PASS

AN ALTERNATIVE EDUCATIONAL
PROGRAM

FOR HIGH SCHOOL
STUDENTS

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Portable Assisted Study Sequence
WISCONSIN PASS / MIDDLE SCHOOL PASS PROGRAM

"PASS"
Portable Assisted Study Sequence

PASS courses were introduced in 1978 when California produced semi-independent courses for migrant students in grades 9-12. In 1997 the National PASS Center was formed to develop second-generation courses that would meet local school district requirements and align with performance standards of various states. Thus, PASS courses are correlated with states that send migrant students (California, Florida and Texas) to states throughout the country. States receiving migrant students that have performance standards matched with PASS are Wisconsin, Nebraska, Arkansas and Michigan.

The new PASS courses were developed to help students earn credits and graduate from high school with academic diplomas from their local high schools. In other situations, PASS may be used to remediate students in basic subjects. PASS courses should be taught and supervised by certified teachers and administrators.

PASS Introduction

PASS courses are designed to help students improve in attitude, knowledge, and skills. These improvements are developed through:
- individualized assessment and teaching
- participation and creative activity
- appreciating and developing a student's unique potential
- recognition of views that build strength and diversity
- utilization of current media and materials
- assessments in terms of course objectives and state performance standards

PASS was founded on the principles of appropriateness, flexibility and credibility. The program is appropriate because it may be used with high school students through semi-independent study courses. Courses will enable students to:
- earn full or partial credit
- make up deficiencies for promotion or graduation
- pursue remediation or enrichment of disciplines
- study at their own pace
- enroll in courses not available on their high school schedules
- develop responsibility in completing objectives through semi-independent study

Flexibility in administering PASS enhances instructional opportunities for students in a variety of settings. PASS may be used to:
- serve one student, several pupils or a class under teacher supervision
- provide instruction to students in their homes, other public locations or in normal school settings
- offer courses during the summer, evenings, or regular school year
- support all or portions of local courses in accordance with local control

Credibility of PASS has increased with the National PASS Center producing courses

that meet performance standards of numerous states. The program's worth is demonstrated through:

- updated courses that support local school curriculum and meets individual needs
- immediate and accurate assessment through tests administered by local school officials
- accurate record keeping allowing for course interruptions and continuation of classes for students under special circumstances
- local educators ensuring that the integrity of PASS is comparable to local standards

PASS has been defined as a semi-independent instructional program that will supplement the regular secondary school curriculum. Within this definition the program in Wisconsin has always required certified teachers to instruct students with a minimum contact time of four to six hours each week with migrant students. Contact hours for students in regular or alternative school settings enrolled in PASS should have six or more contact hours per week depending upon the number of courses assigned each semester.

PASS in 2004 maintains key concepts from first generation courses in addition to improved courses developed through the National PASS Center in Geneseo, New York. An overview of PASS today includes:

- self-contained courses one semester in length or 90 Carnegie hours that parallel regular high school classes
- courses which may be used as independent, semi-independent, or in regular classroom settings
- courses structured with five units per course with each unit having from five to seventeen lessons or activities
- tests for each unit in certain courses whereas the new series could have as many as three exams per unit
- a contract between student, teacher, and parent to ensure that all parties understand expectations and requirements for credit or partial completion of courses
- courses that meet all or most of the requirements set forth by state standards or local school districts
- reading levels that require students to have basic reading and writing skills in English

Student progress through PASS requires updated curricula and instructional excellence by local school officials or site coordinators. Through the continued upgrading of curriculum by the N.P.C. and improved instruction from local educators, PASS will continue to serve students who need an alternative program to earn the necessary credits for high school graduation.

PASS

COURSE

DESCRIPTIONS
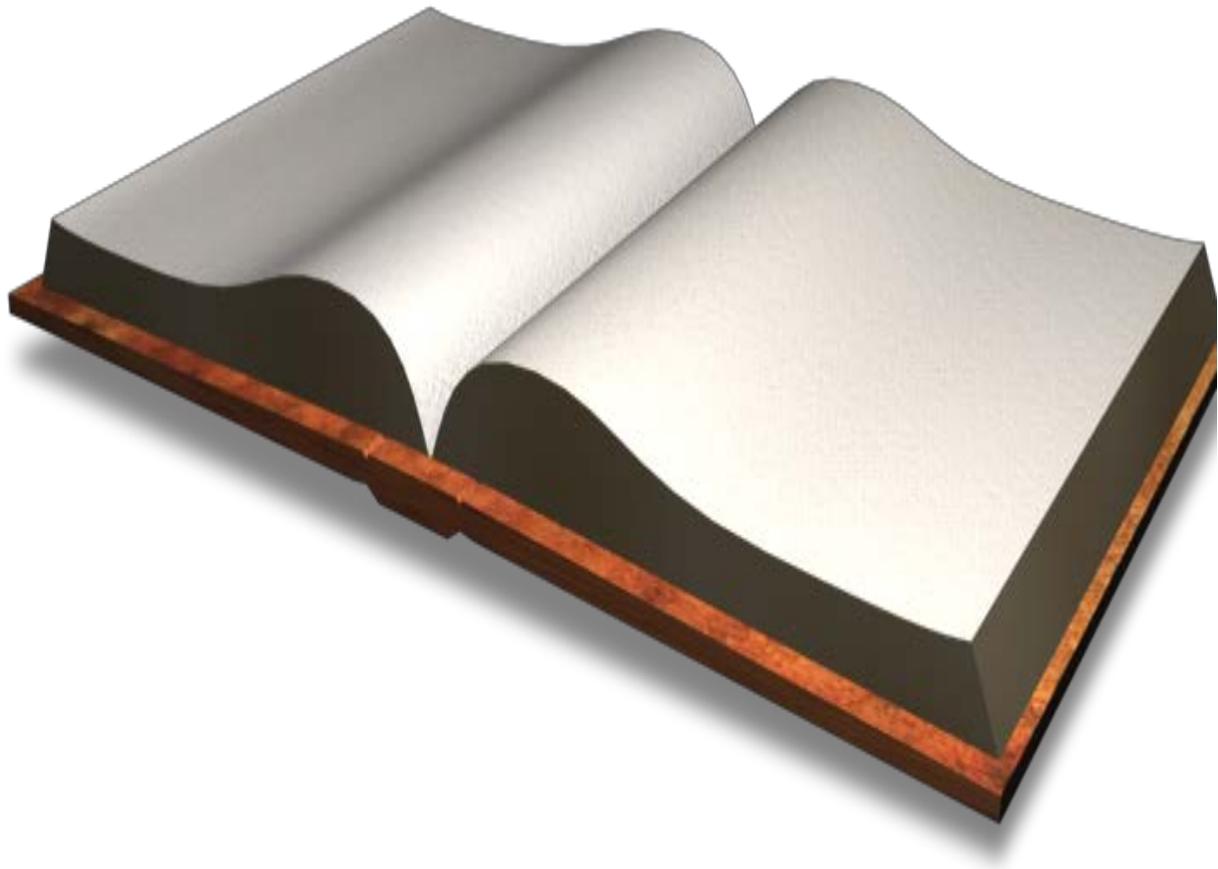
PASS – Study Skills
NPC – 2010

SCOPE OF COURSE

This course helps students explore the different types of learning styles, and discover
how their own personal abilities work best for them in different situations. The course offers
information and activities to help improve reading, writing, speaking, listening, critical thinking,
problem solving skills, and test taking strategies.

SEQUENCE OF SKILLS

UNIT 1 – Learning Styles

1.   Characteristics of physical learning styles
2.   Characteristics of intrinsic learning styles
3.   Characteristics of emotional learning styles
4.   Discover individual learning style

UNIT 2 – Fundamentals

1.   Critical thinking
2.   Speaking
3.   Listening
4.   Spelling rules
5.   Mechanics
6.   Analyzing text
7.   Letter writing

UNIT 3 – Methods of Study

1.   Ways to study
2.   Outlining and notetaking
3.   Diagnosing fiction
4.   Sequencing: cause and effect
5.   Visual aids
6.   Parts of a book
7.   The Internet

Study Skills
Scope and Sequence

UNIT 4 – Words, Words, Words

1.   Antonyms, synonyms, homonyms, context clues
2.   Entomology
3.   The versatile English language
4.   Emotional language
5.   Problem solving
6.   The main idea
7.   Summarizing

UNIT 5 – Test Strategies and Research Techniques

1.   Reading directions
2.   Objective test strategies
3.   Essays – literary and personal
4.   The interview
5.   Researching
6.   Writing the research paper
7.   Editing and proofreading

PASS – Learning English Through Literature
Second Edition – NPC – 2011
(Replaces Transitional English)

SCOPE OF COURSE

Learning English Through Literature develops and strengthens reading, writing, listening, speaking, viewing, and producing skills, through the study of the newspaper, poetry, story genre, and the novel. A unit on basic language and grammar skills is also included. The course is geared toward the intermediate English language learner, who has some basic English skills.

SEQUENCE OF SKILLS

UNIT 1 – Basic Skills

1.   Alphabetizing; using guide words
2.   Parts of speech; forms of a word
3.   Choosing the right meaning of a word
4.   Pronunciation
5.   Prefixes
6.   Suffixes
7.   Root words
8.   Reading strategies; survey, question, read, recite
9.   Writing strategies; the writing process

UNIT 2 – The Newspaper

1.   Introduction: staff, parts, vocabulary
2.   The news article: 5W + H questions
3.   The human-interest story: cause and effect
4.   The business article: making predictions
5.   Graphics: reading and understanding visual clues, charts and graphs
6.   Letter to the editor: fact versus opinion
7.   The political cartoon: analysis and understanding point of view
8.   Sports section: understanding text and charts
9.   The movie review: making judgments; demonstrating literary elements
10.   The advice column: making inferences/expressing opinions
11.   Classified advertisements: asking questions for information; writing descriptions
12.   Comics and puzzles: sequencing through reading and writing activities
13.   Writing a news article
14.   Grammar: verb forms
15.   Extension activities: newspaper and Internet use

Learning English Through Literature
Scope and Sequence

Unit 3 – Poetry

1. Reading poems for understanding, enjoyment, and personal response
2. Increase vocabulary
3. The lives of selected poets
4. Literary elements of poetry
5. Compare and contrast: two poems
6. A poem's point of view
7. Writing an organized essay
8. Writing original poems
9. Using correct English conventions: grammar, spelling, punctuation
10. Grammar: adjectives and adverbs

UNIT 4 – Story Genre

1. Reading and understanding: fables, myths, native American stories, African-American stories, tall tales, and folk tales from various cultures
2. Vocabulary of genre and stories
3. Literary terms: identification and usage
4. Writing original fables and myths
5. Writing a compare/contrast essay
6. Retelling a folk tale from one's culture
7. Grammar: pronouns, articles, prepositions, conjunctions, interjections

UNIT 5 – The Novel

1. Reading for understanding, enjoyment, and personal response
2. Understanding literary elements used in novels
3. Reading maps and understanding cultural contexts
4. Comparing/contrasting two characters
5. Making predictions and inferences
6. Observing and understanding sequence of an on-going event
7. Read aloud with expression, correct pronunciation, and voice
8. Using correct English conventions: grammar, spelling, pronunciation
9. Increasing vocabulary
10. Grammar: punctuation and spelling rules

PASS – English IA
Second Edition – NCP – 2015

SCOPE OF COURSE

English IA develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of myths and folk tales, a drama, a novel, poetry, and non-fiction.

SEQUENCE OF SKILLS

UNIT 1 – Myths, Tales, and Legends

1. Prepare journal entries
2. Increase vocabulary
3. Examine myths, tales and legends from various cultures
4. Write a myth
5. Write a literary essay, brainstorming, drafting, revising and rewriting: emphasis on the writing process
6. Identify literary themes
7. Use of Internet for information
8. Use of computer for writing
9. Identify and use correctly nouns, pronouns, verbs and adjectives

UNIT 2 – Drama: *The Diary of Anne Frank*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze the drama *The Diary of Anne Frank*
4. Understand the historical background for the drama
5. Read and understand related poetry
6. Write a literary essay, brainstorming, drafting, revising and rewriting: emphasis on the writing process
7. Use of Internet for information
8. Use of computer for writing
9. Identify and use correctly adverbs, prepositions, conjunctions, and interjections

English IA
Scope and Sequence

UNIT 3 – Novel: *The Old Man and the Sea*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze *The Old Man and the Sea*
4. Write a script for a television story
5. Write a literary essay, brainstorming, drafting, revising and rewriting: emphasis on the writing process
6. Interpret the novel through drawing activities
7. Use of the Internet for information
8. Use of computer for writing
9. Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1. Prepare journal entries
2. Read and analyze poetry
3. Identify literary terms associated with poetry
4. Write poetry
5. Write a literary essay on a poem: emphasis on the writing process
6. Use of Internet for information
7. Use of computer for writing
8. Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 5 – Non-Fiction

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze non-fiction material
4. Write a job application and personal letter
5. Conduct interviews and develop a character sketch from them: emphasis on the writing process
6. Use of Internet for information
7. Use of computer for writing
8. Practice use of correct punctuation and capitalization

PASS – English IB
Second Edition – NPC – 2015

SCOPE OF COURSE

English IB develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry, and non-fiction.

SEQUECE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read and analyze short stories
5. Analyze a drawing, a commercial and a news story
6. Use of Internet for information
7. Use of computer for writing
8. Write a literary essay, brainstorming, drafting, revising and rewriting
9. Identify and use correct nouns, pronouns, verbs, and adjectives

UNIT 2 – Drama: *A Raisin in the Sun*

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read and analyze the drama *A Raisin in the Sun*
5. Understand its background
6. Read parts of the play aloud with another "actor"
7. Complete graphic activities
8. Use of Internet for information
9. Use of computer for writing
10. Write a literary essay, brainstorming, drafting, revising and rewriting
11. Identify and use correct adverbs, prepositions, conjunctions, and interjections

UNIT 3 – Novel: *The House on Mango Street*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze *The House on Mango Street*
4. Write a literary essay, brainstorming, drafting, revising and rewriting
5. Complete graphic activities
6. Use of Internet for information
7. Use of computer for writing
8. Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1. Prepare journal entries
2. Read and analyze poetry
3. Compare one poem with another
4. Understand literary terms
5. Write poetry
6. Identify types of sentences and correct sentence fragments with run-on sentences

UNIT 5 – Non-Fiction

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze non-fiction
4. Write a memo
5. Compare a review of a performance with personal experience
6. Recognize genres such as nightly news, newsmagazines and documentaries
7. Use of Internet for information
8. Use of computer for writing
9. Write a literary essay, brainstorming, drafting, revising and rewriting
10. Practice use of correct punctuation and capitalization

PASS – English IIA
Second Edition – NPC – 2011

SCOPE OF COURSE

English IIA develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry, and the newspaper.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze short stories from various cultures
4. Understand literary terms
5. Complete graphic activities
6. Write a literary essay, brainstorming, drafting, revising and rewriting
7. Identify and use correctly nouns, pronouns, verbs and adjectives

UNIT 2 – Drama: *The Miracle Worker*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze biographies
4. Read and analyze *The Miracle Worker*
5. Write an autobiography
6. Identify and use correctly adverbs, propositions, conjunctions, and interjections

UNIT 3 – Novel: *The Pearl*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze *The Pearl*
4. Understand historical background for *The Pearl*
5. Write a script for a television story
6. Write a literary essay, brainstorming, drafting, revising and rewriting
7. Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1. Prepare journal entries
2. Understand literary terms
3. Read and analyze poetry
4. Read poetry to another person
5. Write poetry
6. Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 5 – The Newspaper

1. Prepare journal entries
2. Identify characteristics of newspaper sections
3. Learn about careers in the newspaper industry
4. Read and analyze various newspaper stories
5. Interpret graphs, maps, statistical tables
6. Write various types of newspaper articles
7. Write a letter to the editor
8. Draw a comic strip
9. Use correct punctuation and capitalization

PASS – English IIB
Second Edition – NPC – 2011

SCOPE OF COURSE

English IIB develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry, and essays.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze short stories
4. Conduct a survey
5. Write a script for a television story
6. Analyze a commercial
7. Write a literary essay, brainstorming, drafting, revising and rewriting
8. Identify and use correctly nouns, pronouns, verbs and adjectives

UNIT 2 – Drama: *Antigone*

1. Prepare journal entries
2. Increase vocabulary
3. Explore Greek myths
4. Explore beliefs of other cultures
5. Read, analyze and illustrate *Antigone*
6. Analyze a drawing and commercials
7. Write a literary essay, brainstorming, drafting, revising and rewriting
8. Identify and use correctly adverbs, prepositions, conjunctions, and interjections

UNIT 3 – Novel: *The Good Earth*

1. Prepare journal entries
2. Increase vocabulary
3. Understand historical background of *The Good Earth*
4. Read and analyze *The Good Earth*
5. Prepare character charts and plot outlines
6. Analyze ideas in various media
7. Write a literary essay, brainstorming, drafting, revising and rewriting
8. Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1. Prepare journal entries
2. Understand literary terms
3. Read and analyze poetry
4. Write poetry
5. Analyze a song
6. Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 5 – Essays

