

ACES Learning Center Course Syllabus V106 Literature and Science

Course Description

The study of specialized, domain-centric words forms the heart of the middle-school Vocabulary Curriculum. In V106, students focus on words used in science and literature. Upon completion of this course, students will be familiar with an extensive number of vocabulary words used in these disciplines as well as a number of techniques useful in order not only to memorize new words but also incorporate them into active vocabulary.

Course Objectives and Student Competencies

Students will:

1. Master an extensive list of English vocabulary:
 - Words necessary for success in middle-school science.
 - Words necessary for success in middle-school English classes.
2. Become skilled with tools for analyzing texts to determine the meanings of words through context clues.
3. Become skilled with tools for connecting new vocabulary to prior knowledge and transforming passive recall into active vocabulary.

Major Topics:

Root Words in Science
Mnemonic Techniques
Online Reading, with attention to evaluating scientific sources for reputability
Words Maps, Frayer Models, Frames, and other vocabulary learning strategies

Class Structure:

1. Vocabulary Quiz
2. Introduction of new words and Learning Strategy of the day.
3. Text Analysis
4. Explicit definition of new vocabulary
5. Application of new vocabulary: A writing assignment or challenging word game

Course Schedule:

Date	Topics	Strategies	Exemplary Vocabulary Words
Week 1	The Language of Science	Memorization Strategies	Experiment, Hypothesis, Theory, Conclusion, Variable vs. Control,
Week 2	Physical Science	Morpheme Analysis	-ology, -onomy, solid, liquid, gas, plasma, volume, pressure
Week 3	Biology	Context Clues	Taxonomy: Kingdom, Phylum, Class, Order, Family, Genus, Species
Week 4	Geology	Prediction Charts	Crust, mantle, core, tectonic, Richter
Week 5	Chemistry	Word Maps	Mole, Stoichiometry, Atom, Molecule, Ion, Proton, Neutron, Electron, Quark
Week 6	Physics	Frayer Models	Scalar vs. vector, mass, velocity, acceleration, displacement,
Week 7	Astronomy	KWL Charts	Meteor, comet, stellar, solar, lunar, galaxy, orbit, perihelion, aphelion
Week 8	Science Composite	Contextual Redefinition	Review of science vocabulary
Week 9	Novels and novellas	Analogies	Foreshadowing, symbol, simile, metaphor, hyperbole
Week 10	Plays and short stories	Vocabulary Frames	Scene, monologue, improvisation
Week 11	Poetry	Figurative Writing	Alliteration, Assonance, Verse, Stanza