  
(Advanced)  
Perseverance Amidst Struggle  
(Advanced)

### Reflection

Effective Communication  
Self-Awareness and Identity  
Empathy  
Self Care and Wellness  
Ethical Decision Making  
Advanced Communication  
Advanced Wellness

### Knowledge and Understanding

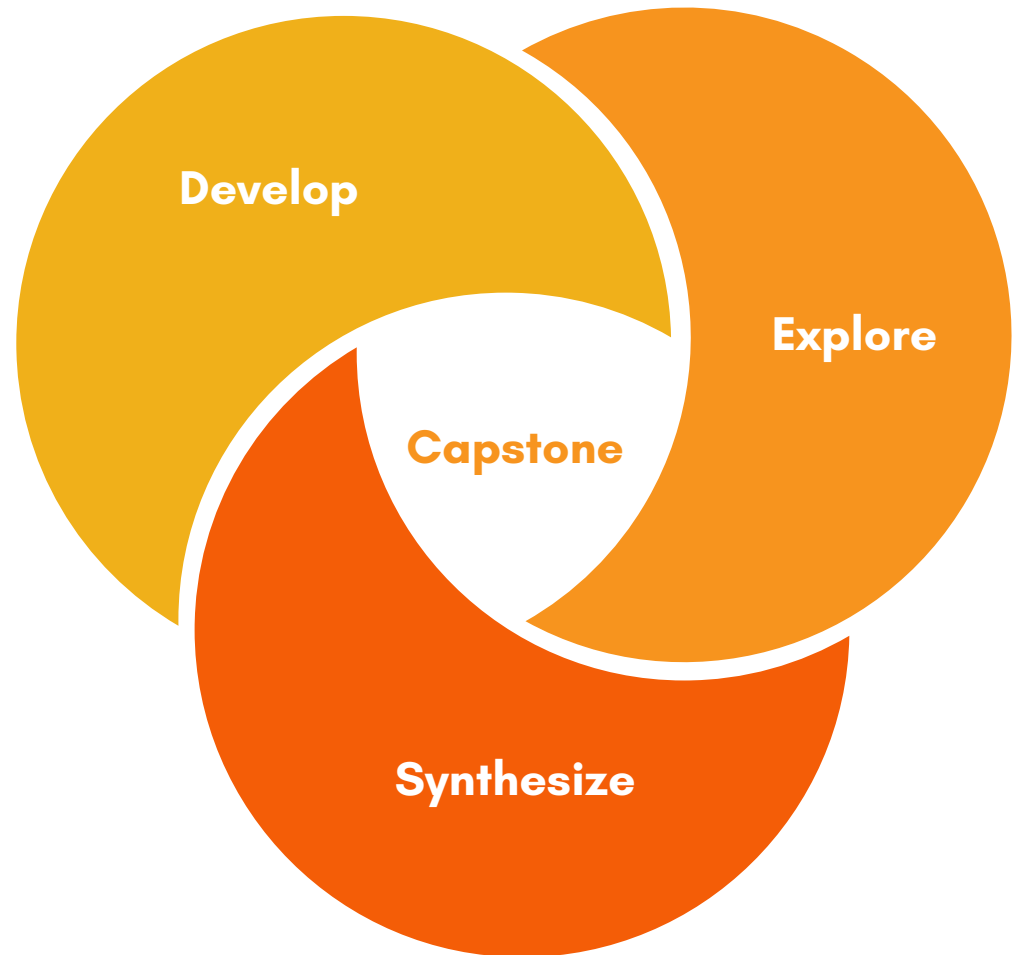
Foundational Computation  
Media Fluency  
Effective Research  
Human Sexuality  
Applied Scientific Reasoning  
Advanced Mathematics  
Advanced Technical Skills  
Advanced Sciences

# Light Cycle

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Competencies can be achieved in any context. Everything "counts." Learning happens everywhere.

Each competency has an associated set of **attainments**- "I can" statements. When students can document each attainment in their portfolio, the competency is completed, whether those skills were developed inside or outside of LightHouse.