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze essays
4. Understand characteristics of various types of essays
5. Compare a performance with personal experience
6. Write various types of essays
7. Use correct punctuation and capitalization

PASS – English IIIA
Second Edition – NPC – 2012

SCOPE OF COURSE

English IIIA develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry and non-fiction.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read, analyze, compare and contrast short stories
5. Read analyze, compare and contrast a current news story presented in two different media
6. Conduct an Internet or hard copy search for information to answer questions about an author and setting
7. Complete an outline for each story
8. Identify and use correctly the parts of speech

UNIT 2 – Drama: *Our Town*

1. Prepare journal entries
2. Increase vocabulary
3. Understand the background and literary terms for the drama
4. Locate props and furniture on stage diagrams
5. Make predictions about what will happen in the play
6. Conduct interviews for an oral history and write a biography based on notes
7. Evaluate a performance of a literary week
8. Identify phrases and clauses and understand the structure of a sentence

English IIIA
Scope and Sequence

UNIT 3 – Novel: *To Kill a Mockingbird*

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze *To Kill a Mockingbird*
4. Analyze a news story's presentation in different media
5. Deliver a speech defending one of the story's characters
6. Write a variety of newspaper articles and accounts of an experience using various viewpoints
7. Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 4 – Poetry

1. Prepare journal entries
2. Discuss poetry as a literary genre
3. Understand literary terms associated with poetry and identify their applications in selected poems
4. Learn about literary periods for poetry in the United States
5. Create personal and visual responses to poems
6. Present poems orally
7. Write poems on a number of topics
8. Practice use of correct punctuation and capitalization

UNIT 5 – Non-fiction

1. Write journal entries in response to prompts
2. Increase vocabulary
3. Learn about historical background for selected non-fiction works
4. Understand aspects of various media
5. Relate happenings of nonfiction pieces to your own life
6. Deliver a brief presentation
7. Practice correct usage of modifiers, adverb clauses, pronoun references and comparisons

PASS – English IIIB
Second Edition – NPC – 2012

SCOPE OF COURSE

English IIIB develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry, and non-fiction.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read and analyze short stories
5. Identify and explain examples of types of conflict
6. Create personal and visual responses to a story
7. Analyze content and purposes of media forms and messages
8. Write a literary essay, brainstorming, drafting, revising and rewriting
9. Identify and use correctly nouns, pronouns, verbs, and adjectives

UNIT 2 – Drama: *Death of a Salesman*

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read, analyze and understand the cultural background for *Death of a Salesman*
5. Prepare and deliver a sales speech
6. Write a literary essay, brainstorming, drafting, revising and rewriting
7. Identify and use correctly adverbs, prepositions, conjunctions, and interjections

English IIIB
Scope and Sequence

UNIT 3 – Novel: *The Adventures of Huckleberry Finn*

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read and analyze *The Adventures of Huckleberry Finn*
5. Write and compile various types of newspaper articles and advertisements
6. Present oral report
7. Use maps to follow the story and develop visual responses to the story
8. Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1. Prepare journal entries
2. Increase vocabulary
3. Understand and identify literary terms
4. Read, analyze, discuss and write poetry
5. Create personal and visual responses to poetry
6. Assemble a portfolio of poems
7. Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 5 – Non-fiction

1. Prepare journal entries
2. Increase vocabulary
3. Read and analyze non-fiction
4. Develop visual responses to literary works
5. Obtain information on colleges from the Internet or library
6. Write a personal essay for a job or college application, brainstorming, drafting, revising and rewriting
7. Use correct punctuation and capitalization

PASS – English IVA
Second Edition – NPC – 2012

SCOPE OF COURSE

English IVA develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, and units on continuing your education/finding a job and preparing a research paper.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1.	Prepare journal entries
2.	Increase vocabulary
3.	Understand literary terms
4.	Read and analyze British short stories and a fairy tale
5.	Write a creative essay, brainstorming, drafting, revising and rewriting
6.	Identify and use correctly the parts of speech

UNIT 2 – Drama: *Macbeth*

1.	Prepare journal entries
2.	Increase vocabulary
3.	Understand the background and literary terms for the drama
4.	Read, analyze and prepare drawings for *Macbeth*
5.	Write a literary essay, brainstorming, drafting, revising and rewriting
6.	Identify phrases and clauses and understand the structure of a sentence

UNIT 3 – Novel: *Animal Farm*

1.   Prepare journal entries
2.   Increase vocabulary
3.   Read and analyze fables and *Animal Farm*
4.   Cast a movie
5.   Complete graphic activities
6.   Write a literary essay, brainstorming, drafting, revising and rewriting
7.   Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 4 – Continuing Your Education/Finding a Job

1.   Prepare journal entries
2.   Complete a college application
3.   Write an essay for college admission
4.   Learn sources of financial aid
5.   Learn steps to finding a job
6.   Prepare a personal fact sheet and résumé
7.   Complete a job application
8.   Prepare for a job interview
9.   Practice use of correct punctuation and capitalization

UNIT 5 – The Research Paper

1.   Choose a research paper topic
2.   Conduct research from various sources, preparing data cards
3.   Develop thesis statements
4.   Prepare outline and rough draft
5.   Prepare "Works Cited" listing
6.   Revise, edit and write final draft of research paper
7.   Practice correct usage of modifiers, adverb clauses, pronoun references and comparisons

PASS – English IVB
Second Edition – NPC – 2012

SCOPE OF COURSE

English IVB develops and strengthens reading, writing, listening, speaking, viewing and producing skills through the study of short stories, a drama, a novel, poetry, and non-fiction.

SEQUENCE OF SKILLS

UNIT 1 – Short Stories

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read and analyze short stories
5. Write a friendly and a business letter
6. Analyze a commercial
7. Write newspaper and radio articles
8. Write a literary essay, brainstorming, drafting, revising and rewriting
9. Identify and use correctly nouns, pronouns, verbs, and adjectives

UNIT 2 – Drama: *Pygmalion*

1. Prepare journal entries
2. Increase vocabulary
3. Understand literary terms
4. Read, analyze and understand the cultural background for *Pygmalion*
5. Prepare concept maps and complete graphic activities
6. Conduct a survey
7. Compare a review of a performance with personal experience
8. Write a literary essay, brainstorming, drafting, revising and rewriting
9. Identify and use correctly adverbs, prepositions, conjunctions, and interjections

English IVB
Scope and Sequence

UNIT 3 – Drama: *Lord of the Flies*

1.   Prepare journal entries
2.   Increase vocabular
3.   Understand literary terms
5.   Read and analyze *Lord of the Flies*
6.   Analyze a drawing
7.   Present oral report
8.   Write a literary essay, brainstorming, drafting, revising and rewriting
9.   Identify phrases and clauses and understand the structure of a sentence

UNIT 4 – Poetry

1.   Prepare journal entries
2.   Increase vocabulary
3.   Understand literary terms
4.   Read and analyze poetry
5.   Analyze ideas presented in the media
6.   Write poetry
7.   Identify types of sentences and correct sentence fragments and run-on sentences

UNIT 5 – Non-Fiction

1.   Prepare journal entries
2.   Increase vocabulary
3.   Read and analyze non-fiction
4.   Consider various news genres
5.   Explore resources on the Internet
6.   Write a literary essay, brainstorming, drafting, revising and rewriting
7.   Use correct punctuation and capitalization

PASS – Themes in Literature A
Units 1 and 2 revised – 2005

SCOPE OF COURSE

This third and/or fourth year course in English covers advanced grammar and composition that is presented through selected American and British literary pieces as well as famous letters in history.

SEQUENCE OF SKILLS

UNIT I – How to Write Letters

1.   Basic rules of successful letter writing
2.   Parts of a letter
3.   Business letter

UNIT II – Letters in History

1.   Letters from Mesopotamia
2.   Letter of Thomas Jefferson, to his daughter Patsy
3.   Letter of Dolly Madison, Fleeing the Executive Mansion
4.   Letter to John Brown's widow
5.   Letter from Susan B. Anthony
6.   A letter to President Ulysses S. Grant
7.   The Lynching of Samuel Petty by an anonymous witness

UNIT III – Fantasy and the Unexplained

1.   "The Magic Shop" by H.G. Wells
2.   "The Crowd" by Ray Bradbury
3.   "Rip Van Winkle" by Washington Irving
4.   "The Secret Life of Walter Mitty" by James Thurber
5.   "The Monkey's Paw" by W.W. Jacobs

Themes in Literature A

Scope and Sequence

UNIT IV – Experiences with War and Peace

1.   "Johnny Got His Gun" by Dalton Trumbo
2.   "Soldiers Home" by Ernest Hemingway
3.   "Mother Savage" by Guy deMaupassant
4.   "Grass" by Carl Sandberg
5.   "The Soldier" by Rupert Broke
6.   "The Man He Killed" by Thomas Hardy
7.   "Soldier What Did You See"? by Don Blanding
8.   "The Change of the Light Brigade" by Alfred Lord Tennyson

UNIT V – A Time for Change

1.   "Chang and Eng: The Original Siamese Twins"
2.   "The Man Without a Country" by Edward Everett Hale
3.   "Miniver Cheevy" by Edwin Arlington Robinson
4.   "Invictus" by Williams Ernest Henley
5.   "Adventures of Isabel" by Ogden Nash

PASS – Themes in Literature B
Developed 1989

SCOPE OF COURSE

This third and/or fourth year course in English is designed to develop skills in understanding contemporary and world literature as well as in critical and creative writing.

SEQUENCE OF SKILLS

UNIT VI – Building an Effective Vocabulary – Part I

1.   Using the dictionary
2.   Our language, past and present
3.   Tracing word origins
4.   How to build an effective vocabulary

UNIT VII - Building an Effective Vocabulary – Part II

1.   Words borrowed from other languages
2.   Words derived from names

UNIT VIII – New Americans and the Immigration Experience – Part I

1.   The Immigrant Experience
2.   "Why They Came" excerpt from a Nation of Immigrants by John F. Kennedy
3.   "An Irish Integrity" by William Alfred
4.   "Italian in Hell's Kitchen" by Mario Puzo
5.   "A Bintel Brief" (letters)

UNIT IX - New Americans and the Immigration Experience – Part II

1.   Music writing: "The Golden Cage"
2.   Novel: "Farewell to Manzanar" by J. W. Houston
3.   Poetry: "We Wear the Mask" by Paul Lawrence
4.   Poetry: "The New Colosus" by Emma Lazarus

Scope and Sequence

UNIT X – The Individual and Society

1.   "The Light in the Forest" by Conrad Richter
2.   "Removal from Grandmother's" excerpts from the Life and Times of Frederick Douglas
3.   "Man's Search for Meaning" by Victor E. Frankl
4.   "Barrio Boy" by Ernest Galarza

PASS – General Science A
Original

SCOPE OF COURSE

This introduction of general science covers physical and life sciences and the steps involved in scientific methods and classifications.

SEQEUNCE OF SKILLS

UNIT I – Methods of Investigation and Classification

1. Utilize the scientific methods of inquiry
2. Utilize the senses to observe and test
3. Explain scientific investigation
4. Identify and define the system of scientific classification
5. Relate facts regarding classification
6. Classify objects into groups
7. List career requirements

UNIT II – Physical Science

1. Explain, describe and give examples of matter and energy
2. Explain the functions of neutrons and electrons
3. Define and give examples of static and current electricity
4. Explain the function of a dry cell battery
5. Identify common electrical symbols
6. Explain the contributions of inventors
7. Explain what heat is, what causes it, and from where it comes
8. Define and explain temperature, and tell how a thermometer works

UNIT III – Physical Science

1. Identify, list kinds and give example of work
2. Explain the functions and give examples of machines
3. Explain harnessing nature's energy
4. Identify fuel and its sources
5. Explain combustion
6. Relate the future of power, energy and food supplies
7. Explain a career in physics

UNIT IV – Plants

1.   Define, explain and illustrate a plant cell
2.   Explain the importance of plants
3.   Draw and label the parts of a flower
4.   Explain the fertilization of a flower
5.   Explain photosynthesis
6.   Define plant terms
7.   Relate career facts

UNIT V – Animals

1.   Explain the importance of animals
2.   Identify where and how animals live
3.   Identify animal concepts and behaviors
4.   Explain animal classifications
5.   Relate career facts

PASS – General Science B

Original

SCOPE OF COURSE

This general science course covers the entire spectrum of natural forces and processes found on the planet Earth.

SEQUENCE OF SKILLS

UNIT VI– Atmosphere and Weather

1.   Identify the elements and properties of air
2.   Explain gravity
3.   Explain the difference between winds
4.   Explain what causes wind
5.   Draw a compass
6.   List the elements of weather
7.   Explain the water cycle
8.   List and explain the kinds of clouds
9.   Compare winds
10.   Explain sources of weather data

UNIT VII – Space

1.   Relate career facts
2.   Compare telescopes
3.   Identify constellations
4.   List and describe the plants
5.   Define terminology
6.   Compare and contrast the sun and the moon
7.   Explain seasons and eclipses
8.   List facts about rockets, satellites and spacecrafts

UNIT VIII – Oceans

1. Explain why the oceans are important
2. Name and locate oceans and seas
3. Explain ocean currents and wave action
4. Name ocean plants and animals
5. List tools and instruments used in oceanography
6. Relate career facts

UNIT IX – Rocks, Minerals and Fossils

1. Define terminology
2. Compare and contrast rocks and minerals
3. List ways to identify and use minerals
4. Identify classes of rocks
5. Relate fossil facts

UNIT X – Mountains, Weathering and Erosion

1. Explain the characteristics of mountains
2. Define and compare weathering and erosion

PASS – Environmental Science A
NPC – 2011

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The first half of the course (A) provides a comprehensive exploration of ecosystem structures and functions, studies the various global biomes, and the relationships between natural and human populations. Laboratory activities embedded within each unit allow for hands-on, practical applications of various concepts and the interrelationships that exist at different levels within the living world.

SEQUENCE OF SKILLS

UNIT 1 – Ecosystem Structure

1. Introduction to ecosystems: structures of the biosphere
2. What is an ecosystem?
3. A detailed look at ecosystem structure
4. Investigate your ecosystem
5. Making an ecosystem: Part one – modeling land ecosystems
6. Making an ecosystem: Part two – modeling aquatic ecosystems
7. Who's eating whom?
8. Identify ecosystem roles
9. The web of life
10. Energy – where does it go?   Energy pyramids and trophic levels
11. The importance of biodiversity
12. The Exxon Valdez oil spill
13. Exxon Valdez ecosystem impact

Scope and Sequence

UNIT 2 – Ecosystem Function

1. Sunlight and photosynthesis
2. Ecosystem vocabulary
3. Energy flow
4. Energy pyramids
5. Symbiosis
6. Renewable versus non-renewable resources
7. Natural Cycles
8. Carbon and oxygen cycles
9. Water and nitrogen cycles
10. Competition and succession
11. Succession exploration (field experiment)
12. "Vivo"
13. Career connection: exploring resources

Environmental Science A
Scope and Sequence

UNIT 3 – Natural Populations

1.   Review nutritional relationships
2.   Exploration of local ecosystem populations
3.   Ecosystem impact from food web changes
4.   Estimating population size
5.   Carrying capacity
6.   Interpreting population data
7.   Kaibab deer graphing activity
8.   Natural selection activity
9   Introduced species: issues and challenges
10.   Invasive species project
11.   Reintroduction programs: pros and cons
12.   Career Connection: population analyst
13.   Natural controls for pest species

UNIT 4 – Biome

1.   Definition and description of classification of biomes
2.   Rainforests
3.   Temperate deciduous forest
4.   Taiga/coniferous forest
5.   Desert
6.   Tundra
7.   Grasslands
8.   Freshwater
9.   Wetlands
10.   Marine
11.   Biome adaptions
12.   Biome project
13.   Career connection: conservation law enforcement

UNIT 5 – Human Populations

1.   World populations: numbers, trends, and reasons for growth
2.   Predictions on consequences of continued growth
3.   Population comparisons: developed versus developing nations
4.   Feeding more people
5.   Space concerns and energy use of growing populations
6.   Graphing population growth
7.   Shared global resources
8.   Feeding a growing global population
9.   Sustaining limited resources
10.   Factors influencing population growth
11.   Career connection – demographer
12.   Individual responsibility
13.   Population policy project

PASS – Environmental Science B

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The second half of the course (B) provides a comprehensive exploration of various sources of energy, the structure and function of the atmosphere, the water cycle and factors impacting this valuable resource, the land and its responsible management, and the environmental movement over the years. Laboratory activities embedded within each unit allow for hands-on, practical applications of various concepts and the interrelationships that exist at different levels within the living world.

