# **Outdoor Leadership**

# Common Ground High School

UNITS (1/3 SELECTED)

Unit 1: Why Go Outside? An Introduction to Health and Outdoor Leadership

10 lessons

Unit 2: Preparing for Outdoor Adventures

16 lessons

Unit 3: Advanced Outdoor Leadership Skills

12 lessons

**Outdoor Leadership** 

#### **DESIRED RESULTS**

#### **Unit Description**

Unit 2 uses health concepts addressing physical activity and nutrition to plan for hiking and camping as a group. Planning and preparation are keys to outdoor success. Students learn about essential gear, including our food and water needs when we go outside. Leave No Trace principles are emphasized to protect the outdoors from us. Students immediately apply what they are learning to actual trip plans: a Day-Hike, and Overnight Camping.

Meaning	
Big Ideas & Understandings	Essential Questions & Instructional Questions
<ul> <li>Students will understand that</li> <li>Preparation is important when going outdoors for hiking, camping, and other activities; there are some essential items to bring in order to stay safe and healthy</li> <li>It's important to plan for physical activity goals that are flexible and aligned with the ability levels and confidence of group members, and it's important to plan for food and nutrition to be able to stay safe and healthy when doing such activities</li> <li>Understanding the principles of Leave No Trace can help protect fragile outdoor environments from overuse by human recreation</li> </ul>	Students will keep considering  How can we prepare to stay safe and healthy when we spend time outdoors1  What equipment do we need for outdoor activities and adventures?  What gear is necessary vs. nice?  What are our nutrition needs to meet our outdoor physical activity goals?  How can we plan outdoor activities for the physical ability-levels of our group?  How do we plan for healthy eating when we are going outside or on adventures?  How do we make sure the air, land, and water are safe from us and healthy after we leave?  How do we leave no trace?  How can we become advocates for clean, healthy outdoors for all?

Acquisition	
Knowledge	Skills
Students will know	Students will be skilled at

#### **Outdoor Leadership**

#### Acquisition

- · essential equipment for hiking
- principles of Leave No Trace
- Air Quality Index, UV Index
- water testing, water treatment & filtration
- · body composition, body mass index
- · cardiorespiratory endurance
- · exercise, flexibility
- · muscular endurance, muscular strength
- · obesity, sedentary
- physical activity, physical fitness
- sleep deprivation, sleep hygiene
- carbohydrate, protein, fat, vitamin, mineral
- dehydration, deficiency
- · nutritional supplement
- fad diet, pseudoscience
- eating disorders, body image
- · personal health plan, food journal
- negative effects of human recreation on outdoor environments
- · campfire safety

- Distinguish between safe, risky or harmful behaviors affecting themselves and the group
- Use and evaluate safety techniques to avoid and reduce injury and prevent disease
- Apply and evaluate characteristics needed to be a responsible individual within the group and community
- Practice planning for healthy eating individually and for the group
- Set physical activity goals based on ability levels and characteristics of the group
- Analyze and explain negative effects and impacts of human outdoor recreation on environments

#### **STANDARDS**

# Connecticut - Grade 9-12 - Health H.1.3. H.1.5. H.1.6. H.3.3. H.3.6. H.5.2. H.5.4. H.5.5. H.5.9. Connecticut - Grade 11-12 - Literacy in History, Science & Technical Subjects (ELA)

WHST.11-12.2 WHST.11-12.4 WHST.11-12.10 RST.11-12.2 RST.11-12.9

**Outdoor Leadership** 

#### ASSESSMENT EVIDENCE

# APEX Health Quizzes (5 total) [ Coursework ]

**Assessment Type:** Formative

**Assessment Tier:** Rehearsal & Scrimmage (REHSCR)

Assessment Level (DOK): DOK1 / DOK2

Description: Students complete short quizzes after reading APEX Health content in class, or for homework

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.1.3. H.1.6.

H.3.3.