## *Light Cycle*

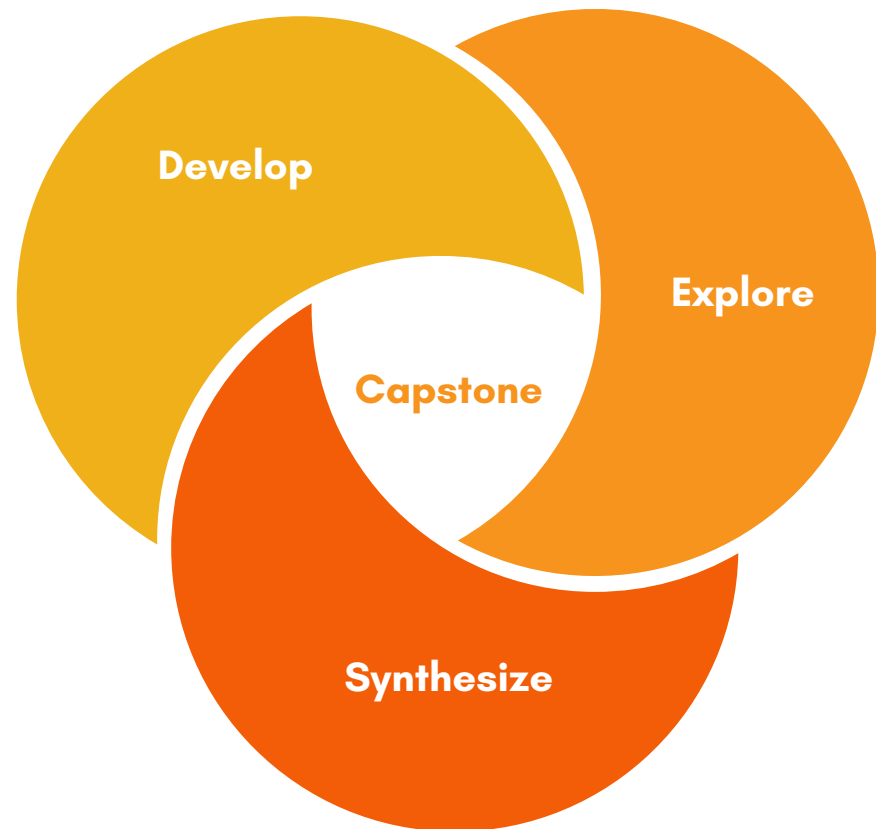
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### *Competencies*

Competencies encompass a set of skills that are bigger than what can usually be achieved in any one class at LightHouse.

Each class at LightHouse selects three competency areas to help students progress in and evaluates students on this progression.

In some cases an entire competency may be achieved during one class, but rarely. Classes aim to move students closer to competency achievement. Completion of each competency is tracked through the advisory relationship and is based on the completion of the **attainments** connected to each competency.



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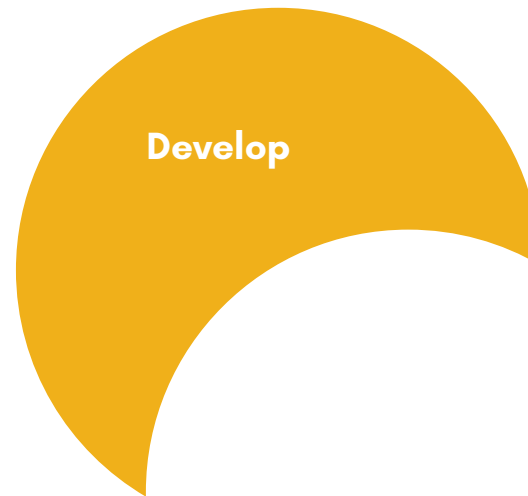
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As a source of guidance, competencies are distributed over the Develop-Explore-Synthesize-Capstone framework.

Students new to LightHouse are encouraged to focus in the **Develop** competencies:

While new students are encouraged to focus on the **Develop** skill set, parts of each area can and will be worked on simultaneously.

Students are supported to pursue passions and interests while also developing new skills in an entirely personalized, non-linear, holistic learning experience.



Experiential Learning  
Community Leadership  
Effective Communication  
Self-Awareness and Identity  
Empathy  
Advanced Communication  
Problem Solving  
Voice  
Public Speaking  
Foundational Computation  
Media Fluency  
Advanced Mathematics  
Advanced Technical Skills



# Light Cycle

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New students are encouraged to focus their learning in the Develop set of competencies, but may also be working in **Explore** and/or Synthesize simultaneously, depending on their coursework and interests.

Collaboration  
Global Thinking  
Advanced Social Sciences  
Leading Collaboration  
Self Care and Wellness Strategies  
Advanced Wellness  
Financial Literacy  
Perseverance  
Perseverance Amidst Struggle  
Effective Research  
Human Sexuality



# Light Cycle

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The Develop-Explore-Sythesize-Capstone framework is a loop, with students circling back through each area repeatedly and deepening their learning as they grow.

Environmental Awareness  
Social Justice Concepts  
Environmental Activism  
Ethical Decision Making  
Understand Self as Learner  
Applied Scientific Reasoning  
Advanced Sciences