SEQUENCE OF SKILLS

UNIT 1 – Energy

1.   Fossil fuel – oil
2.   Fossil fuels – coal and natural gas
3.   To drill or not to drill?
4.   Solar energy
5.   Solar energy storage
6.   Wind power
7.   Hydroelectric power
8.   Nuclear power
9.   Chain reaction demonstration
10.   Geothermal and tidal power
11.   Biomass
12.   Energy use at home
13.   Hydrogen

Scope and Sequence

UNIT 2 – Atmosphere

1.   The atmosphere
2.   Air pressure
3.   What is air pollution?
4.   Global warming
5.   Greenhouse effect demonstration
6.   Acid rain
7.   Effects of acid rain
8.   Ground level ozone
9.   The ozone layer – stratospheric ozone
10.   Environmental issues – global or local?
11.   How clean is the air around you?
12.   Noise pollution
13.   Air pollution control

UNIT 3 – Water

1. Water pollution
2. Plant nutrients
3. Sediment pollution
4. Groundwater pollution
5. Groundwater pollution activity
6. Aquifer in a cup
7. Toxic waste
8. Municipal solid waste (MSW)
9. Thermal Pollution
10. Water treatment filtration activity
11. Water treatment facilities
12. Sewage treatment
13. Water conservation activity

UNIT 4 – Land

1. Overview of environmental hazards/focus on land
2. Municipal solid waste
3. Reducing solid waste/municipal solid waste activity
4. Hazardous chemicals – focus on pesticides
5. Activity – How do pesticides affect an ecosystem?
6. Biomagnification and the pesticide treadmill
7. Alternate pest control – natural methods
8. Love canal history
9. Love canal testimony
10. Dioxin – Food and Drug Administration/interagency report
11. Public awareness and superfund
12. EPA and national priority listings
13. Environmental responsibility in your area/NPL

UNIT 5 – Past, Present, and Future

1. History of the environmental movement
2. The value of biodiversity
3. Diversity in your own backyard
4. Urban sprawl
5. Invasive non-native species
6. Habitat restoration – you and your community
7. Rachel Carson – someone who made a difference
8. Costs and benefits of environmental protection
9. Major Federal environmental laws
10. A scientific debate
11. Environmental careers
12. Job shadowing
13. Ask the question

PASS – Biology A
Third Edition – NPC – 2012

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The first half of the course (A) provides a comprehensive exploration of the definition of life, the scientific method, cell structure, the chemical processes for energy production, life at the cellular and multicellular levels, and the various body systems that work together to sustain life. Laboratory activities embedded within each unit allow for hands-on, practical applications of various concepts and the interrelationships that exist at different levels within the living world.

SEQUENCE OF SKILLS

UNIT 1 – The Science Called Biology

1. Introduction to biology
2. Problem solving: the scientific method
3. Laboratories:
   - investigating the scientific method
   - investigating measurement
   - investigating changes in a biological material
   - investigating the compound light microscope
4. Making, organizing, and analyzing observations
5. Line graphs
6. Bar graphs
7. Circle graphs/pie charts
8. Interview

Scope and Sequence

UNIT 2 – The Characteristics of Life

1. The definition of life
2. Using life's characteristics to define it
3. Organizing the characteristics of life
4. The scientific definition of life
5. Properties of life
6. Life activities:
   - nutrition
   - respiration
   - synthesis, growth, reproduction
   - transport
   - laboratory activity: investigating the transport of water in a living organism
   - excretion
   - regulation
7. Are viruses alive?

Biology A
Scope and Sequence

UNIT 3 – The Chemistry of Life

1. The chemical nature of life
2. What are living things made of?
3. The making of chemical compounds:
    • ionic bonding
    • covalent bonding
4. A study of pH
5. An example of the importance of pH to the living world
6. Acid rain
7. The organic compounds of life
8. Testing for the compounds of life
9. Enzymes
10. Investigating enzyme activity
11. The bag of chemicals

UNIT 4 – The Cell

1. Cells: the basic unit of life
2. Our city's outer wall – the cell membrane
3. Moving around the city – osmosis and diffusion
4. Laboratories:
    • osmosis/diffusion
    • looking at cells
    • modeling mitosis (cell division)
5. How cells make energy:
    • step 1: glycolysis
    • step 2: the mitocondrion
6. Using ATP – the making and breaking of the city's energy chips
7. The city's factory and packaging plant – the endoplasmic reticulum and Golgi apparatus
8. The city's government building and control center – the nucleus
9. The reason why our city is small
10. The many different jobs of cells

UNIT 5 – Life at the Cellular and Multicellular Levels

1. Introduction
2. Nutrition
3. Transport
4, Blood
5. Respiration
6. Excretion
7. Regulation
    • nervous system
    • endocrine system
8. Locomotion
    • skeletal system
    • muscular system
9. Integumentary system
10. Human anatomy

PASS – Biology B
Third Edition – NPC 2012

SCOPE OF COURSE

This course is divided into two semesters of study (A &B) comprised of five units each. The second half of the course (B) provides a comprehensive exploration of reproduction, genetics, classification of various organisms, evolution, and ecology. Laboratory activities embedded within each unit allow for hands-on, practical applications of various concepts and the interrelationships that exist at different levels within the living world.

SEQUENCE OF SKILLS

UNIT 1 – Reproduction

1. Introduction
2. Asexual vs. sexual reproduction
3. Asexual reproduction
4. Sexual reproduction in plants
5. Investigating a typical flower
6. Plant growth and development
7. Investigating seed and plant development
8. Sexual reproduction
9. Male reproduction system
10. Female reproduction system
11. Development and embryology
12. Reproductive technology

Scope and Sequence

UNIT 2 – Genetics

1. Genetics – what makes us each unique?
2. Determining phenotypes
3. Asexual reproduction
4. Sexual reproduction
5. Meiosis and sexual reproduction
6. Laboratories:
   - meiosis
   - DNA separation simulation
   - karyotyping
7. Compounds of DNA – the stuff we are made of
8. Constructing a DNA model
9. Genes to proteins
10. DNA mutations
12. Genetic engineering

Biology B
Scope and Sequence

UNIT 3 – Classification

1. The need for classification
2. What is biological classification?
3. Naming organisms: the principles of taxonomy
4. How to classify: use of a classification key
5. Classifying trees by using their leaves
6. Laboratory: animal classification
7. More applications of the animal classification lab
8. Modern taxonomy: biosystematics
9. Biosystematics today
10. A species problem: are the wolf and dog members of the same species?
11. The science of biosystematics: evidences of relationship
12. Modern classification: problem solving

UNIT 4 – Evolution

1. Where it all began
2. Evidence of evolution from fossils
3. Evolution: change over time
4. Evidence of evolution in the fossil record
5. Laboratories:
    - finch
    - comparative similarities
    - constructing a cladogram
6. Modern evolution
7. Natural selection of alleles
8. Mechanisms of change
9. The peppered moth – survival of the fittest
10. Comparative similarities of evolution
11. Path of humans

UNIT 5 – Ecology

1. Levels of organization
2. Laboratories:
    - biodiversity
    - foreign invaders: ecological succession
    - saving a habitat
    - ecosystem in a bottle
    - ecosystem damage
3. Energy systems
4. Competition shapes communities
5. Cycling of ecosystem materials
6. Limits to growth
7. Human impact
8. Dangers to the ecosystem

PASS – U.S. History A
NPC – 2018

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The first half of the course (A) begins with the Reconstruction period following the Civil War and covers up through the government policies and business practices that brought high levels of American prosperity after WWI, but led to world-wide economic collapse by the end of the 1920s.

SEQUENCE OF SKILLS

UNIT 1 – Reconstruction and Backlash

1. Lincoln's and Johnson's plans for reconstruction
2. The impeachment of Andrew Johnson
3. Amendments 13, 14, and 15
4. Ku Klux Klan and Jim Crow laws
5. Plessy v. Ferguson
6. Booker T. Washington and W.E.B. DuBois

UNIT 2 – The Industrialization of the U.S.: 1876 – 1914

1. The United States becomes an industrial giant
2. Andrew Carnegie and John Rockefeller
3. Growth of unions
4. Immigration
5. Urbanization
6. Tammany Hall
7. Laissez-faire capitalism
8. Theodore Roosevelt: trustbuster

U.S. History A
Scope and Sequence

UNIT 3 – United States Expansion

1.   Manifest destiny
2.   Native peoples: a century of dishonor
3.   Cattle change the West
4.   Agriculture in the West: the farmers revolt
5.   Spanish American War
6.   American influence grows in Asia and Latin America
7.   The Panama Canal

UNIT 4 – Theodore Roosevelt to Woodrow Wilson: The Progressive Era

1.   Populists and Progressives
2.   Muckrakers
3.   The Wisconsin Idea
4.   The presidency of Theodore Roosevelt
5.   Amendments 16, 17, 18, and 19
6.   Regulating and reforming big business
7.   The presidency of Woodrow Wilson

UNIT 5 – Boom to Bust: World War I to the Great Depression

1.   World War I
2.   The Fourteen points
3.   Postwar isolationism
4.   The Roaring Twenties
5.   The Jazz Age

PASS – U.S. History B
NPC – 2018

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The second semester of this course (B) begins with the policies of
F.D. Roosevelt that led the U.S. out of the Great Depression, and the formation of alliances that brought about victory in WWII. The course then addresses the Cold War, the turmoil and changes of the 1960s through the 1980s, and moves up to present-day inroads and challenges facing this country and the world.

SEQUENCE OF SKILLS

UNIT 1 – The Great Depression – World War II

1.   The Great Depression (1929 – 1932); causes and effects
2.   Franklin Delano Roosevelt
3.   The New Deal
4.   World War II
5.   The Holocaust
6.   Research essay

UNIT 2 – The Paradox of the Post-War Years: 1945 – 1960

1.   The United Nations
2.   The Cold War around the world
3.   The communist threat and policy of containment
4.   The Korean War
5.   The McCarthy Era
6.   Dwight Eisenhower and the Cold War
7.   Civil rights
8.   Prosperity and rock & roll

U.S. History B
Scope and Sequence

UNIT 3 – The Sixties: A Decade of Change and Upheaval

1.   The Civil rights movement
2.   The Kennedy years
3.   Lyndon B. Johnson and the great society
4.   American involvement in Vietnam

UNIT 4 – Years of Turmoil and Change: 1968 - 1988

1.   Nixon's *Imperial* Presidency
2.   Watergate
3.   President's Ford administration
4.   Jimmy Carter: foreign policy
5.   Ronald Regan and the New Right
6.   George H.W. Bush takes office

UNIT 5 – 1988 – Present

1.   The Cold War comes to an end
2.   The Persian Gulf War
3.   Bill Clinton's two terms
4.   George W. Bush: Homeland Security, the Bush Recession and Hurricane Katrina
5.   War in Afghanistan and Iraq
6.   The Obama presidency
7.   Terrorism
8.   Technology
9.   Protecting the environment
10.   Equality service learning project
11.   Write a lesson on a recent occurrence or issue since publication of the course

PASS – World History A
Second Edition – NPC – 2014

SCOPE OF COURSE

This World History course allows students to learn about the progression of human history on a global basis. It is divided into two semesters of study (A & B). World History A starts the journey with global prehistory and ancient times and carries it through the Industrial Revolutions and European imperialism of the 19th century.

SEQUENCE OF SKILLS

UNIT 1 – Prehistory and the Ancient World

1.   Introduction to social studies
2.   Early humans and the beginnings of civilization
3.   Mesopotamia
4.   Ancient Egypt
5.   Ancient India
6.   Ancient China
7.   The Greek World
8.   The Greco-Persian Wars – evaluating sources
9.   The Roman Empire
10.   Trade routes of the Ancient World
11.   Mesoamerica
12.   The Gupta empire in India
13.   Early belief systems

Scope and Sequence

UNIT 2 – Eastern Empires and Changes in Western Civilization

1.   Medieval Europe
2.   The Byzantine Empire
3.   Early Russia
4.   The spread of Islam
5.   The Crusades
6.   Civilizations in Africa
7.   Dynasties of China
8.   The Mongol Empire
9.   The late middle ages: trade brings change
10.   The Renaissance
11.   Changes in religion – the Protestant reformation
12.   The spread of the Protestant reformation and its effects
13.   The rise of nation-states

UNIT 3 – The First Global Age

1.   Empires of the western hemisphere – the Aztecs and the Inca
2.   The age of discovery and exploration
3.   Colonization of the New World
4.   Effects of European colonization: the New World
5.   Islamic empires: the Ottomans
6.   Islamic empires: the Safavid Dynasty
7.   The Moguls of India
8.   The Ming Dynasty
9.   The Qing Dynasty
10.   Japan
11.   Korea
12.   Australia and New Zealand
13.   The impact of the first global age

UNIT 4 – The Age of Revolution

1.   Europe during the age of discovery – the rise of absolutism
2.   Absolutism in England and the rise of constitutionalism
3.   The scientific revolution
4.   The enlightenment
5.   Women of the scientific revolution and enlightenment
6.   Art and architecture in enlightenment Europe
7.   The American revolution
8.   The French revolution
9.   The Napoleonic Era
10.   Europe after Napoleon
11.   Revolutions in Latin America
12.   Latin America: the struggle for democracy and stability
13.   Compare/contrast essay

UNIT 5 – Industrial Revolutions and 19th Century Imperialism

1.   The Industrial Revolution
2.   Responses to industrialization
3.   Europe in the face of change
4.   The unifications of Italy and Germany
5.   Nationalism and reform – Europe and North America
6.   Nationalism and reform in the East
7.   The New Imperialism
8.   Africa
9.   Effects and results of Imperialism
10.   Japan and the United States enter the world stage
11.   Inventions and advances in technology and transportation
12.   Industrial societies of the late nineteenth century
13.   Research project

PASS – World History B
Second Edition – NPC – 2014

SCOPE OF COURSE

This World History course allows students to learn about the progression of human history on a global basis. It is divided into two semesters of study (A & B). World History B begins with World War I and the revolutions of the early 20th century and ends with the modern world and current global issues. Information and study is presented in chronological order and oriented by geographic location.

SEQUENCE OF SKILLS

UNIT 1 – World War and Revolution

1. Nationalism: a force for change
2. The Armenians: the "Forgotten Genocide"
3. Long-term causes of World War I
4. Assassination and war
5. World War I: The Great War
6. A global conflict
7. World War I: its aftermath
8. A flawed peace
9. Revolutions in Czarist Russia
10. Communism in the Soviet Union: from Lenin to Stalin
11. A study of totalitarianism: the U.S.S.R. under Stalin
12. The 1920s: attempts at peace and recovery, The Great Depression
13. Between the Wars: social and cultural changes

Scope and Sequence

UNIT 2 – From World War to Cold War

1. Revolution and nationalism in the East
2. Rise of fascism in Europe
3. Aggression and War in Asia
4. Aggression and War in Europe
5. World War II in Europe
6. World War II in the Pacific
7. Allied victory
8. The Atomic Bombs
9. The Holocaust
10. The cost of war and justice
11. Rebuilding Germany and Japan
12. From World War to Cold War
13. A polarized world

UNIT 3 – Colonial Independence: The Restructuring of the Post-War World

1. China becomes a Communist Nation
2. The Cold War gets hot: Korea
3. The War in Vietnam
4. Genocide in Cambodia
5. Southeast Asian nations gain independence
6. Independence and partition for India
7. New nations in Africa
8. Conflict in the Middle East
9. Struggles in Central Asia: Afghanistan
10. Revolution and Communism in Latin America
11. Struggles in Latin America: repressive governments
12. Western Europe
13. Human rights violations in the 20th Century

UNIT 4 – The Modern World

1. Reform and change in Communist China
2. Asian tigers
3. South Asia: emerging powers
4. Apartheid in South Africa
5. The Persian Gulf War
6. Islamic fundamentalism in Iran
7. Middle East tension today
8. The Cold War thaws
9. The end of the Soviet Union
10. Revolution and change in Eastern Europe
11. The breakup of Yugoslavia
12. The Democracies of Western Europe
13. Modern Latin America

UNIT 5 – Current Global Issues

1. A global community
2. Science and technology
3. Global economics: the *Haves* vs. the *Have-nots*
4. The environment
5. International terrorism
6. Human rights issues in Africa: Rwanda and Durfur
7. Human rights issues in modern China
8. World health issues
9. Patterns of global migration
10. Illegal drug trafficking
11. The status of women
12. Global citizenship
13. The flow of money: from global economics to personal finance

PASS – U.S. Government
NPC – 2017

SCOPE OF COURSE

This one-semester offering is divided into five units of study. Essential questions addressed include the historic basis for the United States' form of government and the events leading up to the writing of the U.S. Constitution; its structure, purpose, guarantees, and functionality; the three branches of government; and how the separation of powers provides for checks and balances within the system. From there it moves on to the rights and responsibilities of citizenship and how it is obtained, the role of politics, and how public policy impacts both local and global issues. Activities foster direct connections with local governance and topics of concern.

SEQUENCE OF SKILLS

UNIT 1 – The Birth of American Democracy

1.   Purpose, basis, and types of government
2.   Government in the colonies
3.   The American resistance
4.   Contributions of historical individuals
5.   The Declaration of Independence
6.   The first and second Continental Congresses
7.   Post-revolution government under the Articles of Confederation
8.   Important compromises
9.   The road to ratification
10.   Two revolutions in the development of our government

UNIT 2 – The U.S. Constitution

1.   Structure and purpose of the Constitution
2.   Articles I – VI
3.   The Bill of Rights
4.   Amendments 11 – 27
5.   The amendment process
6.   The First Amendment with case study
7.   The nation's symbols

UNIT 3 – Separation of Powers

1. Separation of powers
2. Legislative Branch at federal, state, and local levels
3. Executive Branch at federal, state, and local levels
4. Organization of the Executive Branch
5. Judicial Branch: court system
6. Supreme court decisions

UNIT 4 – Citizenship and Politics

1. Becoming a citizen
2. Responsibilities of citizenship
3. The voting process
4. Influencing the government
5. Political parties
6. Government revenues
7. Media influences

UNIT 5 – Public Policy

1. Civics
2. Politics and demographics
3. United States economy
4. Domestic policy
5. Global economy
6. U.S. foreign policy
7. The United Nations

PASS – World Geography A

SCOPE OF COURSE

This first semester of a two-semester course includes two units that serve as an introduction to the study of geography and the basic skills that are applied to investigation of the physical characteristics of the world. The remaining three units focus on the regions and countries of the Western Hemisphere and the role geography has played both historically and in the present.