# LNT Principles Notecards [ Coursework ]

**Assessment Type:** Formative

Assessment Tier: Rehearsal & Scrimmage (REHSCR)

Assessment Level (DOK): DOK1 / DOK2

Description: Notecards that can be taken on the trail that summarize Leave No Trace principles, and explain

why they are important

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.3.3.

H.5.2.

# Foods for Day-Hikes [ Coursework ]

**Assessment Type:** Formative

**Assessment Tier:** Rehearsal & Scrimmage (REHSCR)

Assessment Level (DOK): DOK2 / DOK3

Description: Check for understanding, students apply nutrition and packing recommendations to foods for hiking

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.1.3.

H.1.6.

H.5.2.

# Day-Hike Plan [ Coursework ]

**Assessment Type:** Formative

**Assessment Tier:** Rehearsal & Scrimmage (REHSCR)

**Outdoor Leadership** 

Assessment Level (DOK): DOK2 / DOK3

**Description:** Students apply what they have learned to develop a plan for a day-hike including gear, physical

activity, routes, and food

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.1.6. H.3.3.

H.5.2.

H.5.4.

Connecticut - Grade 11-12 - Literacy in History, Science & Technical Subjects (ELA)

H.5.9.

RST.11-12.9

WHST.11-12.2

WHST.11-12.10

Day-Hike Participation Rubric & Self-evaluation [ Participation ]

**Assessment Type:** Summative

**Assessment Tier:** Authentic Performance (AUTPER)

Assessment Level (DOK): DOK3

Description: Check for outdoor leadership skills practiced during the hike

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.1.6.

H.3.6.

H.5.2.

#### Advanced Food & Drink Notecards [ Coursework ]

**Assessment Type:** Formative

**Assessment Tier:** Rehearsal & Scrimmage (REHSCR)

Assessment Level (DOK): DOK1 / DOK2

Description: Trail-ready notecards for what to watch for regarding dehydration, not enough calories, eating

disorders, diabetes, etc.

**STANDARDS** 

Connecticut - Grade 9-12 - Health

H.1.3.

H.3.3.

H.5.5.

H.5.9.

#### [ Summative ] Writing 2: Human Recreation and its Effects

**Assessment Type:** Summative

**Assessment Tier:** Authentic Performance (AUTPER)

H.5.2.

**Outdoor Leadership** 

Assessment Level (DOK): DOK3 / DOK4

**Description:** Explain the effects of human recreation on outdoor environment. See 2.06 below.

#### **STANDARDS**



Connecticut - Grade 11-12 - Literacy in History, Science & Technical Subjects (ELA)

RST.11-12.2 RST.11-12.9 WHST.11-12.2 WHST.11-12.4 WHST.11-12.10

# Overnight Camping Plan: Physical Activities and Meal Planning [Coursework]

Assessment Type: Summative

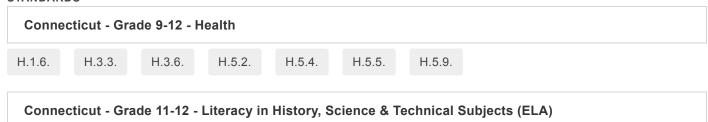
**Assessment Tier:** Authentic Performance (AUTPER)

Assessment Level (DOK): DOK3 / DOK4

Description: Students apply what they have learned to develop a plan for overnight camping including gear,

physical activity, camp activities, and food

#### **STANDARDS**



WHST.11-12.10

# Overnight Camping Participation Rubric & Self-evaluation [ Participation 1

**Assessment Type:** Summative

**Assessment Tier:** Authentic Performance (AUTPER)

Assessment Level (DOK): DOK4

**Description:** Check for outdoor leadership skills practiced during camping

STANDARDS

Connecticut - Grade 9-12 - Health

**Outdoor Leadership** 

H.1.6. H.3.6. H.5.2.