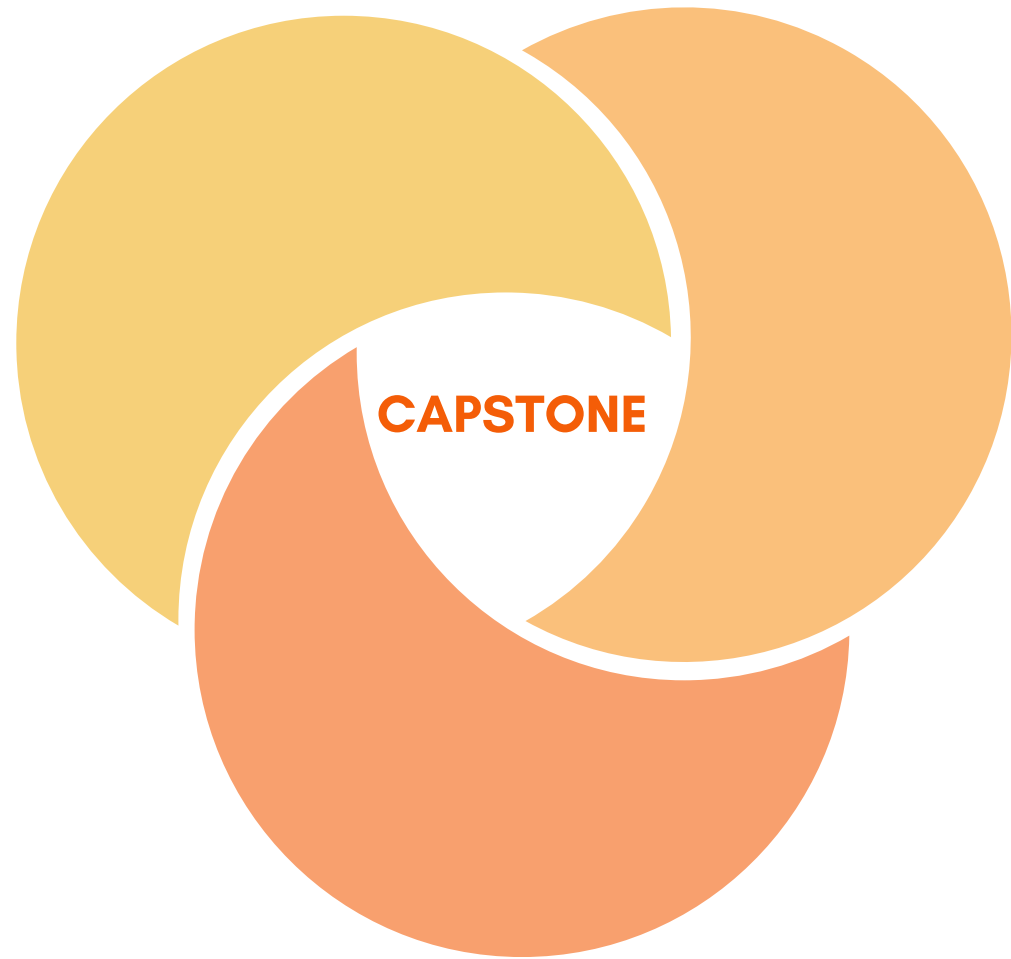
**Synthesize**

# *Light Cycle*

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The Develop-Explore-Sythesize-**Capstone** framework is a loop which informs a final Capstone project in the student's final stage at LightHouse.

Capstone projects highlight unique skills and interests and connects those to the larger world. Students develop projects in alignment with their personal goals and interests.



Each student works with their advisor to develop and eventually present their final Capstone project.

# Light Cycle

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## Attainments

Each competency has a description and associated set of attainments- "I can" statements. When students can document each attainment in their portfolio, the competency is completed, whether those skills were developed inside or outside of LightHouse.

## Community

### Experiential Learning

Collaboration

Global Thinking

Environmental Awareness

Social Justice Concepts

Advanced Social Sciences

Community Leadership  
(Advanced)

Environmental Activism  
(Advanced)

Leading Collaboration  
(Advanced)

### Experiential Learning (Develop)

Become an active participant in the LightHouse community. Demonstrate the ability to acknowledge and identify how you interact with the world and how the world interacts with you.

- I am an active participant in the LightHouse community.
- I can present artifacts of learning from active experiences in or outside of LightHouse.
- I can recall meaningful group experiences with the intention of learning and leading.

# Light Cycle

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## Attainments

### Community

Experiential Learning

#### Collaboration

Global Thinking

Environmental Awareness

Social Justice Concepts

Advanced Social Sciences

Community Leadership  
(Advanced)

Environmental Activism  
(Advanced)

Leading Collaboration  
(Advanced)

### Collaboration (Explore)

Develop projects within a group dynamic over time. Ability to work with others with respect, patience, and partnership.

I have developed projects in more than one environment within a group dynamic over time.

I work with others with respect.

I demonstrate patience and partnership with my project peers.

# Light Cycle

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## Community

Experiential Learning  
Collaboration

### Global Thinking

Environmental Awareness  
Social Justice Concepts

Advanced Social Sciences  
Community Leadership  
(Advanced)  
Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

## Attainments

### Global Thinking (Explore)

Understanding of cultures, diverse worldviews, global geography and politics. Familiarity with human geography, national and international histories and perspectives.

- I can use and interpret maps and geospatial data.
- I can demonstrate a deep understanding of cultural values in more than one world culture.
- I am familiar with various world maps and can demonstrate an understanding of regions as well as the locations of most countries.
- I can relate the events and/or issues related to current events and the ways in which they may impact my life today or in the future.
- I can explain or describe the historical events related to one or more important topics, issues, or key historical figures (person).

# Light Cycle

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## Community

Experiential Learning  
Collaboration  
Global Thinking

Advanced Social Sciences  
Community Leadership  
(Advanced)

## Environmental Awareness

Social Justice Concepts

Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

## Attainments

### Environmental Awareness (Synthesize)

Study and understanding of our global environment and current and future environmental crises.