SEQUENCE OF SKILLS

UNIT 1 – Introduction to the Study of Geography

1.   Introduction to geography
2.   Studying geography
3.   Five themes of Geography
4.   The value of geography
5.   Reason to study geography
6.   Observing the world
7.   Geographers' methods
8.   Physical and human characteristics
9.   Resources and change
10.   The human dilemma
11.   Modifying our environment
12.   Fields of geography
13.   Careers in Geography

Scope and Sequence

UNIT 2 – Geography Skills

1.   Global perspective
2.   Maps and globes
3.   Types of maps
4.   Map skills
5.   Regions
6.   Physical characteristics
7.   Geographic forms
8.   Cultural characteristics
9.   Meaning of culture
10.   Belief systems
11.   Political systems
12.   Economic systems

World Geography A
Scope and Sequence

UNIT 3 – North America

1. Overview of North America
2. Canada
3. Native civilizations of Canada
4. European claims on the Canadian wilderness
5. Modern issues: Quebec
6. Climate and Topography of the United States
7. People of the United States
8. The modern United States
9. Overview of Mexico
10. Native civilizations of Mexico
11. Spanish conquest and domination
12. Modern Mexico
13. NAFTA

UNIT 4 – Central America and the Caribbean

1. Overview and early history of central America
2. Colonialism and independence
3. Guatemala, Honduras, and Nicaragua
4. Belize and El Salvador
5. Panama and return of the canal
6. Overview of the Caribbean
7. Encounter with Europe: case study of the Arawak Indians
8. Case study of independence: the Haitian revolution
9. Modern Haiti
10. Cuba: revolution and communism
11. Island nations: the Greater Antilles
12. Island nations: the lesser Antilles
13. Modern issues: tourism

UNIT 5 – South America

1. Overview of South America
2. Native cultures and early history
3. European domination and colonialism
4. Independence and regionalism
5. Venezuela and Colombia
6. Ecuador, Peru, and Bolivia
7. Guyana, Surinam, and French Guiana
8. The Galapagos Islands
9. Chile and Argentina
10. Brazil, Uruguay, and Paraguay
11. Modern issues: cash crops
12. Modern issues: rainforests and deforestation
13. Modern issues: urbanization

PASS – World Geography B

SCOPE OF COURSE

This second semester of a two-semester course consists of five units that focus on the regions and countries of the Eastern Hemisphere and the role geography has played both historically and in the present.

SEQUENCE OF SKILLS

UNIT 1 – Europe

1.   Overview of Europe
2.   Northern and western Europe
3.   Mediterranean Europe
4.   Eastern Europe
5.   Northern Eurasia
6.   European Russia and the Caucasus
7.   The Irish potato famine
8.   European imperialism
9.   The geography of Genocide: case study of Yugoslavia
10.   The commonwealth of independent states
11.   Environmental disaster at Chernobyl
12.   European unity
13.   Modern geographic issues: pollution

UNIT 2 – Africa

1.   Northern Africa
2.   Overview of sub-Saharan Africa
3.   West Africa
4.   East Africa
5.   Southern Africa
6.   Egypt: then and now
7.   Medieval west African civilizations
8.   Cultural diffusion: Bantu migrations and Swahili
9.   European imperialism and independence in Africa
10.   The legacy of European imperialism in Southern Africa
11.   Civil War in the Congo
12.   Famine in Somalia
13.   Modern geographic issues: disease

World Geography B
Scope and Sequence

UNIT 3- Middle East

1. Overview of Southwest Asia and Northern Africa
2. History of the fertile crescent
3. The rise and spread of Monotheistic Faiths
4. Islam: a unifying and dividing force
5. The Arabian Peninsula today
6. The Eastern Mediterranean
7. Case study: conflict in Israel
8. Central Asia
9. Turkey
10. Modern Iran
11. Modern issues: conflict in Iraq
12. Essential resources: oil and OPEC
13. Essential resources: water

UNIT 4 – East Asia and the South Pacific

1. Overview of East Asia
2. China
3. China: three gorges dam
4. Mongolia and Taiwan
5. Japan: geography and the development of an isolated culture
6. Japan: modern issues and innovation
7. The two Koreas
8. Overview of Southeast Asia
9. Burma/Myanmar, Thailand, and Cambodia
10. Laos and Vietnam
11. Malaysia, Singapore, Indonesia, Papua New Guinea, and the Philippines
12. Pacific rim economies: the Asian tigers
13. Australia and New Zealand

UNIT 5 – South Asia

1. Overview of South Asia
2. Monsoons up close
3. Ancient India: the Indus Valley
4. India: invasion and conquest
5. Modern India
6. Creation of Pakistan
7. Modern Pakistan
8. Bangladesh
9. Sri Lanka: from colonialism to Civil War
10. Himalayan Mountains: Nepal and Bhutan
11. Afghanistan: history of invasions
12. Modern Afghanistan
13. Modern issues for South Asia

PASS – Ethnic Studies
Revised 1993

SCOPE OF COURSE

This course covers the history, culture and contributions of the following ethnic groups: Native Americans, Hispanics, Caucasian Non-Hispanic, Asians and African Americans.

SEQUENCE OF SKILLS

UNIT I – Native Americans

This unit covers history, events and people including Native American legends, literature, music, poetry, customs and traditions, regions, tribes and famous Indians.

UNIT II – Hispanics

This unit covers history, events and people including Hispanic family traditions and culture, customs, religion, the art of Ancient Mexico, theater and literature.

UNIT III – Caucasian Non-Hispanic

This unit covers history, events and people including Caucasian literature, art, traditions and customs, and famous people.

UNIT IV – Asians

This unit covers history, events and people including Asian immigration, discrimination, arts, major religions, famous people and written languages.

UNIT V – African Americans

This unit covers history, events and people including African American settlement in the United States, slavery, art and literature, discrimination, music and famous people.

PASS – Consumer Education
Original

SCOPE OF COURSE

This course covers making informed consumer decisions; becoming knowledgeable of consumer laws, rights and methods of recourse; and developing an understanding of the consumer role in economic, social and government systems.

SEQUENCE OF SKILLS

UNIT I – The Role of the Consumer

1.   Define consumer related terminology
2.   Name roles of the consumer
3.   Describe consumer rights
4.   Recognize consumer fraud
5.   Demonstrate knowledge of consumer complaint procedures

UNIT II – Consumer Economic Goals

1.   Define personal and economic goals
2.   Demonstrate awareness of reasons for budgeting
3.   Define budget related terminology
4.   Understanding checking and savings accounts
5.   Write a check

UNIT III – Credit and Advertising

1.   Define credit and advertising vocabulary
2.   List advantages and disadvantages of charge accounts
3.   Explain why a contract should be read completely
4.   Name items asked for on a credit application
5.   Explain comparison shopping
6.   Identify legislation protecting consumers
7.   Relate the importance of being able to judge advertisements

UNIT IV – Consumer Decision Making—Nutrition and Health

1.   Define nutrition and consumer sales vocabulary
2.   Recognize foods from each basic food group
3.   Explain the importance of a balanced diet
4.   Recognize impulse buying
5.   Define recommended daily allowance
6.   Demonstrate knowledge of sales, brands and quality, and durability decision making

UNIT V – Consumer Decision Making—Household and Medical

1.   Define consumer sales and vocabulary
2.   Explain the meaning of generic
3.   Explain clothing sales procedure
4.   Explain consumer protection legislation
5.   Recognize variable and fixed automobile costs
6.   Identify natural and synthetic fibers
7.   Name types of automobile insurance coverage

PASS – Economics
NPC – 2016

SCOPE OF COURSE

In this one-semester course, students will learn the major economic concepts and theories covering how people use scarce resources like time, land, or money, to meet their needs or wants. Economics is not just about money – it is about scarcity, opportunity, and making decisions. Students will gain valuable knowledge about business, government, finance, and the world economy. Students will also have opportunities to apply this knowledge in practical ways by developing a budget, applying for a job, using a bank account, paying for college, etc. Activities will help students to analyze choices and improve their decision-making skills to become better problem-solvers by examining complex economic problems and considering a variety of possible solutions. Students are also asked to conduct research on current topics in an attempt to show them how to gain access and interpret information to become a more informed consumer and citizen. In addition, career opportunities in fields related to economics are discussed and explored.

SEQUENCE OF SKILLS

UNIT 1 – Fundamentals of Economics

1.   Basics of economics
2.   Instructions for reading graphs
3.   Macroeconomics
4.   Microeconomics
5.   Scarcity's role in the economy
6.   Resources – natural, human, capital
7.   Factors of production
8.   Local government planning
9.   Economic systems – traditional, command, market

Scope and Sequence

UNIT 2 – Supply, Demand, and Prices

1.   Relationship between supply and demand
2.   Utility
3.   Determinants of elasticity and inelasticity
4.   Market price
5.   Price and the government
6.   Price system
7.   Theory of production

Economics
Scope and Sequence

UNIT 3 – Business and Government

1. Business organizations – sole proprietorship, partnership, corporation, franchise, non-profit
2. Market structures – perfect competition, monopoly, oligopoly
3. Price determination
4. Role of government in economics
5. Government revenue and spending
6. Measuring economic performance
7. Business cycle
8. Federal monetary policy
9. Unemployment and poverty

UNIT 4 – Employment and Money

1. Elements of employment
2. Labor unions
3. Trends in labor
4. Outsourcing
5. Wages, income, and paying taxes
6. Budgeting
7. Banking, saving, investing and using credit
8. Consumer choices
9. Identity theft
10. Monetary policy

Unit 5 – Global Economics

1. International trade
2. Trade – balance, barriers, agreements
3. Free trade
4. Financing trade
5. Global view of U.S. economy
6. Economic development in less-developed countries
7. Global economic concerns – child labor, ethical consumption

PASS – Consumer Math
Revised in 1993

SCOPE OF COURSE

This course identifies basic consumer choices and teaches the skills needed to make economically sound consumer decisions. Lessons center around specific, consumer tasks-budgeting, limited resources, comparison shopping, energy conservation, maintaining savings and checking accounts.

SEQUENCE OF SKILLS

UNIT I -Earnings and Income Tax

1.   Calculate time worked and hourly wages
2.   Calculate commission, piece work and overtime
3.   Define vocabulary words
4.   Complete a tax return

UNIT II – Dealing with Money

1.   Use cash and calculate cash purchases
2.   Open, use and balance a checking account
3.   Understand and use special vocabulary
4.   Open and use a savings account
5.   Purchase and complete a money order

UNIT III – Housing, Utility and Remodeling/Repair Costs

1.   Calculate rental and house payment costs
2.   Calculate building costs, taxes and insurance costs
3.   Read utility meters and calculate costs
4.   Define vocabulary terms
5.   Figure and compare home repair costs

Scope and Sequence

UNIT IV – Comparative Shopping and Short-Term Credit

1.   Calculate and compare unit costs
2.   Calculate sales discount
3.   Understand using credit cards
4.   Fill out a mail order form

UNIT V – Long-Term Credit and Budgeting

1.   Calculate down payments and deferred price
2.   Calculate miles per gallon
3.   Understand the concepts of needs and wants
4.   Demonstrate the differences in fixed and flexible expenses
5.   Develop a budget worksheet

PASS – Personal Finance
Second Edition – NPC – 2014

SCOPE OF COURSE

This course could also be called consumer math. It is a course about making decisions and solving problems. Studying math skills and money handling as they relate to the responsibilities faced by adults in the working world with help students analyze choices and improve their decision-making ability. This course will help students develop skills in money management as they apply knowledge of mathematics to real-life situations such as calculating wages, developing a budget, using credit, and planning to rent or buy a home. It will help them become more confident in using math skills to make personal decisions.

SEQUENCE OF SKILLS

Unit 1 – Earnings and Income Tax

1.   Introduction to various methods of being paid for work done
2.   Calculate weekly wages
3.   Review decimal point placement when multiplying decimals
4.   Determining the number of hours worked
5.   Calculate overtime earnings based on regular rate of pay
6.   Calculate piecework earnings
7.   Learn about being paid on commission: what it is, how to compute, what kinds of jobs are paid this way, and advantages and disadvantages of this form of payment
8.   Salary and combinations: pay periods and computing straight salary or combined with commissions
9.   Payroll deductions
10.   Reading earnings statements
11.   Calculating net pay
12.   Withholding allowances: filling out a W-4 form
13.   Calculate city and state income taxes as a portion of earnings
14.   Calculate FICA as a portion of earnings for regular and self employment
15.   Federal income tax
16.   Fringe benefits

Scope and Sequence

UNIT 2 – Dealing with Money

1.   Review adding, subtracting, and multiplying money amounts
2.   Define and practice using terms associated with money
3.   Find the cost of goods and services using a price list
4.   Add and/or multiply the cost of goods and services to find the total cost of a purchase
5.   Calculate city and state sales taxes on a purchase
6.   Calculate change according to the cost and payment
7.   Make change by addition from cost of item to the amount of payment
8.   Fill out sample money orders
9.   Calculate the fees for purchasing money orders
10.   Practice using a signature card for a checking account

11. Define and use terms related to checking and savings accounts
12. Fill out deposit slips to deposit money in a checking account
13. Endorse checks
14. Fill out checks
15. Protecting your checking account
16. Advantages and disadvantages of debit cards
17. Calculate ATM withdrawals, including cash and fees
18. Use of a register to track payments, withdrawals, and deposits for a checking account
19. Practice using an imaginary checking account for one month
20. Reconcile a checking account using a bank statement and check register
21. Savings accounts and simple interest

UNIT 3 – Budgeting and Credit

1. Calculate monthly income
2. Look at common types of monthly expenses
3. Explain the difference between a need and a want
4. Explain the difference between the two main types of expenses
5. Calculate fixed expenses and flexible expenses
6. Create and use a monthly budget
7. Track actual expenses and compare to the budgeted amount
8. Track savings using a monthly budget summary
9. Learn to distinguish between necessary and careless or wasteful spending
10. Learn how much money to save in an emergency fund
11. Look at ways that unplanned expenses can add up and cause financial problems if not anticipated
12. Learn about the three main types of credit
13. Calculate the number of payments or length of payment plan for installment credit
14. Learn about credit limits with revolving credit
15. Calculate simple interest for a loan
16. Examine how the length of a loan affects how much interest the borrower pays
17. Calculate fees and minimum payment amounts for credit cards
18. Learn to read a credit report
19. Calculate total money owed to lenders
20. Develop a plan to repay loans in order of priority
21. Calculate a debit limit of 20% of yearly net income
22. Calculate a limit on debt payments of 10% of monthly net income
23. Calculate total assets and total liabilities
24. Calculate net worth

UNIT 4 – Housing Costs

1. Calculate move-in costs for renting
2. Calculate monthly cost of rental housing
3. Learn to read and understand a lease
4. Find the cost and coverage of renters insurance
5. Compare the monthly cost of renting versus buying
6. Calculate the down payment for a house as a percentage of the total cost of the house
7. Find the amount of time needed to save a down payment
8. Learn about private mortgage insurance

9. Calculate the interest repaid on a mortgage, depending on the length of the loan and the interest rate
10. Calculate property tax on the assessed value of real estate
11. Find the monthly cost of homeowner's insurance based on the annual premium
12. Find the total annual cost of insurance with the basic and additional coverage
13. Calculate a monthly house payment including the costs of property tax and homeowner's insurance
14. Calculate the breakdown of charges on a water bill
15. Learn to read water and gas meters
16. Calculate the charges for natural gas by unit
17. Figure the equal monthly payment for natural gas
18. Learn to read an electric meter
19. Calculate the charges for electricity by unit
20. Calculate the energy consumption of some household appliances
21. Calculate the cost of local and long-distance service, depending on the fees and cost per minute for calling
22. Calculate the cost of different wireless service plans
23. Calculate the cost of some types of home repair
24. Compare the cost of buying furniture and appliances to the cost of renting-to-own

UNIT 5 – Smart Shopping

1. Find the cost of buying goods in quantity
2. Compare costs for different sized containers of the same item
3. Learn about seven common types of advertising appeals
4. Calculate savings when buying goods and services on special
5. Find the amount of discount for a sale item
6. Find the cost of an item after a rebate
7. Calculate sales prices according to the dollar amount, percent, or fraction off the original prices
8. Learn how layaway plans and agreements work
9. Calculate the deposit amount for a layaway plan
10. Find the additional cost of using layaway
11. Find out how much merchandise you would need to buy to offset the cost of joining a buying club
12. Learn to recognize the warning signs of a dishonest buying club
13. Read and understand a catalog entry
14. Fill out an order form for a catalog order, including totaling the order and adding the cost of shipping
15. Calculate the total cost of an online purchase
16. Understand buying and selling on an Internet auction
17. Learn to recognize common types of consumer fraud
18. Learn how to write a consumer complaint letter
19. Calculate the down payment and finance amount to buy a car
20. Find the deferred price of a car
21. Learn to read an odometer
22. Calculate miles per gallon
23. Find the cost of gas to operate a car for one year
24. Calculate the amount of mileage before scheduled tune-ups
25. Find the total cost of repairs

PASS – General Math A
Developed in 1989

SCOPE OF COURSE

This course in basic math skills addresses place value and whole numbers, Roman numerals, use of symbols, and computation. Students are required to make skill application in anticipated daily life situations.