# Letter of Gratitude: Overnight Camping Trip [ Summative ]

**Assessment Type:** Summative

**Assessment Tier:** Authentic Performance (AUTPER)

Assessment Level (DOK): DOK4

Description: Write a letter to someone who helped to make the trip happen explaining what you learned or how

you changed

# APEX Unit 2 Test [ Summative ]

Assessment Type: Summative

Assessment Tier: Drill & Practice (DRIPRA)
Assessment Level (DOK): DOK1 / DOK2

**Description:** Summative check for understanding

#### **STANDARDS**

# Connecticut - Grade 9-12 - Health H.1.3. H.1.5. H.3.3.

# Unit 2 Choice Project: Unit 2 Essential Questions [ Summative ]

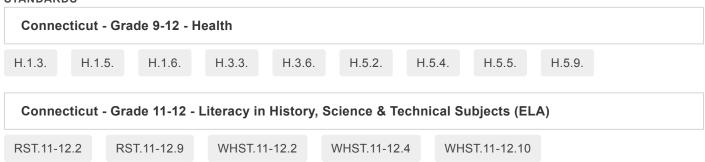
**Assessment Type:** Summative

**Assessment Tier:** Authentic Performance (AUTPER)

Assessment Level (DOK): DOK3 / DOK4

**Description:** Students choose a format in which to answer the EQs of Unit 1

#### STANDARDS



**Outdoor Leadership** 

#### LEARNING OPPORTUNITIES FOR LESSONS

#### 2.01 Preparing to Hike

Learning Objectives:

- · Identify essential items and safety gear to bring on a hike, and explain the purpose of each item
- Explain the basic principles of Leave No Trace and practice them on short hikes

#### The 10 Essentials of Hiking:

Compare several lists of the essential items recommended for hiking. Identify the central ideas of what is most important to bring, and why. Activity Assessment: Make a packing list for day-hikes, including the gear that everyone needs vs. group gear that someone should be carrying, but not everyone. Annotate the list with why each item is important.

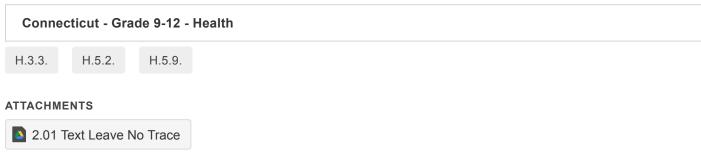
Leave No Trace 1: Introduce the basic principles of Leave No Trace including:

- 1. Plan ahead and prepare
- 2. Travel and camp on durable surfaces
- 3. Dispose of waste properly
- 4. Leave what you find
- 5. Minimize campfire impacts
- 6. Respect wildlife
- 7. Be considerate of others

Students could start in pairs or small groups to consider what each principle means, or this could turn into a jigsaw activity where groups are sharing what they think about different principles with each other. Students can use the <a href="https://linear.com/lnt.org">lnt.org</a> website to learn more about each principle and add to their definitions. Activity Assessment: Groups could make a set of notecards to take on hikes with each principle and why it is important. Pulling those cards out on the trail when appropriate can build connections and reinforce the LNT principles.

**GET OUTDOORS - STAGE 4:** Short Hikes in the forest around the school during class meetings. Whether planned or unplanned, use any opportunity on these short hikes to point out when an essential piece of gear or a Leave No Trace principle applies to actual trail conditions.

#### **STANDARDS**



#### 2.02 Food for Hiking and Physical Activity

2.01 Text 10 Essentials of Hiking

Learning Objectives:

- · Describe healthy and unhealthy nutritional choices.
- Describe the need for sleep, rest, physical activity, and a healthy body weight, and identify the prevalence,

**Outdoor Leadership** 

causes, and long-term consequences of sleep deprivation and a sedentary lifestyle.

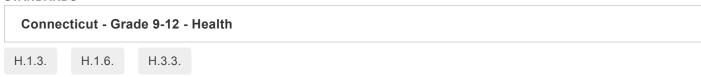
- · Explain factors that influence decisions about nutrition.
- Explain the relationship between body composition and healthy body weight.
- Identify the major types of nutrients.