- I can explain multiple environmental systems or processes: the weather, habitats, life cycles, oceans, etc.
- I can demonstrate interactions between/among parts of any of these systems or processes.
- I understand the ecological, economic, and cultural connections between humans and the environment.
- I can articulate the impact of decisions made by individuals (including myself) and governments and corporations have on our global environment

# Light Cycle

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## Community

Experiential Learning

Collaboration

Global Thinking

Environmental Awareness

## Social Justice Concepts

Advanced Social Sciences

Community Leadership  
(Advanced)

Environmental Activism  
(Advanced)

Leading Collaboration  
(Advanced)

## Attainments

### Social Justice Concepts (Synthesize)

Ability to recognize and talk about social injustice productively. Ability to discuss challenging topics with respect and care. Sense of responsibility toward ending unjust practices.

- I understand what social injustice is and communicate my understanding to others in words or writing.
- I can discuss injustice productively with others with respect and care.
- I am able to think critically about how I am affecting people around me.
- I am able to identify how my personal history and experience influences my ability to be a social justice advocate.
- I have a sense of responsibility toward ending unjust practices.



# Light Cycle

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## Community

Experiential Learning  
Collaboration  
Global Thinking  
Environmental Awareness  
Social Justice Concepts

## Advanced Social Sciences

Community Leadership  
(Advanced)  
Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

# Attainments

## Advanced Social Sciences (Explore)

Extensive, in depth study of social science topics including history, politics, economics, anthropology, and/or sociology.

- I can explain in depth the history and functions of the U.S. federal government.
- I can demonstrate the similarities and differences among multiple global systems of government.
- I can offer in depth explanations of the history of multiple topics of my own choosing.
- I can demonstrate my understanding of one or more significant historical trends (civil rights, colonization, effects of technology, political activism, commercialism, wars, etc.)
- I can explain in detail the workings of one or more economic systems (capitalism, socialism, feudalism, etc.)

# Light Cycle

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## Community

Experiential Learning  
Collaboration  
Global Thinking  
Environmental Awareness  
Social Justice Concepts

Advanced Social Sciences  
**Community Leadership  
(Advanced)**  
Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

## Attainments

### Community Leadership- Advanced (Develop)

Set a positive example for others in the community. Develop and lead projects within the school community and engage in involved service learning projects in the local or global community.

- I set a positive example for others in the community.
- I have developed and led projects within the school community.
- I have engaged in long term service learning projects in the local or global community.

# Light Cycle

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## Community

Experiential Learning  
Collaboration  
Global Thinking  
Environmental Awareness  
Social Justice Concepts

Advanced Social Sciences  
Community Leadership  
(Advanced)  
**Environmental Activism  
(Advanced)**  
Leading Collaboration  
(Advanced)

## Attainments

### Environmental Activism- Advanced (Synthesize)

Long term study and action on issues of global health and sustainability with a focus on local and/or global solutions.

- I am actively involved in significant environmental projects inside or outside LightHouse seeking to create change.
- I can convey a strong understanding of multiple global environmental concerns, ie global warming, plastic or other pollution, ocean degradation, rainforest loss...

# Light Cycle

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## Community

Experiential Learning  
Collaboration  
Global Thinking  
Environmental Awareness  
Social Justice Concepts

Advanced Social Sciences  
Community Leadership  
(Advanced)  
Environmental Activism  
(Advanced)  
**Leading Collaboration  
(Advanced)**

## Attainments

### Leading Collaboration- Advanced (Explore)

Lead a community based initiative inside or outside of school that tackles or addresses a specific issue.

- I led a group initiative inside or outside of school that addressed a specific issue.
- I played a key role with a group of my peers to complete a substantial project or achieve a major goal we set for ourselves.
- I contributed to finding solutions to challenges that a group of my peers experienced as we tried to complete a project or achieve a goal.

# Light Cycle

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## Reflection

### Effective Communication

Self-Awareness and Identity

Empathy

Self Care and Wellness Strategies

Ethical Decision Making

Advanced Communication

Advanced Wellness

## Attainments

### Effective Communication (Develop)

Positively and effectively express ideas in words, writing, and other media and understand the ideas of others.

- I can accurately gain meaning from texts and other media and summarize these details.
- I can analyze how ideas develop and interact over the course of a text, (i.e.: including how point of view or purpose shapes the content and style of a text)
- I can write informative/explanatory essays to convey complex ideas and information
- I can create narratives to convey opinions or experiences using well-chosen details and well-structured sequences.
- I develop and strengthen my work as needed by planning, revising, editing, or rewriting.

# Light Cycle

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## Reflection

Effective Communication

**Self-Awareness and Identity**

Empathy

Self Care and Wellness Strategies

Ethical Decision Making

Advanced Communication

Advanced Wellness

## Attainments

### Self Awareness and Identity (Develop)

Demonstrated understanding of one's own biases, triggers, and personal tendencies. Willingness to examine one's own beliefs. Explore and reflect on personal identities within any intersecting cultural, familial, geographical, political and/or other personal contexts.