SEQUENCE OF SKILLS

UNIT I – Addition and Subtraction

1. Basic addition facts and applications
2. Addition without regrouping
3. Two-digit addition regrouping
4. Three-digit addition with zeros
5. Three-digit addition with regrouping
6. Multiple addends with regrouping
7. Basic subtraction facts and applications
8. Subtraction without regrouping
9. Subtraction with regrouping

UNIT II – Multiplication

1. Basic multiplication facts and applications
2. Multiplication without regrouping
3. Two-digit multiplication with regrouping
4. Three-digit multiplication with zero
5. Two-digit times two-digit multiplication
6. Three-digit multiplication

UNIT III – Numeration System and Place Value

1. Recognize whole numbers
2. Identifying place value
3. Looking at larger numbers
4. Word number
5. Face value, place value and total value
6. Expanded notation

UNIT IV – Division

1. Basic steps in division and their application
2. One-digit divisor, two-digit dividend with remainders
3. One-digit divisor, three or four-digit dividend with zero
4. Two-digit divisor, two-digit dividend without remainders
5. Two-digit divisor, two-digit dividend with remainders
6. Two-digit divisor, three-digit dividend without remainders
7. Two-digit divisor, multiple digit dividends without remainders
8. Two-digit divisor, multiple digit dividends with remainders
9. Three-digit divisor, multiple digit dividends without remainders
10. Three-digit divisor, multiple digit dividends with remainders
11. Three-digit divisor and dividend with zero
12. Multiple dividends

UNIT V – Application

1. Review of addition
2. Review of subtraction
3. Review of multiplication
4. Review of division
5. An introduction to problem solving
6. Estimation
7. Strategies for problem solving
8. Finding average
9. Understanding charts, tables and graphs

PASS – General Math B
Developed in 1992

SCOPE OF COURSE

This course continues to reinforce basic mathematical skills through the introduction and application of fractions, decimals, percents, measurements and metrics. Students are required to complete computations relevant to daily life situations.

SEQUENCE OF SKILLS

UNIT VI – Fractions

1. Identify fractions as part of the whole
2. Identify proper, improper and mixed number fractions
3. Write equivalent fractions
4. Reduce fractions to lowest terms
5. Rename fractions
6. Identify the GCF and the LCD
7. Add fractions
8. Subtract fractions
9. Multiply fractions
10. Divide fractions

UNIT VII – Decimals

1. Understand place value
2. Read and write decimals
3. Round decimals
4. Change decimals to fractions and fractions to decimals
5. Add decimals
6. Subtract decimals
7. Multiply decimals
8. Divide decimals

General Math B
Scope and Sequence

UNIT VIII – Percents

1. Change decimals to percents
2. Change common fractions and mixed numbers to percent
3. Change percents to decimals
4. Change percents, common fractions and mixed numbers
5. Find a percent of a number
6. Find what percent one number is of another
7. Find a number when a percent of it is known
8. Solve percent by proportion and ratio

UNIT IX – Measurement

1. Identify lines
2. Measure lines
3. Understand plane closed figures
4. Find perimeters
5. Compare lineal units of measure
6. Compare units of liquid measure
7. Compare units of mass
8. Add and subtract measures
9. Multiply and divide measures
10. Find areas
11. Find volumes

UNIT V – Metrics

1. Measure metric length
2. Understand metric meanings
3. Apply metric conversions
4. Find sums or differences
5. Find the perimeter
6. Find the area
7. Find the volume
8. Find the weight
9. Understand Celsius temperatures
10. Apply metrics

PASS – Pre-Algebra & Calculator Math
Revised 1992

SCOPE OF COURSE

This course in Pre-Algebra concepts and skills encompasses the use of whole numbers and theory; quantitative data; percents, ratios and proportions; and integers. Additionally, instruction in the use of the calculator assists in a better understanding of the manipulation of numbers.

SEQUENCE OF SKILLS

UNIT I – Whole Numbers and Number Theory

1.   Add, subtract, multiply and divide whole numbers
2.   Round whole numbers
3.   Identify prime and composite numbers
4.   Find all factors of a given number
5.   Factor a number using primes and exponents
6.   Find greatest common factor (GCF)
7.   Find least common multiple (LCM)
8.   Solve a simple algebraic equation
9.   Use a calculator to solve problems

UNIT II – Fractions, Decimals and Quantitative Data

1.   Add, subtract, multiply and divide fractions
2.   Evaluate formulas
3.   Solve simple linear equations
4.   Add, subtract, multiply and divide decimals
5.   Change fractions to decimals and vice-versa
6.   Simplify fractions
7.   Solve problems using a calculator

Pre-Algebra
Scope and Sequence

UNIT III – Percent, Ratio and Proportions

1.   Change percents to decimals or fractions and vice-versa
2.   Use percents
3.   Use proportions
4.   Evaluate formulas
5.   Solve simple algebraic equations
6.   Evaluate algebraic expressions
7.   Solve problems using a calculator

UNIT IV – Integers

1.   Represent integers on a number line
2.   Add and subtract integers on a number line
3.   Find the opposite (additive inverse) of an integer
4.   Add, subtract, multiply and divide integers
5.   Add, subtract, multiply and divide rational numbers
6.   Simplify expressions
7.   Solve equations
8.   Solve problems using a calculator

UNIT X – More Algebra

1.   Solve 1, 2 or 3-step equations
2.   Solve inequalities
3.   Translate English phrases into algebraic phrases
4.   Factor polynomials
5.   Find approximations of square roots
6.   Use the Pythagorean Theorem
7.   Identify points in a plane
8.   Identify graphs of equations
9.   Identify graphs of inequalities
10.   Solve problems using a calculator

PASS – Algebra IA
Third Edition – NPC – 2012

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The first-semester (A) is a study of algebraic concepts including measurement and mathematical reasoning; algebraic expressions; factoring; and equations.

SEQUENCE OF SKILLS

UNIT 1 – Foundations

1. Real numbers
    - learn to recognize and differentiate between natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers
    - relate the number line to the collection of real numbers
2. Sets
    - recognize a well-defined set
    - learn set notation and terminology
    - study some subsets of real numbers-prime and composite numbers
3. Variables and Axioms
    - learn why, when, or how to use a variable
    - learn the definition of an axiom
    - learn some specific axioms
4. Real number properties
    - learn the characteristics and uses of the following properties of numbers: the commutative property, the associative property, the distributive property
5. Properties of real numbers
    - to learn the meaning and some uses of identity elements, inverses, and the multiplicative property of zero
    - to understand why division by zero is not allowed
    - to introduce the uniqueness and existence properties
6. Density property of real numbers
    - study the density property of real numbers
    - learn which subsets of real numbers are dense
7. Addition of signed (+/-) numbers (integers): understand the concept and process of adding signed numbers
    - by using additive inverses
    - with the help of an algorithm (or rule) and the distance from zero (absolute value)
    - by studying shortcuts to adding strings of integers
    - in application problems
8. Subtraction of signed (+/-) numbers (integers): learn to subtract signed numbers
    - using an algorithm which changes the problem to an addition problem
    - in applied problems

9. Multiplication and division of signed numbers
    *   learn to multiply integers using pattern finding, repeated addition, and an algorithm
    *   learn to divide integers using the relationship between multiplication and division and an algorithm
    *   learn to multiply and divide integers in applications
10. Fractions and number sense
    *   become comfortable with fractions by understanding their make-up and comparing their sizes
11. Operations with fractions: prepare for operations with algebraic fractions
    *   by understanding the concepts behind the algorithms
    *   by determining if solutions are reasonable
12. Decimals: become comfortable with decimals and decimal operations
    *   by understanding the relative size of decimals
    *   by understanding why the algorithms or rules dealing with decimals work
    *   by testing answers for reasonableness
13. Scientific notation and percent
    *   to review scientific notation-value and form
    *   to review percent and some of its applications
14. Properties of real numbers—order and the number line: study the order of real numbers
    *   in relation to each other (the Trichotomy Property)
    *   as related to the number line; variables, order, and the number line

UNIT 2 – Measurement and Mathematical Reasoning

1. Exponents
    *   to recognize an exponential expression and its parts
    *   to use exponents to express repeated multiplication
    *   to evaluate arithmetic expressions with exponents (with and without a calculator)
2. Operations with exponents
    *   to evaluate exponential expressions with a negative base
    *   to multiply and divide expressions involving exponents
    *   to evaluate expressions involving scientific notation
3. Radicals
    *   learn the meaning or concept of radicals
    *   learn how to perform operations involving radicals
    *   learn applications and problem solving involving radicals
4. Like radicals
    *   learn to identify like radicals
    *   learn to simplify radical expressions with and without like radicals
    *   learn to solve application problems
5. Absolute value
    *   learn absolute value notation
    *   perform operations involving absolute value
6. Order of operations
    *   learn the importance of order of operations
    *   learn the correct order of operations
    *   learn to use the calculator correctly by experimenting

7. Measurement-conversions: learn to make conversions
    - between units in the same system using the factor/label method
    - between the British and the metric system of measurement
8. Nonstandard measurement and measurement as problem solving
    - learn to use nonstandard measuring devices
    - learn to solve problems involving measurement
9. Measurement—estimation and accuracy
    - learn to estimate quantities between and within the British and metric systems
    - learn to estimate quantities using your senses
    - learn to select appropriate instruments and techniques to measure quantities
    - learn accuracy of measurement
    - learn the difference between actual and relative errors
10. Mathematical reasoning
    - learn about statements and their negative
    - learn to use Venn Diagrams for problem solving
    - learn to use counter-examples to justify arguments
11. Mathematical reasoning "and" and "or"
    - learn to use "and" and "or" mathematically correctly
    - learn to use Venn Diagrams in problem solving with "and" and "or"
12. Mathematical reasoning—conditional and biconditional statements
    - learn to recognize the hypothesis and conclusion of a conditional statement
    - determine the truth of a conditional statement
    - solve problems with conditional statements
    - write and evaluate the truth of the converse of a conditional statement
    - if a statement and its converse are both true, write a biconditional statement to replace them
13. Mathematical reasoning--deduction
    - learn the difference between valid arguments and valid conclusions
    - learn to use three types of valid arguments: direct reasoning, indirect reasoning, and the chain rule
14. Mathematical reasoning--induction

Algebra IA
Scope and Sequence

UNIT 3 – Algebraic Expressions

1. Writing algebraic expressions
   - recognize constants and variables
   - translate word expressions into algebraic expressions using variables and vice versa
2. Evaluating algebraic expressions with one variable
   - learn to evaluate algebraic expressions with one variable
   - connect order of operations in algebraic and arithmetic expressions
   - begin problem solving with algebra through applications
3. Evaluating algebraic expressions with more than one variable
   - learn to evaluate algebraic expressions with more than one variable
   - use algebra to solve problems through applications
4. Polynomials
   - recognize monomials, binomials, trinomials, polynomials, and coefficients
   - find the degree of a monomial and a polynomial
   - write polynomials in descending order
5. Combing like terms
   - learn to recognize like terms
   - add and subtract like terms
6. Adding and subtracting polynomials
   - learn to add and subtract polynomials
   - use the distributive property to simplify polynomial expressions
7. Simplifying algebraic expressions with exponents
   - learn to simplify algebraic expressions containing exponents of the form $a^m\ a^n$ $\underline{a^m}$
   - simplify algebraic expressions containing exponents of the form a^n
8. More on algebraic expressions with exponents
   - learn to simplify algebraic expressions of the form $(a^n)^m$
   - simplify algebraic expression of the form $(ab)^n$
9. Multiplying polynomials
   - learn to multiply a monomial times a monomial
   - learn to multiply a monomial times a polynomial
10. Multiply a binomial times a binomial
   - learn to multiply a binomial by a binomial using the distributive property
   - learn to multiply a binomial by a binomial using FOIL
11. Special binomial products
   - find the square of a binomial
   - find the product of the sum and the difference of the same two terms
12. Multiplication with polynomials
   - learn to multiply a binomial times a polynomial with more than two terms
   - learn to multiply two polynomials each with more than two terms
13. Dividing a polynomial by a monomial
   - learn to divide a polynomial of any length by a monomial
14. Dividing a polynomial by a binomial
   - learn how to divide a polynomial by a binomial

Algebra IA
Scope and Sequence

UNIT 4 – Factoring

1. Factoring-common factors
   - learn to factor monomials
   - learn to recognize common factors and use them to write expressions in factored form
2. The difference of two squares
   - learn to recognize the difference of two squares
   - learn to factor the difference of two squares
3. Factoring trinomials
   - learn to factor trinomials with a leading coefficient of 1
4. Factoring trinomials—advanced
   - learn to factor trinomials of the form $ax^2 + bx + c$ where a ≠ 1 and a and c are prime
   - learn to factor trinomials of the form $ax^2 + bx + c$ where a ≠ 1 and a and c are not both prime
5. Factoring by grouping
   - learn to recognize when factoring by grouping is appropriate
   - learn to factor by grouping
6. Factoring the sum and difference of two cubes
   - learn to recognize the sums and differences of two cubes
   - learn to factor the sum and the difference of two cubes
7. Factoring completely
   - learn to factor expressions completely
8. Reducing algebraic fractions using factoring
   - learn how to use factoring to reduce algebraic fractions
9. Addition and subtraction of algebraic fractions with common denominators
   - learn to add algebraic fractions with a common denominator
   - learn to subtract fractions with a common denominator
10. Addition and subtraction of algebraic fractions without common denominators
    - find the lowest common denominator of algebraic fractions
    - add and subtract fractions after finding a common denominator
11. Multiplying and dividing algebraic fractions
    - learn to multiply algebraic fractions
    - learn to divide algebraic fractions
12. Complex algebraic fractions
    - learn to recognize complex fractions
    - learn to simplify complex fractions by changing to the equivalent multiplication problem
    - learn to simplify complex fractions using the least common multiple
    - learn to use complex fractions in applications

Unit 5 – Equations

1. Equations
   - learn to recognize equations
   - learn to recognize solutions or roots of equations
   - learn to identify conditional equations, identities, and impossible equations and find solution sets for each type
2. One step equations –addition and subtraction
   - learn to solve equations that require one step: addition and subtraction
   - learn to solve equations by writing equivalent equations
3. One step equations—multiplication and division
   - learn to solve equations that require one step: multiplication and division
   - learn to use a reciprocal to solve one step problems involving multiplication or division
4. Two step equations: learn to solve two step equations of the form
   - $ax + bx = c$
   - $ax + b = c$
   - $ax + b = cx + d$
5. Multiple step equations
   - learn to solve multiple-step problems involving the distributive property and clearing fractions
6. Writing equations
   - learn to write, solve, and check equations
7. Word problems with one variable (number relations, consecutive integer, and average problems)
   - learn to write, solve, and check word problems that fall into the following three categories: number relations, consecutive integers, and average problems
8. Word problems with one variable (coin problems and interest problems)
   - learn to solve coin or money problems and interest problems
   - learn to use tables to organize data
9. Word problems with one variable (perimeter and area)
   - learn to solve perimeter problems, area problems, and use drawings to help organize data
10. Rational algebraic expressions
    - learn to solve rational algebraic equations using the lowest common denominator
    - learn to use the cross-product rule correctly
    - learn to check solutions to rational algebraic equations for extraneous roots

11. Distance-rate-time problems
    - learn to combine sketches and tables to help solve problems
    - learn to solve word problems involving distance, rate, and time
    - learn to solve distance-rate-time problems with wind or current involved
12. Work problems and percent problems
    - learn to solve problems involving percent
    - learn to solve work problems
13. Mixture problems
    - learn to solve mixture problems by mixing ingredients of different strengths or values to get a desired result
    - learn to solve mixture problems by replacing part of the substance with a substance of another strength to obtain a desired result
    - learn to use proportions to adjust for different amounts of a substance
14. Literal equations
    - learn to solve a literal equation for any of the variables it contains

PASS – Algebra IB
Third Edition – NPC – 2012

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. The second semester (B) is a study of linear functions; inequalities, absolute value, and radicals; quadratic functions, circles, modeling exponential growth and decay; systems of equations and inequalities; and probability and statistics.