#### **APEX Health Lesson 2.1**

· Overview, Study, Quiz, Study, Quiz - skip the Practice research

**Food for Hiking Assessment:** Make a list of foods that would be good to take on a Hike based on what you have learned. For now, let's think about Day Hikes, so identify at least 5 snack ideas and at least 5 lunch ideas. For each item on your list, explain why it is a healthy food choice and why it is a good choice to hike with. Finally, identify how many calories you are likely to burn on an all-day hike, and what amounts of your food choices would be appropriate to maintain healthy body weight.

#### **STANDARDS**



#### 2.03 Planning a Day Hike

Learning Objectives:

· Create a trip plan for a day-hike

Planning a Day Hike: Students work in pairs or small groups to prepare a plan for a Day Hike - in our case to Sleeping Giant State Park.

- Essential Gear: students should plan for items that everyone should carry vs. group gear that only someone needs to carry, and make a packing list for all students in the class including footwear, cold, rain, and sun protection, and personal medications
- Food Plan: work together to identify healthy snacks and lunch items that will be best for the group, identify prices and put together a shopping list with a reasonable budget

Route Planning: In particular, students will need help reading a topographic map to be able to plan the route for the day. The plan should include extension and bail-out options.

UV Index - plan to check for sun exposure

- Check the UV Index to find days when you want to avoid overexposure to damaging sun ultraviolet rays.
- <u>Protect yourself</u> when spending time in the sun by seeking shade, and using sunblock that has a protection level of at least SPF 15.

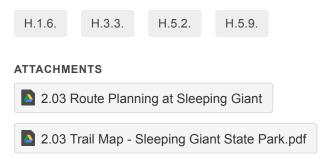
Air Quality Check - plan to check for air quality

**Assessment:** students can either submit written plans, or present their plans to the whole class. Review all of the plans with the whole class in order to make a class plan for the actual Day Hike.

#### **STANDARDS**

Connecticut - Grade 9-12 - Health

#### **Outdoor Leadership**



#### 2.04 Day Hike: Sleeping Giant State Park

Learning Objectives:

Practice outdoor leadership skills

#### GET OUTDOORS - STAGE 5: Day Hike.

Arrange transportation. Purchase food. Review med forms and medications plan. Update First Aid kits. Check out radios. Print trail maps.

Be very clear with expectations for the Day Hike.

Assign or decide to switch up Leadership Roles throughout the day:

- · Lead and Sweep
- Map skills
- Collecting litter and disposing of waste appropriately
- Noise monitoring and respecting others
- · Snacks, Food, Water
- · Trail games
- Other -

After the hike, it's very important to debrief and do celebrations - mini-POWER awards for Pride, Ownership, Wonder, Effort, and Respect.

Assessment: rubric and self-evaluation rubric for hike participation and practicing leadership skills

#### **STANDARDS**



#### 2.05 Advanced Food and Drink Planning for Outdoor Adventure Trips

Learning Objectives:

- Identify the effects and signs of dehydration and not getting enough calories from food
- Identify different types of eating disorders and what to watch for

As a trip leader, it's very important to observe how group members are eating and drinking when we are outdoors. Fatigue, irritability, changes in behavior, and making poor decisions are all likely if people are getting dehydrated or don't get enough calories from food. It's also important to monitor for pre-existing conditions like eating disorders and diabetes. Focus on knowing what to look for and strategies to manage the

#### **Outdoor Leadership**

situation in the moment, knowing that there may need to be follow-up after the trip is over.

APEX Learning Objectives Lesson 2.2: Threats to Fitness and Good Nutrition

- Define what an eating disorder is and identify different types of disorders.
- Discuss the causes, symptoms, harmful effects, and treatment of eating disorders.
- Evaluate the validity of information about health in general, as well as about nutrition practices, products, physical performance, and services.
- List the resources for seeking help for people with eating disorders.
- Research the accuracy of claims and the accessibility of health information, products, and services.
- Locate community programs and services that provide information about health information, products, and services.