- I am able to recognize I am a culmination of my unique cultural intersections.
- I am able to recognize how I am pre-judged and how I might pre-judge others.
- I have clarity about my own beliefs AND I am willing to question these beliefs.
- I can recognize where my values come from.
- I am able to recognize that judgements passed by myself or others may not be true and can be harmful (may cause conflict, connection, or conversation with others)

# Light Cycle

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## Reflection

Effective Communication  
Self-Awareness and Identity

## Empathy

Self Care and Wellness Strategies

Ethical Decision Making  
Advanced Communication  
Advanced Wellness

# Attainments

## Empathy (Develop)

Awareness and understanding and concern for other people's feelings and experience.

- I know when I've hurt someone's feelings or made them feel uncomfortable.
- I am compelled to change my behavior when I've negatively affected someone.
- I can recognize when I should stick up for others.
- I can approach others with compassion across differences.
- When someone tells me about their feelings I am able to hear their perspective.

# Light Cycle

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## Reflection

Effective Communication  
Self-Awareness and Identity  
Empathy

Ethical Decision Making  
Advanced Communication  
Advanced Wellness

## Self Care and Wellness Strategies

# Attainments

## Self Care and Wellness Strategies (Explore)

Understanding of personal mental, physical and social-emotional wellness needs and how to tend to them.

- I have self care practices and can describe them.
- I can identify helpful and harmful behaviors, practices, or routines that impact my mental, physical, and social-emotional wellness (nutrition, movement or sports, meditation, etc.)
- I can reflect on habits, patterns, and typical self care or self soothing strategies and identify opportunities for growth.
- I can identify and articulate emotions as they arise.



# Light Cycle

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## Reflection

Effective Communication  
Self-Awareness and Identity  
Empathy  
Self Care and Wellness Strategies

**Ethical Decision Making**  
Advanced Communication  
Advanced Wellness

## Attainments

### Ethical Decision Making (Synthesize)

Ethical Decision Making is a culmination of voice, empathy, self-awareness, and identity. The act of being in alignment with moral honesty.

- My intentions are to do the greatest amount of good and least amount of harm.
- I am able to see multiple sides of an ethical dilemma before making a decision.
- I am willing to go against the grain to speak out against hurtful behavior.
- I advocate for what is beneficial to the community.

# Light Cycle

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## Reflection

Effective Communication  
Self-Awareness and Identity  
Empathy  
Self Care and Wellness Strategies

Ethical Decision Making  
**Advanced Communication**  
Advanced Wellness

## Attainments

### Advanced Communication (Develop)

Strong ability to persuade or dissuade through writing and/or other media. Storytelling. Creating compelling narratives.

- I can identify bias, prejudice, and ulterior motives in sources of information.
- I can analyze the arguments of others on controversial or complex issues.
- I can present in speaking and writing a logical argument to support an opinion or position on an issue.
- I can craft compelling stories for a variety of purposes and audiences.
- I am fluent in or have studied extensively more than one language.

## Light Cycle

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### Reflection

Effective Communication  
Self-Awareness and Identity  
Empathy  
Self Care and Wellness Strategies

Ethical Decision Making  
Advanced Communication  
**Advanced Wellness**

## Attainments

### Advanced Wellness (Explore)

Demonstrate a significant commitment over time to physical and mental development through sports, fitness and physical health, mental health, and/or mindfulness or spiritual connection.

- I commit a significant amount of energy toward my physical and emotional well being.
- I think about and monitor health metrics like my sleep and nutrition.
- I have used a variety of resources (books, podcasts, documentaries, classes, personal guidance) to learn about how to increase and maintain my physical and emotional health.
- Caring for my well being is a major aspect of my daily focus and activities.

# Light Cycle

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## Attainments

### Self Direction

#### Problem Solving

Financial Literacy  
Voice  
Perseverance

Understand Self as Learner  
Public Speaking (Advanced)  
Perseverance Amidst Struggle  
(Advanced)

### Problem Solving (Develop)

Ability to recognize problems, identify effective step-by-step solutions, and modify those solutions as needed for a positive outcome. Set goals and make continued attempts to work towards those goals. Work with an advisor as an accountability partner to track and monitor progress.

- I can identify barriers and ask for guidance when I get stuck.
- I can build upon existing ideas.
- I can communicate my potential solutions to others.
- I can create step by step processes to finding solutions.

# Light Cycle

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## Self Direction

Problem Solving  
**Financial Literacy**  
Voice  
Perseverance

Understand Self as Learner  
Public Speaking (Advanced)  
Perseverance Amidst Struggle  
(Advanced)

## Attainments

### Financial Literacy (Explore)

Understanding of financial components and skills such as budgeting, credit, debt, investing, borrowing, taxation, and personal money management.

- I can explain the concept and benefits of a budget and explain or demonstrate my understanding of basic budgeting terms.
- I can use Google sheets or Excel to set up a basic budget.
- I can explain or demonstrate my understanding of credit and debt as they relate to personal loans, student loans, and credit cards.
- I can explain or demonstrate my understanding of two or more financial concepts including, mortgages, lines of credit, the stock market, interest and compound interest, investing, and taxes.