SEQUENCE OF SKILLS

UNIT 1 – Linear Functions

1. Functions and relations
    - learn about relations and functions
    - learn about ordered pairs
    - learn about domain and range
2. Functional notation
    - learn functional notation
    - learn the difference between a dependent and an independent variable
    - learn to evaluate functions
3. Graphing
    - introduce the Cartesian coordinate system
    - name points
    - plot points
    - use a table
4. Linear functions
    - learn what a linear function is
    - verify whether or not a given point lies on a line
    - graph equations of the form $y = mx + b$ and $ax + by = c$ by plotting points
    - use the vertical line test
5. Slope of a line
    - define slope
    - find slopes using a graph or data
    - find slopes using equations in the form $y = mx + b$ and $ax + by = c$
6, Intercepts
    - define intercepts
    - find intercepts using a graph or data
    - find intercepts using equations in the form $y = mx + b$ and $ax + by = c$

7. Applications of slopes and intercepts
    *   look at slope as a rate
    *   interpret slope and intercepts in applied situations
    *   look at graphs in term of direct variation
8. Effects of change of slope and intercepts: look at equations in the form
    $y = mx + b$ and determine
    *   what happens to the graph if m changes
    *   what happens to the graph if b changes
9. Parallel and perpendicular lines
    *   learn the characteristics of lines that are parallel and lines that are perpendicular
10. Writing linear equations: write the equation of a line
    *   given the slope and the y-intercept
    *   given the graph of the line
    *   given a slope and a point on a line
    *   given the y-intercept and a point on the line
11. More on writing linear equations: write the equation of a line
    *   given any two points on the line
    *   given a point on the line and the line is parallel to another given line
    *   given a point on the line and the line is perpendicular to another given line
    *   in real-world applications
12. Horizontal and vertical lines: learn to recognize the graphs of equations in the form
    * $y = c$ and $x = c$
13. Other special linear equations: learn to recognize and use equations of the form
    * $y = x$ and $x = -x$
14. Applications: study some applications of linear functions such as
    *   scatter plots and lines to best fit
    *   matching graphs with data

UNIT 2 – Inequalities, Absolute Value and Radicals

1. Graphing and writing inequalities
    *   learn to graph inequalities on a number line
    *   learn to write inequalities to represent real-world solutions
    *   learn to write inequalities given a number line graph
    *   learn to graph and recognize inequalities of the form $x \leq a$ or $x \leq b$
    *   write and graph the corresponding real-world examples
    *   recognize valid and invalid inequality strings
2. The algebra of inequalities
    *   learn how to fine solutions to algebraic inequalities
3. Linear inequalities in two variables
    *   learn why it is necessary to use the Cartesian plane instead of using a number line to graph the solution to some inequalities
    *   learn to determine whether or not an ordered pair is a solution to an inequality in two variables
    *   learn to graph the solution of linear inequalities in two variables
    *

4. Writing linear equations in two variables
    - learn to write inequalities associated with graphs
    - learn to write inequalities corresponding to word problems
5. Absolute value equations: learn to solve and graph absolute value equations
    - involving one variable-graph results on a number line
    - involving two variables-graph results on the Cartesian plane
6. Absolute value inequalities with one variable
    - learn to simplify and graph absolute value inequalities with one variable
    - learn to write absolute value inequalities represented by graphs
    - learn to write absolute value inequalities corresponding to word problems
7. Absolute value inequalities in two variables
    - learn to graph absolute value inequalities in two variables
    - learn to write absolute value inequalities in two variables given their graph
8. Simplifying radicals with variables
    - learn to simplify radicals that contain variables
9. Multiplying and dividing radical expressions with variables
    - learn to multiply and divide radical expressions with variables
10. Addition and subtraction of radicals with variables
    - learn to recognize like radical terms
    - learn to add and subtract radical expressions with variables
11. Rational expressions with radical monomial denominators: learn to rationalize fractions with a
    - square root for a denominator
    - cube root for a denominator
12. Rational expressions with radical binomial denominators
    - learn to find the conjugate of a binomial containing a square root
    - learn to rationalize the denominators of fractions that are binomials with square roots
13. Gears, pulleys, and the wheel and axle
    - learn how gears and pulleys use the number of teeth or radius of circles to gain speed or to gain mechanical advantage

UNIT 3 – Quadratic Functions, Circles, and Modeling Exponential Growth and Decay

1. Conic sections
   - recognize which second-degree equations, in general form, are equations of parabolas, circles, or neither
   - recognize solutions to quadratic equations
   - graph circles and parabolas by plotting points
2. The basics about quadratic functions
   - recognize when a parabola is a quadratic function
   - find the vertex of a quadratic function by observation
   - write the equation of the line of symmetry
   - determine whether a vertex is a maximum or a minimum
   - find the points of reflection of points on a parabola
3. Solving quadratic equations-using square roots
   - learn the relationship between the graph of a quadratic function and the solutions to a quadratic equation
   - learn when quadratic equations may be solved algebraically using square roots and how to do it
4. Solving quadratic equations-by factoring
   - learn the zero-product property
   - learn to solve equations by factoring
5. Completing the square
   - learn to solve quadratic equations by completing the square
6. The quadratic formula
   - learn how to solve quadratic equations by using the quadratic formula
7. The discriminant and the nature of roots: learn how to use the discriminant to determine
   - the number of roots a given quadratic equation will have
   - the kind of roots to expect from a given quadratic equation

Algebra IB
Scope and Sequence

8.   The vertex of a parabola
- learn to find the vertex of a quadratic function written in the general form
$y = ax^2 - bx + c$
- learn to find the vertex of a quadratic function written in the standard form
$y - k = a(x - h)^2$
- learn to change from standard form to general form by expanding
- learn to change from general form to standard form by completing the square

9.   Graphing quadratic functions
- study the effects of changing the *a* in $y = ax^2$
- study the effects of changing the *c* in $y = x^2 + c$
- graph a quadratic function written in standard form and written in general form

10.   Writing the equations of quadratic functions: learn to write he equation of a quadratic function given
- a graph
- practical problems

11.   Maximum and minimum problems
- learn to find the maximum and minimum value of a quadratic function on an interval $[a, b,]$
- use the information learned about quadratic functions to solve practical problems

12.   The distance formula and a circle
- learn how to find the distance between two points in a plane
- learn how to write the equation of a circle in standard form
- learn how to find the center and radius of a circle when it is written in standard form
- learn how to change the equation of a circle in standard form to one in general form

13.   The midpoint formula and the circle
- learn how to find the midpoint of a line segment
- learn more on writing equations of circles
- learn how to find the center and radius of a circle when it is written in general form

14.   Mathematical modeling-exponential growth and decay
- learn to model an exponential growth and decay
- learn to solve problems involving exponential growth and decay

Algebra IB
Scope and Sequence

UNIT 4 – Systems of Equations and Inequalities

1. Systems of two linear equations-graphing
    - determine the possible number of solutions to a system of two linear equations
    - find the solution to the system of graphing
2. Systems of two linear equations-substitution
    - learn to solve a system of linear equations by substitution
    - learn how to recognize systems with no solutions or an infinite number of solutions when solving the system by substitution
3. Systems of two linear equations-addition or elimination method
    - learn how to find the solution to a system of equations by the addition or elimination method
4. Writing systems of equations
    - learn what is necessary for a problem involving two variables, to have a unique solution
    - learn how to write systems of equations in order to solve practical situations
5. Systems of equations with more than two variables
    - examine systems with more than two variables visually
    - determine the number of possible solutions in these systems
    - solve a system with more than two variables by substitution
6. Solving systems of equations in three variables by elimination
    - learn to use elimination to solve systems of equations in three variables
7. Applications of systems of equations with three variables
    - learn to recognize systems of equations that do not have unique solutions
    - learn to write and solve practical problems involving three variables
8. Simultaneous solutions-a linear equation and a quadratic function
    - determine the number of possible solutions to a system of equations
    - find the solution to systems of equations (with a linear equation and a quadratic function) algebraically and by graphing
9. Simultaneous solutions-a linear equation and a absolute value function or a circle
    - compare quadratic functions and absolute value functions
    - find simultaneous solutions to systems with a linear function and an absolute value function
    - find simultaneous solutions to systems with a linear function and a circle
10. Matrices-introduction
    - learn what a matrix is and how it is named
    - learn what the elements and dimensions of a matrix are
    - learn some arithmetic operations with matrices
11. Solving systems of equations with matrices
    - learn to write systems of equations in matrix form
    - learn the row operations for matrices
    - learn to solve systems of equations with matrices

12. Determinants and Cramer's rule
    - learn what a determinant of a square matrix is and how to find its value
    - learn how to use determinants to solve systems of linear equations in two variables
    - learn to use determinants to determine if a system of linear equations in two variables is dependent, independent, or inconsistent
13. System of linear inequalities
    - learn to find the solution to a system of linear inequalities by graphing
    - learn to recognize whether or not specific points are part of the solutions by observation
    - learn to solve application problems involving linear inequalities
14. Linear programming
    - learn how to solve systems of inequalities using linear programming

UNIT 5 – Probability and Statistics

1. Theoretical probability
    - develop an understanding of the number associated with a probability
    - find sample spaces and events
    - determine theoretical probabilities
2. Mutually exclusive and complementary events
    - learn how to recognize mutually exclusive events and complementary events
    - learn to use Venn diagrams with probability
    - learn properties of probability for complementary and mutually exclusive events
3. Tree diagrams and multistage experiments
    - find probabilities of a multistage experiment with the help of tree diagrams
    - understand the difference between dependent and independent events
    - learn to use the counting principle to check that the number of outcomes is correct
4. Geometric probability and expected value
    - learn to use an area model and geometric shapes to find probabilities
    - learn to use expected value to make wise decisions
5. Experimental probability and simulations
    - learn how to model experiments using random numbers
    - learn how to find probabilities using simulations
6. Permutations
    - learn how to use permutations for counting
    - learn about factorials and how to evaluate them
    - solve problems using permutations
7. Combinations
    - understand the difference between permutations and combinations
    - evaluate combinations
    - solve problems with combinations

8.   Organizing data
   - show how to organize statistical data using line plots and stem and leaf plots
   - use data to draw conclusions
9.   Bar graphs
   - learn to create bar graphs
   - learn to create histograms
   - learn to create double bar graphs
   - learn to analyze data
10.   Line graphs and pictographs
   - learn to analyze data
   - learn to create line graphs
   - learn to create pictographs
11.   Circle graphs
   - learn to analyze data
   - learn to create circle graphs
12.   Mean and median
   - learn to calculate mean and median measures of central tendency
   - learn to analyze data using central tendency
13.   Frequency distributions
   - learn to calculate the mean and median of a frequency distribution
   - learn to find the mode of a set of data
   - learn to analyze data using central tendency
14.   Box and whisker plots
   - study range and outliners
   - learn about quartiles and interquartile range (IQR)
   - learn to make and interpret box and whisker plots

PASS – Algebra IIA
NPC – 2006

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. Each unit teaches concepts and strategies recommended for intermediate algebra students. The first half of the course (A) addresses linear equations and functions, systems of linear equations and inequalities, quadratic functions, polynomial functions and their graphs, and power functions and inverses.

SEQUENCE OF SKILLS

UNIT 1 – Linear Equations and Functions

1. Perform operations with real numbers
2. Simplify and evaluate algebraic expressions
3. Use linear equations to solve problems
4. Rewrite equations and formulas to solve for a given variable
5. Apply formulas in problem solving
6. Analyze problems and write equations to solve them
7. Determine when a relation is a function
8. Graph and evaluate linear functions
9. Find the slope of a line given its graph or two points on the line
10. Classify pairs of lines as parallel, perpendicular, or neither
11. Understand slope as a rate of change
12. Graph an equation using slope-intercept form
13. Graph an equation that is in standard form
14. Write an equation of a line given its slope and y-intercept, the slope and a point on the line, or two points on the line
15. Use an algebraic model to make a prediction given a set of data
16. Graph piecewise functions
17. Solve absolute value equations
18. Graph absolute value functions

Algebra IIA
Scope and Sequence

UNIT 2 – System of Linear Equations and Inequalities

1. Solve linear inequalities
2. Solve absolute value inequalities in one variable
3. Graph linear inequalities
4. Write linear inequalities
5. Solve a linear system graphically
6. Determine whether a system has zero, one, or many solutions by observing the graph
7. Use a linear combination method
8. Use the substitution method
9. Determine algebraically whether a system has zero, one, or many solutions
10. Apply linear systems to realistic situations
11. Graph a system of two inequalities in two variables
12. Graph a system of three inequalities in two variables
13. Describe the difference between bounded and unbounded regions
14. Find minimum and maximum values of an objective function
15. Use linear programming to solve problems in realistic situations
16. Identify the octant in which an ordered triple is located
17. Locate an ordered triple in three-dimensional space
18. Write the ordered triple that corresponds to a given point in three-dimensional space
19. Use the linear combination method to solve a system in three variables
20. Determine whether a system has zero, one, or many solutions
21. Apply systems in three variables to realistic situations
22. State the dimensions of a given matrix and name its entries
23. Identify row, column, square, and zero matrices
24. Add and subtract matrices
25. Multiply a matrix by a scalar
26. Use matrices to represent realistic situations
27. Recognize when it is possible to multiply two matrices
28. Multiply two matrices
29. Verify the properties of matrix multiplication
30. Use matrix multiplication in realistic situations

31.   Evaluate determinants of 2 x 2 and 3 x 3 matrices
32.   Use the determinant of a matrix to find the area of a triangle on the coordinate plane
33.   Convert a system of linear equations in two variables into a matrix equation
34.   Solve a system of linear equations in two variables using a graphing calculator
35.   Apply matrices to solve systems in two variables in realistic situations using a graphing calculator
36.   Convert a system of linear equations in three or more variables into a matrix equation
37.   Solve a system of linear equations in three or more variables using a graphing calculator
38.   Apply matrices to solve systems in three or more variables in realistic situations using a graphing calculator

UNIT 3 – Quadratic Functions

1.   Recognize that the graph of a quadratic function is a parabola
2.   Identify the vertex and the axis of symmetry for a parabola by observing its graph
3.   Determine whether a quadratic function is written in standard form, vertex form, or intercept form
4.   Graph a quadratic function in standard form, vertex form, or intercept form
5.   Explore some realistic applications of quadratic functions
6.   Identify monomials, binomials, and trinomials, and recognize that these are all polynomials
7.   Factor a trinomial of the form $x^2 + bx + c$ or $ax^2 + bx + c$
8.   Recognize and factor a difference of two squares or a perfect square trinomial
9.   Check to see if the terms of a given polynomial have a common monomial factor
10.   Solve quadratic equations by factoring
11.   Solve realistic problems using quadratic equations
12.   Recognize that solutions, zeros, *x*-intercepts, and roots are all related
13.   Discover that the maximum or minimum value of a quadratic function is the average of its zeros
14.   Find the zeros of a quadratic function by factoring and writing the function in intercept form
15.   Find the zeros of a quadratic function using a graphing calculator

Algebra IIA
Scope and Sequence

16. Understand and use the properties of square roots
17. Apply the properties of square roots to solving quadratic equations
18. Verify the solutions of a quadratic equation both algebraically and by using a graphing calculator
19. Use quadratic functions to model falling objects
20. Discover that some parabolas do not cross the *x*-axis and therefore have no real solutions
21. Understand the definitions of an imaginary number, complex number, and pure imaginary number
22. Solve quadratic equations with imaginary solutions
23. Add and subtract complex numbers
24. Multiply complex numbers
25. Recognize complex conjugates and discover that the product of complex numbers is always a real number
26. Divide complex numbers
27. Explore the powers of *i* and discover a pattern
28. Simulate the process of completing the square using algebra tiles or sketches
29. Complete a perfect square trinomial and write it as the square of a binomial
30. Solve quadratic equations by completing the square
31. Write the vertex form of a quadratic function by completing the square, given the standard form
32. Find the maximum value of a quadratic function by completing the square
33. Given a graph of a quadratic function, select an equation in vertex form that represents the graph
34. Determine whether a quadratic function has two real solutions, one real solution, or two imaginary solutions by examining its graph
35. Apply the quadratic formula to solve quadratic equations with two real solutions, one real solution, or two imaginary solutions
36. Identify the discriminant of a quadratic equation and use it to determine the number and nature of the functions' solutions
37. Choose the most appropriate method for solving a quadratic equation: factoring, square roots, quadratic formula, or graphing calculator
38. Apply quadratic equations to realistic solutions
39. Review graphs of linear inequalities
40. Given a quadratic inequality and its graph, choose several points inside and outside the parabola to determine which one satisfy the inequality

41.   Match a quadratic inequality with its graph
42.   Graph a quadratic inequality
43.   Explore realistic applications of quadratic inequalities
44.   Graph a system of quadratic inequalities
45.   Solve a quadratic inequality by graphing
46.   Solve a quadratic inequality algebraically
47.   Explore some more realistic applications of quadratic inequalities
48.   Write a quadratic function in vertex form, intercept form, and standard form given information about its graph
49.   Produce a quadratic function that models a given set of data
50.   Find the best-fitting quadratic model for a set of data using a graphing calculator

UNIT 4 – Polynomial Functions and Their Graphs

1.   Evaluate and simplify expressions with exponents
2.   Apply scientific notation to solve realistic problems
3.   Identify and evaluate polynomial functions
4.   Use synthetic substitution
5.   Graph a polynomial function
6.   Determine the end behavior of a graph
7.   Add and subtract polynomials vertically and horizontally
8.   Multiply polynomials
9.   Apply special product patterns
10.   Factor polynomial expressions using the sum or difference of cubes
11.   Factor polynomials by grouping
12.   Apply factoring to solve polynomial equations
13.   Solve polynomial equations in realistic situations
14.   Divide polynomials using long division
15.   Divide polynomials using synthetic division
16.   Find rational zeros of polynomial functions
17.   Find rational zeros of polynomial functions with the assistance of a graphing calculator
18.   State the number of solutions or zeros of a polynomial function
19.   Write polynomial functions using zeros
20.   Solve realistic problems using polynomial models
21.   Graph a polynomial function using *x*-intercepts
22.   Analyze the graph of a polynomial function

Algebra IIA
Scope and Sequence

UNIT 5 – Power Functions and Inverses

1.   Identify the index of a given radical
2.   Evaluate the nth root of real numbers using radical notation
3.   Identify the number of real roots of a given real number
4.   Rewrite the nth roots using rational exponential notation
5.   Evaluate expressions with rational exponents
6.   Solve and equation using an nth root
7.   Use n^{th} roots and rational exponents to solve realistic problems
8.   Simplify expressions using the properties of rational exponents
9.   Simplify expressions using the properties of radicals
10.   Write radicals in simplest form
11.   Add and subtract roots and radicals
12.   Identify a power function
13.   Graph a power function using both paper/pencil and the graphing calculator
14.   Add and subtract two functions
15.   Multiply and divide two functions
16.   Use function operations in a realistic situation
17.   Find the composition of two functions
18.   Find the inverse of a linear function numerically and algebraically
19.   Graph a linear function and its inverse
20.   Find the inverse of a nonlinear function
21.   Graph a nonlinear function and its inverse
22.   Graph the inverse of a function using the graphing calculator
23.   Determine if two functions are inverses using the graphing calculator
24.   Graph a square root function
25.   Investigate the effect of changing a in a function of the form $y = a\sqrt{x}$ using a graphing calculator
26.   Graph a cube root function
27.   Investigate the effect of changing a in a function $y = a\sqrt[3]{x}$ using a graphing calculator
28.   Use a radical function in a realistic situation
29.   Solve a simple radical equation
30.   Solve an equation with rational exponents
31.   Solve an equation with one radical
32.   Solve an equation with two radicals
33.   Solve an equation with extraneous solution(s)

PASS – Algebra IIB
NPC – 2006

SCOPE OF COURSE

This course is divided into two semesters of study (A & B) comprised of five units each. Each unit teaches concepts and strategies recommended for intermediate algebra students. The second half of the course (B) addresses exponential and logarithmic functions, rational functions and their graphs, quadratic relations and conic sections, fundamentals of trigonometry, and probability and statistics.