#### **APEX Health Lesson 2.2**

· Overview, Study, Quiz, Study, Quiz, decide on whether to use the Checkup or not

**Assessment:** Students work in pairs or small groups to create a set of notecards that can be used on the trail. Notecards should include 'what to look for' signs and indications of dehydration, lack of calories, possible eating disorders, possible effects of diabetes, or other signs of participant distress or unwellness.

#### **STANDARDS**



## 2.06 Advanced Leave No Trace Planning for Outdoor Adventure Trips

Learning Objectives:

- Identify negative effects of common forms of human recreation on outdoor environments
- · Identify additional Leave No Trace practices

Worksheet Activity: Negative Effects of Human Recreation on Outdoor Environments (see attached)

Read EPA linked article: Recreation, Culture, and Aesthetics: Ecosystems provide recreational opportunities and cultural and aesthetic value

Read USDA/Forestry Service literature review: Resource impacts caused by recreation

## Review Campfire Safety

Leave No Trace 2: Select additional topics for students depending on pacing:

- Healthy Land
  - Investigate highly trafficked areas on campus and survey the biodiversity compared to nearby untrafficked areas
  - Try to sprout seeds in compacted and uncompacted soils and compare the results
  - In a test area of forest, experiment with how many passing hikers it takes to compact soil and trample plants
  - · Conduct a litter audit of the campus and surrounding forest

#### **Outdoor Leadership**

- · Healthy Water
  - · Read an article on micro-plastics in waterways and their effects
  - Conduct a litter audit of Springside Brook
  - · Observe eddies and turns in Springside Brook for evidence of chemical contamination and pollutants
  - Investigate why it might be fine to drink from our artisanal spring, but not from Springside Brook
  - Research how many beach and swimming area closings there were locally during the past summer due to bacteria, and how many of those were human-caused bacteria
- Healthy Air with noise pollution
  - Read an article on noise pollution from airplanes and boats can affect wildlife behavior
  - Research the debates between those who want to use ATVs, snowmobiles, jet skis, etc. and those who
    want to ban motorized recreational vehicles

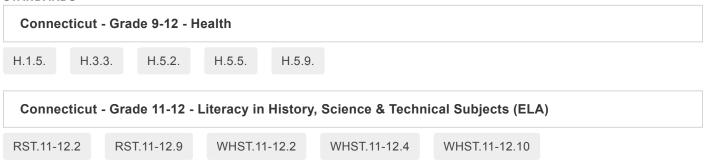
#### Assessment: Writing 2: Human Recreation and its Effects

Explain how increased recreation can decrease the quality of outdoor environments, leading to a less-pleasing recreational experience.

Explain how this can eventually lead to devaluing and no longer protecting the outdoors.

Then, explain how this relates to advanced Leave No Trace practices.

#### **STANDARDS**



#### ATTACHMENTS



#### 2.07 Planning a Multi-Day Camping Trip

Learning Objectives:

- Demonstrate how to setup and use camping gear to meet safety guidelines
- Create an achievable plan for outdoor physical activities for the group during a camping trip
- Create an achievable meal plan for healthy eating for the group during a camping trip

**GET OUTDOORS - STAGE 6:** Hands-on practice with camping gear. Using stations and/or rotating groups, students get experience with the systems and gear they will be using outdoors. Everything will need a demonstration, and then students should pack everything up and put it out again, complete a task or show they understand, and then pack up again. Topics include:

- 1. How to Setup a Tent, with guidelines for footwear and no food in the tent
- 2. Bearbag Systems and Packing the Food and Personal Items
- 3. Water Filtration & Treatment
- 4. Cooking Station Setup, with perimeter and safety guidelines

**Outdoor Leadership** 

Assessment: students should physically demonstrate each component and get checked off

APEX Learning Objectives Lesson 2.3: Planning for Fitness and Good Nutrition - focus on:

- Describe achievable goals for healthful eating habits, physical fitness, weight management, and protecting your health.
- Set goals and formulate a plan for healthy eating habits, physical fitness, weight management, and protecting your health.