# Light Cycle

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## Self Direction

Problem Solving  
Financial Literacy

## Voice

Perseverance

Understand Self as Learner  
Public Speaking (Advanced)  
Perseverance Amidst Struggle  
(Advanced)

# Attainments

## Voice (Develop)

A valuable tool that allows you to share authentically with the world around you. Each voice is a unique reflection of your experiences in the world.

- I can think for myself and express my thoughts freely.
- I can introduce thoughts and ideas others may not have explored.
- I can communicate my thoughts, questions, needs and ideas with others.
- I understand the power of my voice.
- I am aware of the ways in which my voice is important and valuable to my community.

# Light Cycle

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## Self Direction

Problem Solving  
Financial Literacy  
Voice

## Perseverance

Understand Self as Learner  
Public Speaking (Advanced)  
Perseverance Amidst Struggle  
(Advanced)

# Attainments

## Perseverance (Explore)

The ability to be curious, to recall prior success and apply that learned knowledge to the present. Knowing how to stay on task, work through or around obstacles and challenges with support.

- I understand what resilience is and can look like.
- I can identify my own barriers and challenges while working towards a goal.
- I demonstrate the ability to ask for help when I experience feeling discouraged.
- I am open to revising my original plan as challenges arise.
- I am aware of how my personal challenges may skew my perception of being successful.

# Light Cycle

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## Self Direction

Problem Solving  
Financial Literacy  
Voice  
Perseverance

**Understand Self as Learner**  
Public Speaking (Advanced)  
Perseverance Amidst Struggle  
(Advanced)

## Attainments

### Understand Self as Learner (Synthesize)

Discover which learning strategies and work practices are most effective for your academic growth. Commitment to invest the time to pursue questions that spark your curiosity.

- I understand and value that there are multiple ways of learning.
- I can reflect on my journey as a learner so far.
- I can articulate and understand my learning style(s): visual, kinesthetic, auditory...
- I recognize how my curiosity is the foundation for learning and growth.
- I demonstrate the habit and ability apply a sense of wonder and a desire to learn more.



# Light Cycle

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## Self Direction

Problem Solving  
Financial Literacy  
Voice  
Perseverance

Understand Self as Learner  
**Public Speaking (Advanced)**  
Perseverance Amidst Struggle  
(Advanced)

## Attainments

### Public Speaking - Advanced (Develop)

Strong skills in confident, effective communication in front of groups.

- I can speak clearly and confidently in front of large groups.
- I can engage with an audience.
- I am able to stay on track even after being interrupted.
- I am able to be clear in the information I am delivering.

# Light Cycle

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## Self Direction

Problem Solving  
Financial Literacy  
Voice  
Perseverance

Understand Self as Learner  
Public Speaking (Advanced)  
**Perseverance Amidst Struggle  
(Advanced)**

## Attainments

### Perseverance Amidst Struggle (Advanced) (Explore)

Apply previous experiences of working through serious challenges to continue growing while managing boundaries and motivations within one's environment.

- I have faced extraordinary challenges and worked through them using personal resources and/or external supports.
- I can articulate how my specific challenges have impacted me and the ways in which I have sought and achieved successes while managing my life.

# Light Cycle

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## Knowledge and Understanding

### Foundational Computation

Media Fluency

Effective Research

Human Sexuality

Applied Scientific Reasoning

Advanced Mathematics

Advanced Technical Skills

Advanced Sciences

## Attainments

### Foundational Computation (Develop)

Demonstrate sufficient math skills such as being able to pass a 10th grade MCAS or entry level community college placement exam.

- I have mastered elementary arithmetic and geometry through Algebra I.
- I can use arithmetic to solve everyday problems I encounter or may encounter in my life.
- I can explain fractions as they occur in people's everyday lives (i.e.: ingredients in recipes, coins/money, separating/cutting objects into smaller pieces, etc.)
- I can explain percentages as they occur in people's everyday lives (part of the day, part of money, groupings of numbers of people, and other basic statistics.)

# Light Cycle

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## Knowledge and Understanding

Foundational Computation

**Media Fluency**

Effective Research

Human Sexuality

Applied Scientific Reasoning

Advanced Mathematics

Advanced Technical Skills

Advanced Sciences

## Attainments

### Media Fluency (Develop)

Evaluate information found on a variety of internet platforms. Analyze the purpose or goals of the authors/designers of internet and electronic media. Use the internet and electronic media safely. Convey understanding of the unique ways in which electronic/internet tools can be used to either benefit or harm users.

- I can demonstrate my ability or explain how to post information on the internet and social media in responsible, considerate ways (and describe the potential short-term and long-term consequences of not doing so.)
- I can explain my understanding of the ways electronic media can be used to covertly or overtly influence, persuade, or mislead me and others.
- I can use email and common technology tools (Microsoft or Google suite) as tools to help me plan, coordinate, organize, execute, assess or display my learning.

# Light Cycle

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## Knowledge and Understanding

Foundational Computation  
Media Fluency

### Effective Research

Human Sexuality  
Applied Scientific Reasoning

Advanced Mathematics  
Advanced Technical Skills  
Advanced Sciences

## Attainments

### Effective Research (Explore)

Use high quality, and original material representing a range of perspectives in order to organize information and reach conclusions on a topic.