SEQUENCE OF SKILLS

UNIT 1 – Exponential and Logarithmic Functions

1.   Investigate and compare the graphs of exponential functions
2.   Learn the definitions of "exponential function" and "asymptote"
3.   Graph exponential functions
4.   State the domain and range of an exponential function
5.   Differentiate between a "percent increase" and a "growth factor"
6.   Write an equation that models an exponential function
7.   Graph a model of an exponential function
8.   Make predictions involving exponential functions
9.   Understand compound interest and find the balance of an account at a given time
10.   Differentiate between an exponential growth function and an exponential decay function
11.   Graph exponential decay functions
12.   Understand the meaning of "decay factor"
13.   Use exponential decay functions in realistic situations
14.   Discover the value of e
15.   Simplify expressions involving e

16. Use a calculator to evaluate expressions involving *e*
17. Graph functions involving the number *e*
18. State the domain and range of a function involving *e*
19. Use the equations $A = Pe^{rt}$ and $A = (PI+\frac{r}{n})^{nt}$ in realistic situations
20. Examine the difference between common logarithms and natural logarithms
21. Evaluate common and natural logarithms
22. Write an exponential equation in logarithmic form
23. Write a logarithmic equation in exponential form
24. Graph a logarithmic function
25. Investigate the effect of changing the *b*, *h*, or *k* in a function of the form
    $y = log_b (x - h) + k$
26. Use logarithms in a realistic situation
27. Discover the properties of logarithms through investigations
28. Use the product, quotient, and power properties of logarithms
29. Expand or condense a logarithmic expression
30. Evaluate a logarithmic expression using the change-of-base formula
31. Solve an exponential equation by equating exponents
32. Solve an exponential equation by taking the logarithm of each side
33. Solve a logarithmic equation by rewriting it as an exponential equation
34. Solve a logarithmic equation involving logarithms with the same base
35. Solve a logarithmic equation with extraneous solutions
36. Write the equation of an exponential function whose graph passes through two given points
37. Decide whether an exponential function is a good model for a given set of data
38. Use exponential regression on a graphing calculator
39. Use power regression on a graphing calculator
40. Write the equation of a power function whose graph passes through two given points
41. Decide whether a power function is a good model for a given set of data
42. Recognize situations for which a logistic growth function is a good model
43. Use a graphing calculator to graph logistic growth functions and describe their shape
44. Evaluate a logistic growth function for a given value
45. Sketch the graph of a logistic growth function by using the asymptotes, the
    y-intercept, and the point of maximum growth
46. Solve a logistic growth equation
47. Examine the graph of a logistic growth function and describe what it reveals about the situation
    modeled by the graph
48. Use logistic regression on a graphing calculator to formulate a logistic growth model

UNIT 2 – Rational Functions and Their Graphs

1.   Classify an equation as having direct variation, inverse variation, or neither
2.   Write an inverse variation equation
3.   Write an algebraic model of inverse variation to solve problems to realistic situations
4.   Write a joint variation equation
5.   Write a combined variation equation
6.   Write an algebraic model of joint variation to solve problems in realistic situations
7.   State the domain and range of a rational function
8.   Graph a rational function
9.   Investigate the effect of changing the numerator or denominator of a rational function
10.   Write an algebraic model of a rational function to solve problems in realistic situations
11.   State the domain and range of a given function
12.   Graph a given function
13.   Find a local minimum to solve problems in realistic situations
14.   Simplify a rational expression
15.   Multiply a rational expression containing monomials
16.   Multiply a rational expression containing polynomials
17.   Multiply a rational expression and a polynomial
18.   Write a rational expression to solve problems in realistic situations
19.   Divide rational expressions
20.   Divide a rational expression by a polynomial
21.   Combine multiplication and division to simplify rational expressions
22.   Write a rational expression to solve problems in realistic situations
23.   Verify numerically the results of rational expressions using a table (graphing calculator)
24.   Verify graphically the results of rational expressions (graphing calculator)
25.   Add rational expressions with like denominators
26.   Add rational expressions with unlike denominators
27.   Use addition of rational expressions to solve problems in realistic situations
28.   Subtract rational expressions with like denominators
29.   Subtract rational expressions with unlike denominators
30,   Use subtraction of rational expressions to solve problems in realistic situations
31.   Simplify a complex fraction
32.   Write an equation involving complex fractions to solve problems in realistic situations
33.   Determine whether a given value is a solution of a rational equation
34.   Simplify and solve rational equations
35.   Simplify and solve rational equations with two solutions
36.   Verify a solution of a rational equation
37.   Identify an extraneous solution
38.   Use the graph of a rational expression to determine if a solution is extraneous
39.   Solve a rational equation by cross multiplying
40.   Solve a rational equation by using the least common denominator or by cross multiplying
41.   Prove the results are solutions to a given rational equation
42.   Identify extraneous solutions
43.   Write an algebraic model of a rational expression
44.   Use an algebraic model of a rational expression to solve problems in realistic situations

UNIT 3 – Quadratic Relations and Conic Sections

1. Use the distance formula to find the distance between two points
2. Use the distance formula to classify a triangle as scalene, isosceles, or equilateral
3. Find the midpoint of a line segment
4. Apply the midpoint formula to write an equation for the line that is a perpendicular bisector of a given line segment
5. Use the distance formula in a realistic situation
6. Graph parabola
7. Identify the focus and directrix of a parabola
8. Write an equation for a parabola that opens up or down
9. Use parabolas in realistic situations
10, Write an equation of a circle in standard form given the center and radius
11. Identify the center and radius of a circle
12. Graph an equation of a circle
13. Write an equation of a circle in standard form given a point on the circle and the center
14. Write an equation of the line that is tangent to a circle at a given point
15. Use circles in realistic situations
16. Identify the vertices, co-vertices, and foci of an ellipse
17. Graph an equation of an ellipse
18. Write an equation of an ellipse in standard form given the center, vertex, and co-vertex
19. Write an equation of an ellipse in standard form given the center, vertex, and focus
20. Use ellipses in realistic situations
21. Graph an equation of a hyperbola
22. Write an equation of a hyperbola
23. Use a hyperbola in a realistic situation
24. Write an equation of a translated parabola, circle, ellipse, or hyperbola
25. Classify a conic section as a circle, parabola, ellipse, or hyperbola, given its equation
26. Graph a conic section
27. Solve a quadratic system by substitution
28. Solve a quadratic system by linear combination
29. Solve a system of quadratic models

Algebra IIB
Scope and Sequence

UNIT 4 – Fundamentals of Trigonometry

1.   Write the ratios of trigonometric functions
2.   Evaluate trigonometric functions
3.   Use trigonometry to find the length of a side of a right triangle
4.   Use trigonometric functions to solve problems in realistic situations
5.   Draw angles in standard position
6.   Identify the quadrant in which the terminal side of an angle lies
7.   Find conterminal angles
8.   Convert between radian and degree measure
9.   Find the arc length and area of a given sector
10. Evaluate a trigonometric function, given a point on the terminal side of an angle
11. Find a reference angle for a given angle
12. Evaluate trigonometric functions using reference angles
13. Evaluate the inverse of a trigonometric function
14. Use a trigonometric inverse to find the measure of an angle in a right triangle
15. Write and solve a trigonometric equation
16. Use inverse trigonometric functions to solve problems in realistic situations
17. Write and solve an equation using the law of sines to find the measure of a side or an angle in a triangle
18. Use the sine function to find the area of a triangle
19. Apply the sine function to solve problems in realistic situations
20. Write and solve an equation using the law of cosines to find the measure of a side or an angle in a triangle
21. Use Heron's formula to find the area of a triangle
22. Apply the law of cosines to solve problems in realistic situations
23. Graph parametric equations
24. State the domain for parametric equations
25. Write parametric equations to solve projectile problems in realistic situations
26. Identify the period and amplitude of sine and cosine functions
27. Identify the intercepts, maximum, and minimum of sine and cosine functions
28. Graph sine functions
29. Graph cosine functions
30. Identify the intercepts, asymptotes, and halfway points of tangent functions

Algebra IIB
Scope and Sequence

31. Graph tangent functions
32. Graph translations of sine, cosine, and tangent functions
33. Graph reflections of sine, cosine, and tangent functions
34. Use a combination of a translation and a reflection to graph a sine, cosine, or tangent function
35. Find values of trigonometric functions using trigonometric identities
36. Simplify trigonometric expressions using trigonometric identities
37. Verify trigonometric identities
38. Solve a trigonometric equation in a given interval
39. Apply factoring to solve a trigonometric equation
40. Use the quadratic formula to solve trigonometric equations
41. Identify an extraneous solution of a trigonometric equation
42. Write a trigonometric function for a sinusoid
43. Use given data to graph a sinusoid
44. Apply sinusoidal regression to graph a model of data on a graphing calculator
45. Use the sum or difference of angles to simplify trigonometric expressions
46. Use the sum or difference of angles to evaluate trigonometric expressions
47. Use the double- and half-angle formulas to evaluate trigonometric expressions
48. Use the double- and half-angle formulas to simplify trigonometric expressions
49. Use the double- and half-angle formulas to verify a trigonometric identity
50. Use the double- and half-angle formulas to solve a trigonometric equation

Algebra IIB
Scope and Sequence

UNIT 5 – Probability and Statistics

1. Use measures of central tendency and measures of variance to describe data sets
2. Use box-and-whisker plots and histograms to represent data graphically
3. Use the graphing calculator to find measure of central tendency
4. Use the graphing calculator to draw a histogram or box and whisker plot
5. Use the fundamental counting principle to count the number of ways an event can occur
6. Use permutations to count the number of ways an event can occur
7. Use combinations to count the number of ways an event can occur
8. Solve realistic problems using combinations
9. Find the theoretical probability that an event will occur
10. Use permutations or combinations to find the probability that an even will occur
11. Find the experimental probability of an event occurring
12. Use geometric probabilities to find the probability that a length, area, or volume could occur in a given situation
13. Find the probability of mutually exclusive events
14. Find the probability of compound events
15. Use the intersection of two sets to find the probability of an event
16. Use complements to find the probability of an event
17. Use complements in realistic situations
18. Find the probability of two or three independent events
19. Compare dependent and independent events
20. Find the probability of dependent events
21. Use a tree diagram to find conditional probabilities
22. Identify probability experiments that are binomial experiments
23. Find the binomial probability of an event
24. Construct a histogram, given a binomial distribution
25. Given a normal distribution, calculate the probability that an event will occur
26. Use a normal distribution to solve a realistic situation
27. Interpret the histogram of a binomial distribution

PASS – Geometry A
NPC – 2016

SCOPE OF COURSE

Plane and solid geometry are examined visually, analytically, and logically. Constructions are made with a compass and straight edge and by folding paper. Geometric concepts beginning with basic points, lines, planes, angles, and rays are developed along with properties of parallel and perpendicular lines as a basis for the study of polygons. Triangles and triangle properties are studied. Similarities and differences between polygons are addressed using a hierarchical approach. Area, perimeter, and volume connect plane and solid geometry. Students are taught to use definitions, axioms, and postulates to justify conjectures.

The focus and goals of the geometry sequence are concept based and designed to help students think logically and analytically. Making sense of the world through geometry is a priority.

SEQUENCE OF SKILLS

UNIT 1 – Foundations

1. Introduction to geometry
2. Points, lines, and planes
3. Line segments, rays, and angles
4. Plane geometry
5. Polygons
6. Solid geometry
7. Sketches and intersections of planes with solids
8. Ominoes
9. Nets for cubes
10. Nets of other three-dimensional figures
11. Visualizing three-dimensional objects
12. Perspective
13. Sketch geometric models
14. Proofs

Geometry A
Scope and Sequence

UNIT 2 – Congruent Triangles Theorems & Constructions

1. Proofs
2. Side-angle-side theorem
3. Angle-side-angle theorem
4. Isosceles triangle theorems
5. Converse of the isosceles triangle theorem
6. Side-side-side theorem
7. Introduction to constructions
8. Triangle constructions
9. Conditions that are or are not sufficient to prove triangles congruent
10. Perpendicular bisector theorem
11. More constructions
12. Right triangle theorem I
13. Right triangle theorem II

UNIT 3 – Parallel, Perpendicular, & Angle Theorems

1. Exterior angles
2. Lines perpendicular to the same line
3. Lines perpendicular to parallel lines and non-Euclidean geometries
4. Transversals and parallel lines
5. Interior angles and corresponding angle theorems
6. The sum of the angles in a triangle
7. Equal segments theorem
8. Points on the bisector of an angle
9. Angle comparisons
10. Mid-segments
11. The median in a right triangle
12. Triangles with unequal sides
13. Triangles with unequal angles
14. Comparing triangles

Geometry A
Scope and Sequence

UNIT 4 – Perimeter, Area, and Volume

1. Perimeter
2. Area
3. Connection between perimeter and area
4. Area of parallelograms
5. Area of triangles
6. Area of trapezoids
7. Area of regular polygons
8. Surface area of prisms
9. Surface area of cylinders and spheres
10. Surface area of pyramids and cones
11. Volume of prisms
12. Volume of pyramids
13. Volume of cylinders, cones, and spheres
14. Effects of changing dimensions

UNIT 5 – Properties of Common Geometric Shapes

1. Hierarchy of polygons and how this related to their properties
2. Properties of special parallelograms
3. Sufficient conditions for a parallelogram
4. Parallelogram constructions
5. Sufficient conditions for rectangles, rhombi, and squares
6. Isosceles trapezoids
7. Constructing trapezoids
8. Trigonometric ratios
9. Right triangle applications and properties of special right triangles
10. Identities
11. Law of cosines
12. Law of sines

PASS – Geometry B
NPC – 2016

SCOPE OF COURSE

Students study and analyze circles and arcs. Tangents, secants, and chords and the angles they form are examined. Concurrent lines are found in triangles while studying altitudes, angle bisectors, and medians. Regular inscribed and circumscribed polygons and similarities and proportions are some of the other concepts addressed. Connections are drawn between geometry, art and algebra.

Logic is developed using Venn diagrams and truth tables. Motion geometry is studied using grid paper, a compass, and an image reflector.

Students are taught to think logically and to justify their conjectures using a variety of proofs. The focus and goals of the geometry sequence are concept based and designed to help students think logically and analytically. Making sense of the world through geometry is a priority.