#### **APEX Health Lesson 2.3**

• Overview, Skip the Journal, Study, Quiz, adapt the Project: "Your Plan for Fitness and Good Nutrition" - adapt this project to planning for an overnight outdoor trip

The APEX material is more general, so use it for concepts and vocabulary before turning to trip planning as the goal of these lessons.

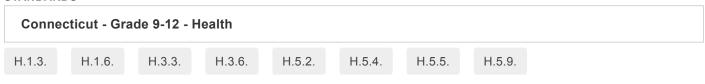
#### Assessment: Plan for an Overnight Camping Trip: Fitness Goals and Meal Planning

Individually or in pairs, students should assess options for trip destinations, evaluate the fitness and readiness of the group to plan for physical activities, and plan for all meals and snacks.

Students can either submit written plans, or present their plans to the whole class.

Review all plans with the whole class in order to make a class plan for the actual camping trip.

#### **STANDARDS**



#### **ATTACHMENTS**



#### 2.08 Go Camping

Learning Objectives:

Practice Outdoor Leadership skills

**GET OUTDOORS - STAGE 7:** Go on an overnight camping trip.

Distribute and collect Permission Slips. Arrange transportation. Purchase food. Review med forms and medications plan. Update First Aid kits. Check out radios. Print trail maps.

Be very clear with expectations; sleeping arrangements, phones, extra food, etc.

Assign or decide to switch up Leadership Roles throughout the trip:

- Tent Setup
- Cooking Setup, and rotating cooking roles

#### **Outdoor Leadership**

- Meal cleanup, collecting litter and disposing of waste appropriately
- Noise monitoring and respecting others
- · Lead and Sweep for hikes, Map skills
- · Organizing Snacks, Food, Water, etc. for Bearbagging
- Camp group-building Games
- Other -

At the end, before transportation home, it's very important to debrief and do celebrations - mini-POWER awards for Pride, Ownership, Wonder, Effort, and Respect.

Assessment: rubric and self-evaluation rubric for participation and practicing leadership skills

#### **STANDARDS**



#### 2.09 Unit Wrap-up and Reflection

#### **Letter of Gratitude: Camping Trip**

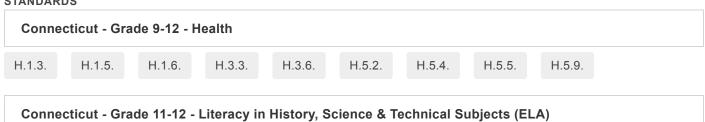
Write a letter to someone who helped to make the Camping Trip happen. Explain what you learned and/or how the experience changed you.

#### **APEX Health Unit 2 Test**

#### Unit 2 Choice Project: Students answer all 3 of the Essential Questions for the Unit:

- 1. How can we prepare to stay safe and healthy when we spend time outdoors?
- 2. What are our nutrition needs to meet our outdoor physical activity goals?
- 3. How do we make sure the air, land, and water are safe from us and healthy after we leave? To answer the questions, students could choose to:
- A. Give a presentation to the whole group
- B. Write 2-3 paragraphs to answer each question with clear claims and reasoning
- C. Draw, or design an artistic response to each question, and add captions explaining
- D. Research additional texts that answer each question, and annotate a bibliography to be a resource for future students
- E. Work with a partner to act out answers to the questions as a skit for the class
- F. Write an article for future students in the class to read that answers all three questions
- G. Other option of choice

#### STANDARDS



**Outdoor Leadership** 

RST.11-12.2 RST.11-12.9 WHST.11-12.2 WHST.11-12.4 WHST.11-12.10

#### **OTHER RESOURCES**

APEX Health is being used as general, comprehensive health content resource during development. If at any point better health content resources become available for specific topics or are preferred, they can be substituted for the APEX Health content. When this happens, adjust assessments accordingly.