- I know the difference between opinions and facts.
- I question the validity of information.
- I use a range of source material (books, articles, databases, videos, interviews, experiences, etc.) to inform my knowledge and opinions on issues and topics.
- I seek a range of perspectives in order to reach conclusions on a topic.
- I know how to cite and give credit to my sources.

# Light Cycle

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## Knowledge and Understanding

Foundational Computation  
Media Fluency  
Effective Research

Advanced Mathematics  
Advanced Technical Skills  
Advanced Sciences

## Human Sexuality

Applied Scientific Reasoning

# Attainments

## Human Sexuality (Explore)

Demystify the topic of sexual health and reproduction.

- I can demonstrate my understanding of the basic functions of cis male, cis female, and intersex anatomy.
- I am able to respectfully engage in conversations about different sexual preferences.
- I can convey a full understanding sexual reproduction, contraceptives, and STIs.
- I know and respect what consent means.

# Light Cycle

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## Knowledge and Understanding

Foundational Computation

Advanced Mathematics

Media Fluency

Advanced Technical Skills

Effective Research

Advanced Sciences

Human Sexuality

## Applied Scientific Reasoning

### Applied Scientific Reasoning (Synthesize)

Demonstrate understanding of scientific concepts and the scientific method. Understanding foundational biological and physical systems.

## Attainments

- I can explain or provide examples of thinking like a scientist (scientific thinking or scientific reasoning.)
- I can explain or present my understanding of the benefits and limitations of science as a broad field of study (or way of thinking.)
- I can describe or explain the biological benefits of exercise, diet and sleep.
- I have completed full length courses of study in at least two of the following: biology, chemistry, physics, environmental science, astronomy, marine biology, geology, or another science of my choosing.
- I can describe or explain the scientific method as applied to simple experiments in real life situations.

# Light Cycle

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## Knowledge and Understanding

Foundational Computation  
Media Fluency  
Effective Research  
Human Sexuality  
Applied Scientific Reasoning

**Advanced Mathematics**  
Advanced Technical Skills  
Advanced Sciences

## Attainments

### Advanced Mathematics (Develop)

Demonstrate advanced computational skills sufficient to succeed in a college level math course.

- I can demonstrate fluent skills in math through Algebra II and Calculus.
- I can explain solutions to problems that require algebraic thinking in practical situations, such as in profit-and-loss calculations for investments or business ventures or calculating the cost and amount of materials required for a project.
- I can solve linear equations, especially in the context of real-life applications (such as comparing income over time, calculating mileage rates, predicting financial profits or loss, or understanding compound interest.)



# Light Cycle

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## Knowledge and Understanding

Foundational Computation  
Media Fluency  
Effective Research  
Human Sexuality  
Applied Scientific Reasoning

Advanced Mathematics  
**Advanced Technical Skills**  
Advanced Sciences

## Attainments

### Advanced Technical Skills (Develop)

Demonstrate fluency in one or more programming languages and/or additional advanced platforms or technologies.

- I can explain the basic structure of the internet.
- I can explain or demonstrate how one or more coding languages are used in general to connect front end users, back end applications and databases.
- I can work fluently in one or more common coding languages such as HTML, CSS, Javascript...
- I can work with a team of my peers and adults to publish a website or other outwardly-facing technology to achieve a personal, professional, artistic, community-oriented or academic goal (websites, landing page, social media campaign, how-to videos, etc.)
- I can collaborate with others in short- and long-term projects to design or create games, tools or experiences that involve multiple iterations.

# Light Cycle

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## Knowledge and Understanding

Foundational Computation  
Media Fluency  
Effective Research  
Human Sexuality  
Applied Scientific Reasoning

Advanced Mathematics  
Advanced Technical Skills  
**Advanced Sciences**

## Attainments

### Advanced Sciences (Synthesize)

Significant study and mastery in particular fields of science including Biology, Chemistry, and/or Physics.

- I have completed advanced, full length courses in at least three of the following: Biology, Chemistry, Physics, Environmental Science, Astronomy, Marine Biology, or another science.
- I can develop a plan for studying a field of science or a set of discipline-specific or interdisciplinary scientific ideas, concepts or theories.
- I can demonstrate, publish or display the results of an experiment that uses the scientific method that I developed on my own or with a group of my peers, including recommendations for follow up to test the results/conclusions drawn.
- I can present an example of well-established pseudo-science and the development of ideas that debunked it.