SEQUENCE OF SKILLS

UNIT 1 – Circles

1.   Circles – related definitions and postulates
2.   Three-point circles
3.   Constructing a circle with three points
4.   Chords and arcs
5.   Diameters and other chords
6.   Intersecting circles
7.   Chords equidistant from the center
8.   Unequal minor arcs
9.   Unequal chords
10.   Tangents and radii
11.   Tangents from the same outside point
12.   Tangent circles
13.   Constructing tangents to a circle
14.   Parallel lines and circles

Geometry B
Scope and Sequence

UNIT 2 – Angles, Arcs, Concurrent Lines, Similarities and Proportions

1. Inscribed angles
2. Angles formed by a tangent and a chord
3. Angles formed by two intersecting chords
4. Angles formed by secants and tangents
5. Concurrent lines
6. Regular inscribed polygons
7. Regular circumscribed polygons
8. Ratio and proportions and parallel line proportionality
9. Proportionality and parallelism
10. Similar triangles
11. Bisectors of interior and exterior angles of triangles and proportionality
12. Right triangles and similarity
13. Circles and proportionality

UNIT 3 – Logic

1. Statements and their opposites
2. Conjunctions
3. Disjunctions
4. Truth tables – conditional statements
5. The converse of a statement
6. Biconditionals
7. The inverse of a statement
8. Contrapositives and logically equivalent statements
9. Identities
10. Tautologies, contradictions, and contingencies
11. Quantifiers
12. Valid arguments
13. Logic puzzles – single matching
14. Logic puzzles – complex matching

Geometry B
Scope and Sequence

UNIT 4 – Coordinate Geometry

1. Analytic geometry
2. Using coordinate in proofs
3. Coordinate geometry – three dimensions
4. Three-dimensional distances, prisms, and pyramids
5. The locus problem
6. Locus of points in a plane
7. Intersection of loci
8. Coordinate geometry and the locus of first-degree equations
9. Coordinate geometry and the locus of circles
10. Locus and an ellipse
11. Locus and a parabola
12. Locus and a hyperbola
13. Conic sections identified and shifted
14. Vectors

UNIT 5 – Motion Geometry

1. Transformations
2. Translations
3. Reflections
4. Rotations
5. Combinations of transformations
6. Identifying transformations
7. Size transformations
8. Symmetry
9. Tessellations with polygons
10. Escher-like tessellations
11. Fractals and chaos

PASS – Integrated Math Concepts
NPC – 2006

SCOPE OF COURSE

This unique course provides a flexible, concentrated, step-by-step series of modules designed to enhance student ability to master the various components of secondary level math skills. This course offers a variety of ways in which it may be utilized, either in whole or in part, to best meet student needs, ranging from remediation and skill building, in preparation for enrollment in one of the traditional, standard high school math classes, or as a credit-bearing course in its own right, should local school administrators elect to do so. Each of the ten modules teaches concepts and strategies that are essential for establishing a firm foundation in that particular content area. The ten course modules, which are non-sequential in nature, address the following content areas: real numbers, sets, variables and axioms, properties of real numbers, fractions, decimals, order of operations, equations, geometry, and properties of polygons.

NOTE: There is no Mentor Manual for this course as all answers to Practice Problems are included at the back of each module. There is an answer key for the tests.

SEQUENCE OF SKILLS

MODULE 1 – Real Numbers

1.   Learn to recognize and differentiate between natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers
2.   Relate the number line to the collection of real numbers

MODULE 2 – Sets

1.   Recognize a well-defined set
2.   Learn set notation and terminology
3.   Study some subsets of real numbers – prime and composite numbers

MODULE 3 – Variables and Axions

1.   Learn
   * why, when, and how to use a variable
   * the definition of an axiom
   * some specific axioms

Integrated Math Concepts
Scope and Sequence

MODULE 4 – Properties of Real Numbers

1.   Learn the characteristics and uses of the following properties of real numbers:
     - the commutative property
     - the associative property
     - the distributive property
     - identity elements
     - inverses
     - the multiplication property of zero
     - to understand why division by zero is not allowed
     - to introduce the uniqueness and existence properties

MODULE 5 – Fractions

1.   Become comfortable with fractions by
     - understanding their make-up
     - comparing their sizes
2.   Prepare for operations with algebraic fractions
     - by understanding the concepts behind the algorithms
     - by determining if solutions are reasonable

MODULE 6 – Decimals

1.   Become comfortable with decimals and decimal operations
     - by understanding the relative size of decimals
     - by understanding why the algorithms or rules dealing with decimals work
     - by testing answers for reasonableness

MODULE 7 – Order of Operations

1.   Understand why problems need to be performed in a certain order
2.   Evaluate numerical expressions using order of operations
3.   Evaluate variable expressions for specific values

Integrated Math Concepts
Scope and Sequence

MODULE 8 – Equations

1. Translate algebraic expressions and equations, as well as consecutive integer questions
2. Solve:
   - one-step equations
   - two-step equations
   - complex equations (combining like terms, use of the distributive property, variables on both sides)
   - multi-step equations
3. Translate algebraic inequalities
4. Solve and graph solutions to one and two-step inequalities

MODULE 9 – Geometry

1. Describe points, lines, and planes
2. Sketch and label points, lines, and planes
3. Use problem solving to explore points, lines, and planes
4. Define line segments, rays, and angles
5. Recognize and examine types of angles
6. Explore problems using angles properties
7. Explore line relationships

MODULE 10 – Properties of Polygons

1. Recognize and classify 2-dimensional shapes – circles, triangles, and quadrilaterals
2. Find 2-dimensional shapes in the environment
3. Explore the sum of the measures of the angles of triangles and quadrilaterals
4. Classify a polygon according to the number of its sides
5. Count diagonals in polygons
6. Find the measures of the interior and exterior angles in polygons

PASS – Color and Design
Original

SCOPE OF COURSE

This is a study of the elements and principles of design which encourages an awareness in both creating art products and in experiencing the visual qualities of nature.

SEQUENCE OF SKILLS

UNIT I – The Elements of Design: Line, Color and Value

1. Identify the function of line
2. Utilize line, color and value
3. Define line, color and value
4. Use primary and secondary colors

UNIT II – The Elements of Design: Space and Form, Space and Texture

1. Distinguish shape and form, space and texture
2. Relate facts regarding texture, form, shape and space
3. Identify shape and form, space and texture
4. List categories of shape and form, texture and space

UNIT III – The Principles of Design: Balance and Unity

1. Identify balance and unity
2. Use balance and unity

UNIT IV – The Principles of Design: Contrast and Emphasis

1. Observe contrast and unity
2. Use contrast and unity
3. List kinds of contrast
4. Recognize and name unifying elements

UNIT V – The Principles of Design: Pattern, Movement and Rhythm

1. Identify pattern, movement and rhythm
2. Use pattern, movement and rhythm
3. Distinguish between patterns

PASS – Your Health
NPC – 2014

SCOPE OF COURSE

The focus of this course is on topics and issues encountered by teens. Students will have a chance to: assess their own personal health and the health of other teens, review the health of their community, evaluate the risks they face and practice reducing those risks, build their skills to be healthy and stay healthy, consider the relationships they are part of or want to be part of, and create their own health plans to care for themselves both now and in the future.

SEQUENCE OF SKILLS

UNIT 1 – How are You Feeling?

1. Introduction to health and definitions
2. The triangle of health
3. Body systems
4. Hygiene and good manners
5. Fitness, exercise, and nutrients

UNIT 2 – How Does Your Community Feel?

1. Community and health; kinds of communities
2. A look at the Hispanic and teenage community
3. Communicable and non-communicable diseases
4. Vulnerable communities
5. Community programs that help
6. Community projects by different organizations
7. Advocating for legislation that favors health in our communities

UNIT 3 – What is Your Risk?

1. Safety and risks
2. Nutrition, physical activity, and personal attitude towards exercise
3. Health and legal consequences for teenage use of drugs, tobacco, and alcohol
4. Injuries and suicide
5. Abstinence; risks, sexual behaviors, and sexually transmitted diseases
6. Eating disorders and body image
7. Role and power of media, family, and friends
8. Personal safety and mental health
9. Preventive strategies
10. Home and family safety

UNIT 4 – How is Your Emotional I.Q?

1. Emotional health
2. Building resilience, balance, and self-control
3. Emotions and decision-making
4. Managing anger and stress
5. Conflict resolution and peace-making
6. Recognizing and preventing violence
7. Improving attitudes; self-esteem and affirmations

UNIT 5 – What is Your Plan?

1. Habits and responsibility
2. Prevention vs cure
3. Self-care and setting your health goals
4. Health and your future employment; health care benefits
5. Mental health and depression
6. Role models
7. Your life story and dreams

PASS – Creative Writing
NPC – 2003

SCOPE OF COURSE

This course covers the full spectrum of writing genres ranging from short stories, novels, plays and poetry, to the various forms of essays and non-fiction. Students will learn and apply a broad variety of techniques to generate, edit, and evaluate their own literary efforts and those of others.

SEQUENCE OF SKILLS

UNIT 1 – Fiction Part I: Short Stories

1.   The origins of language
2.   A writer's definition of story
3.   The importance of premise
4.   The story triangle
5.   Irony and suspense
6.   Character types
7.   Point of view
8.   Scene keys
9.   Characterization
10.   Dialogue
11.   Writing your story
12.   Revising, editing, and revision

UNIT 2 – Fiction Part II: The Novel and Drama

1.   Brainstorming
2.   Description: using nouns and verbs effectively
3.   Description: using adjectives and adverbs effectively
4.   Descriptions: general tips
5.   Useful punctuation for the creative writer
6.   Planning your story
7.   Writing a descriptive passage
8.   Flashback and foreshadowing
9.   Character development and characterization techniques
10.   Style techniques
11.   Staging and special format rules for playwriting
12.   Writing a scene
13.   Writing careers and goals/using a writer's rubric

Creative Writing
Scope and Sequence

UNIT 3 – Poetry

1. Types of poetry and reading tips
2. Voice and tone/tips for writing
3. Imagery and symbolism
4. Figurative language
5. The star scramble
6. Rhyme and rhyme schemes
7. Repetition, refrain, alliterations, and onomatopoeia
8. Rhyme devices and parody
9. Rhyme and meter
10. Blank verse and haiku
11. Free verse
12. The sonnet, elegy, and requiem
13. Narrative poetry and ballads

UNIT 4 – Non-fiction: Part I

1. Introduction to non-fiction
2. Persuasive writing
3. Expressive writing
4. Literary writing
5. Informative writing
6. Scientific writing
7. Exploratory writing
8. Descriptive writing
9. Observation and experience
10. Revision and editing
11. Autobiographical essay
12. Final revision and editing

UNIT 5 – Non-fiction: Part II

1. Creative reporting
2. Report analysis
3. Cause and effect analysis
4. Argument analysis
5. Opinion and claims
6. Critical review
7. Crusading evaluations
8. Position papers
9. Credibility, preliminary research and refining the subject
10. Thesis statements and presenting findings
11. Research and sources
12. The first draft
13. Revision and editing

PASS – Career Connections

SCOPE OF COURSE

This course is designed to help students find out more about their interests, talents, values, and goals in life. Once they know more about themselves and what they want to achieve, students will learn how to use that information to find a career or life path where they will be happy and fulfilled. This course will be very helpful for students in making plans for after high school, whether they plan on going on to post-secondary education or entering the workforce immediately, as it helps them learn how to start preparing for a future career.

SEQUENCE OF SKILLS

UNIT 1 – Learning About Yourself

1.   Introduction to the course
2.   Your autobiography
3.   What do you bring to the table?
4.   Personality types
5.   O*NET interest profiler and how it can help
6.   Abilities and values assessments
7.   Nontraditional careers
8.   Training and education requirements for different career paths
9.   Developing a basic career plan
10.   Decision-making
11.   Evaluating careers

UNIT 2 – Learning About Careers

1.   The changing labor market
2.   Supply and demand
3.   Free enterprise
4.   Career resources and introduction to career industries and occupations
5.   Careers in construction
6.   Careers in energy
7.   Careers in advanced manufacturing
8.   Careers in health care
9.   Careers in STEM
10.   Types of businesses and the organizational structure
11.   Be an entrepreneur
12.   Job shadowing and volunteering

Career Connections
Scope and Sequence

UNIT 3 – Applying for Jobs

1. Organizing your job search
2. Evaluating jobs based on wage
3. Using the newspaper and internet to search for jobs
4. Writing a résumé
5. Writing a cover letter
6. Job applications
7. Career portfolio and letters of reference
8. The job interview
9. Interview scenarios
10. After the interview
11. Networking
12. Job searching tips

UNIT 4 – Success on the Job

1. Organizing your job search
2. Diversity and communication
3. Conflict resolution
4. Receiving feedback
5. Teamwork
6. Decision-making on the job
7. Getting tasks accomplished on the job
8. Management and leadership styles
9. Your wages and withholdings
10. Your rights as a worker
11. Discrimination in the workplace
12. Moving on from a job

CB = college bound
WB = work bound

Students are asked to do only those lessons relevant to their focus after high school

UNIT 5 – Planning Your Future

1. Setting goals (CB/WB)
2. Planning for the future (CB/WB)
3. Paying for college (CB/WB)
4. Test taking (CB/WB)
5. How do YOU learn? (CB/WB)
6. Looking toward the unknown (CB/WB)
7. The college essay (CB)
8. Putting it all together (CB)
9. Completing the college application (CB)
10. Preparing for the college interview (CB)
11. You and your family (CB/WB)
12. Internet resources (CB/WB)
13. The college culture (CB)
14. Graduating from high school (WB)
15. Creating a budge (WB)
16. Using a monthly budget (WB)
17. Further developing your career plan (WB)

PASS COURSES

REQUIRING

SUPPLEMENTAL

BOOKS

PASS COURSES REQUIRING SUPPLEMENTAL BOOKS

Creative Writing

Roget's Thesaurus – Harper Collins Publishing

Color and Design – Art

Exploring Visual Design – Davis Publishing Inc. (copyright **2000**)

English IA

The Diary of Anne Frank – Frances Goodrich & Albert Hackett
The Old Man and the Sea – Ernest Hemingway

English IB

A Raisin in the Sun – Lorraine Hansberry
The House on Mango Street – Sandra Cisneros

English IIA

The Miracle Worker – William Gibson
The Pearl – John Steinbeck

English IIB

Antigone – by Sophocles
The Good Earth – Pearl Buck

English IIIA

Our Town – by Thornton Wilder
To Kill a Mockingbird – by Harper Lee

English IIIB

Death of a Salesman – by Arthur Miller
The Adventures of Huckleberry Finn – by Mark Twain

English IVA

Macbeth – William Shakespeare
Animal Farm – George Orwell

English IVB

Pygmalion – George Bernard Shaw
Lord of the Flies – William Golding

Ethnic Studies

Music Tape

Learning English Through Literature

Seedfolks – Harper Trophy

Study Skills

CD – The Dust Bowl

Themes in Literature A

Handbook of Letter Writing

Themes in Literature B

A Bintel Brief – Schocken Books
Farewell to Manzanar – Bantam Books
The Light in the Forest – Bantam Books

PASS
ORDER
FORM

Updated Price List
Effective 7-1-18

CESA 8
223 West Park Street
Gillett, WI 54124

PASS Price List and Order Form

Course Title	Student	Teacher	Student	Teacher
*Study Skills	$75.00	$35.00	_____	_____
*Learning English Through Literature	80.00	35.00	_____	_____
*English IA	85.00	35.00	_____	_____
*English IB	80.00	35.00	_____	_____
*English IIA	80.00	35.00	_____	_____
*English IIB	80.00	35.00	_____	_____
*English IIIA	90.00	35.00	_____	_____
*English IIIB	80.00	35.00	_____	_____
*English IVA	80.00	35.00	_____	_____
*English IVB	82.00	35.00	_____	_____
Themes in Literature A	75.00	35.00	_____	_____
Themes in Literature B	90.00	35.00	_____	_____
General Science A	75.00	35.00	_____	_____
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*Biology A	75.00	35.00	_____	_____
*Biology B	75.00	35.00	_____	_____
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*U.S. History B	75.00	35.00	_____	_____
*+U. S. Government	70.00	35.00	_____	_____
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*World Geography B	70.00	35.00	_____	_____
Consumer Education	70.00	35.00	_____	_____
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*World History B	75.00	35.00	_____	_____
*Economics	70.00	35.00	_____	_____
Consumer Math	70.00	35.00	_____	_____
*+Personal Finance	70.00	35.00	_____	_____
General Math A	70.00	35.00	_____	_____
General Math B	70.00	35.00	_____	_____
Pre-Algebra/Calculator Math	70.00	35.00	_____	_____

Price List

Course Title	Student	Teacher	Student	Teacher
*Economics	70.00	35.00	_____	_____
Consumer Math	70.00	35.00	_____	_____
*+Personal Finance	70.00	35.00	_____	_____
General Math A	70.00	35.00	_____	_____
General Math B	70.00	35.00	_____	_____
Pre-Algebra/Calculator Math	70.00	35.00	_____	_____
*+Algebra IA	85.00	35.00	_____	_____
*+Algebra IB	80.00	35.00	_____	_____
*Algebra IIA	85.00	35.00	_____	_____
*Algebra IIB	90.00	35.00	_____	_____
*Geometry A	90.00	35.00	_____	_____
*Geometry B	90.00	35.00	_____	_____
*+Integrating Math Concepts	70.00**	10.00***	_____	_____
Color and Design	100.00	35.00	_____	_____
*+Your Health	80.00	35.00	_____	_____
*Creative Writing	80.00	35.00	_____	_____
*+Career Connections	70.00	35.00	_____	_____

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