# Light Cycle

## Key Vocabulary Terms and Understandings

### Credit Areas

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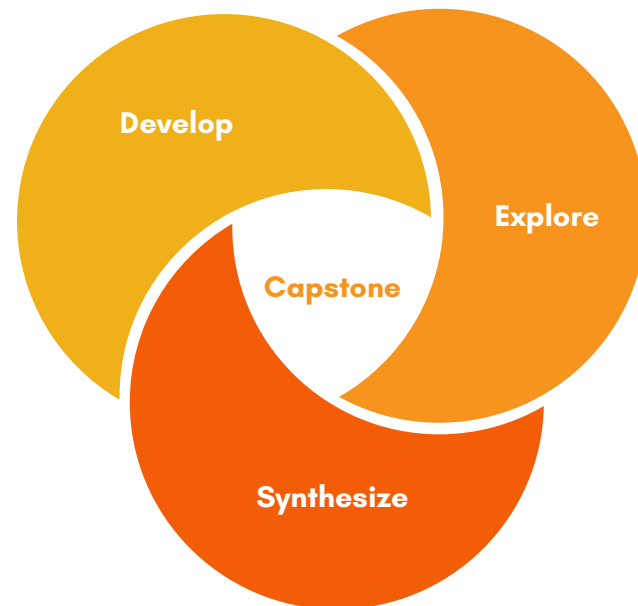
**Credit Areas:** LightHouse has four interwoven **Credit Areas** to help guide students through our Competency Based Learning process:

**Develop**

**Explore**

**Synthesize**

which together inform a culminating **Capstone** project which students focus on in their final year.



# Light Cycle

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## Key Vocabulary Terms and Understandings

### **Competency Areas**

Within the four Credit Areas, LightHouse organizes learning into four competency areas:

**Community**

**Reflection**

**Self-Direction**

**Knowledge and Understanding**

Within these four competency areas, students are supported to develop a host of specific competency skills, most of which are **foundational**, meaning they are required to graduate, and some are **advanced**, meaning they are supported for students who choose to excel beyond expectation.

# *Light Cycle*

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## ***Competencies***

### **Community**

Experiential Learning  
Collaboration  
Environmental Awareness  
Global Thinking  
Social Justice Concepts  
Advanced Social Sciences  
Community Leadership  
(Advanced)  
Environmental Activism  
(Advanced)  
Leading Collaboration  
(Advanced)

### **Key Vocabulary Terms and Understandings**

### **Self Direction**

Problem Solving  
Financial Literacy  
Voice  
Perseverance  
Understand Self as Learner  
Perseverance Amidst Struggle  
(Advanced)  
Public Speaking  
(Advanced)

### **Reflection**

Effective Communication  
Self-Awareness and Identity  
Empathy  
Self Care and Wellness  
Ethical Decision Making  
Advanced Communication  
Advanced Wellness

### **Knowledge and Understanding**

Foundational Computation  
Media Fluency  
Effective Research  
Human Sexuality  
Applied Scientific Reasoning  
Advanced Mathematics  
Advanced Technical Skills  
Advanced Sciences

# *Light Cycle*

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## Key Vocabulary Terms and Understandings

### ***Attainments***

Each competency has a description and associated set of **attainments**- "I can" statements.

When students can document each attainment in their portfolio, the competency is completed, whether those skills were developed inside or outside of LightHouse.

# Light Cycle

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LightHouse partners with The Mastery Transcript Consortium (MTC) to create a digital transcript to document and share student learning and competency completion with colleges and other post graduate programs.

Working with MTC allows us to offer a much more robust and holistic representation of each student than is possible with a simple, traditional letter grade transcript. When students are ready they can share a private, direct link with admissions departments that details their competency-based work and specific skills and achievements.

# Light Cycle

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LightHouse graduates complete 20 foundational competencies, and have the option to add up to 10 advanced credits.

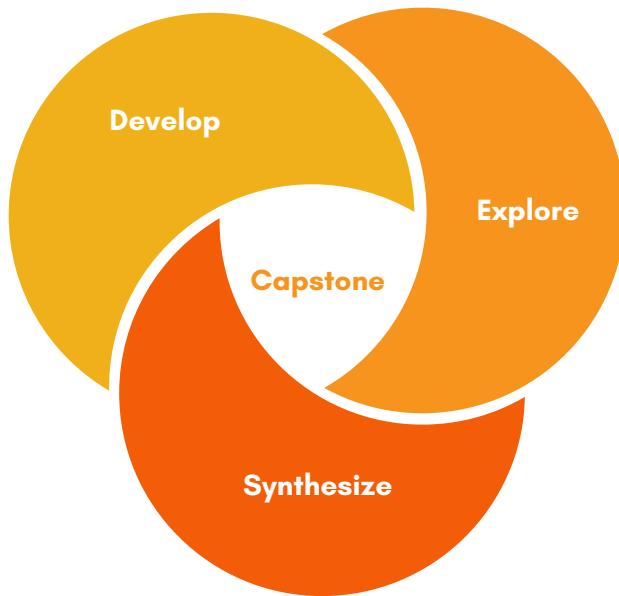
As digital, interactive documents, the Mastery Transcript provides a compact “top layer” that can be quickly scanned, with additional information layered beneath for readers who want to dive deeper into a learner’s credentials.

These records are created to support learners in a variety of post-high school goals, whether that be admission to a selective four-year university, placement at a community college, or entry into the workforce.



# Light Cycle

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At LightHouse each student's unique set of strengths, needs, interests, goals and experiences are nurtured and leveraged to develop a host of research-based competencies using an array of personalized resources both inside and outside of LightHouse. Let's get started!