ART

An Exploration of Early American Art

I. ART FUNDAMENTALS 20%

A. Introduction to Art History
   1. Methods and Inquiries of Art History
      a. The Nature of Art Historical Inquiry
      b. Sources, Documents, and the Work of Art Historians
      c. The Development of Art History
   2. Brief Overview of Art in the Western World
      a. Ancient Civilizations
      b. Greek and Roman Art
      c. Early Christian and Medieval Art
      d. The Renaissance and Baroque
      e. Rococo, Neoclassicism, and Romanticism
      f. Realism and Impressionism
      g. Post-Impressionism and Other Late Nineteenth-Century Developments
      h. The Emergence of Modernism
      i. Abstraction
      j. Pop Art, Minimalism, and Photo Realism
      k. Earthworks, Installations, and Performance
   3. Brief Overview of Non-Western Art
      a. Asian Art
      b. African and Oceanic Art
      c. Islamic Art
      d. The Americas

B. Elements of Art
   1. Formal Qualities of Art
      a. Line
      b. Shape and Form
      c. Perspective
      d. Color
      e. Texture
      f. Composition
   2. Processes and Techniques
      a. Drawing
      b. Printmaking
      c. Painting
      d. Photography
      e. Sculpture
      f. Mixed Media
      g. Performance
      h. Craft and Folk Art
      i. Architecture
II: COLONIAL PORTRAITURE  22%
A. History of Early American Portraiture
B. SELECTED WORK: JOHN SINGLETON COPLEYS, PAUL REVERE, 1768
   1. Paul Revere: Patriot, Printer, and Craftsman
   2. John Singleton Copley: Biography
   3. Subject Matter and Visual Analysis
C. SELECTED WORK: AFTER (?) SCIPIO MOORHEAD, PUBLISHED BY ARCHIBALD BELL,
   PORTRAIT OF PHILLIS WHEATLEY, 1773
   1. Phillis Wheatley: Biography
   2. Subject Matter and Visual Analysis
   3. Scipio Moorhead and the Question of the Image’s Authorship
D. SELECTED WORK: PRUDENCE PUNDERSOS, THE FIRST, SECOND AND LAST SCENE OF
   MORTALITY, C. 1776–83
   1. Embroidery and Needlework as Creative Expression
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
E. SELECTED WORK: ROBERT EDGE PINE, PATIENCE LOVELL WRIGHT, C. 1782
   1. Patience Wright: Biography
   2. Subject Matter and Visual Analysis
   3. Wright’s Intelligence Work during the Revolutionary War
F. SELECTED WORK: GILBERT STUART, GEORGE WASHINGTON (LANSOWNE PORTRAIT), 1796
   1. Gilbert Stuart: Biography
   2. Subject Matter and Visual Analysis
   3. Presidential Portraiture

III. EARLY HISTORY PAINTING  22%
A. The Academy and the Development of History Painting
B. SELECTED WORK: UNKNOWN, SEGESSER II, C. 1720
   1. History of the Segesser hides
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
C. SELECTED WORK: BENJAMIN WEST, PENN’S TREATY WITH THE INDIANS, 1771–72
   1. Benjamin West: Biography
   2. Subject Matter and Visual Analysis
   3. Representing Native Americans in Eighteenth-Century Painting
D. SELECTED WORK: AFTER HENRY PELHAM, ENGRAVED, PRINTED AND SOLD BY PAUL
   REVERE, THE BOSTON MASSACRE, 1770
   1. Prints and the American Revolution
   2. Subject Matter and Visual Analysis
   3. The Controversy over Attribution
E. SELECTED WORK: EMANUEL LEUTZ, WASHINGTON CROSSING THE DELAWARE, 1851
   1. Emanuel Leutze: Biography
   2. Subject Matter and Visual Analysis
   3. An American Icon and Its Influence
F. SELECTED WORK: HARRIET POWERS, PICTORIAL QUILT, 1895–98
1. The History of African-American Quilting Traditions
2. Harriet Powers: Biography
3. Subject Matter and Visual Analysis

IV. NEOCLASSICAL ART AND ARCHITECTURE 18%
A. The Rise of Neoclassicism in the United States
B. SELECTED WORK: THOMAS JEFFERSON, MONTICELLO, 1769–1809, CHARLOTTESVILLE, VIRGINIA
   1. Jefferson as Architect
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
C. SELECTED WORK: WILLIAM THORNTON, CHARLES BULFINCH, AND BENJAMIN HENRY LATROBE, UNITED STATES CAPITOL, BEGUN IN 1793, WASHINGTON, D.C.
   1. Design Competition
   2. Construction History
   3. Iconographic Analysis
D. SELECTED WORK: HORATIO GREENOUGH, GEORGE WASHINGTON, 1840
   1. Horatio Greenough: Biography
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
E. SELECTED WORK: EDMONIA LEWIS, FOREVER FREE, 1867
   1. American Women Sculptors in Rome
   2. Edmonia Lewis: Biography
   3. Visual and Contextual Analysis

V. NATURE AND NATION 18%
A. Engaging with Nature in Early America
B. SELECTED WORK: PUEBLO BONITO, CHACO CANYON, NEW MEXICO, 850–1150 CE
   1. Ancestral Pueblo Art and Architecture
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
C. SELECTED WORK: CHARLES WILLSON PEALE, EXHUMATION OF THE MASTODON, C. 1807
   1. Charles Willson Peale: Biography
   2. Subject Matter and Visual Analysis
   3. Contextual Analysis
D. SELECTED WORK: ROBERT S. DUNCANSON, VIEW OF CINCINNATI, OHIO FROM COVINGTON, KENTUCKY, C. 1850
   1. Robert S. Duncanson: Biography
   2. Subject Matter and Visual Analysis
   3. Duncanson and the American Landscape Tradition
E. SELECTED WORK: GAANAX.ÁDI/RAVEN CREST POLE, REPRODUCTION CARVED IN 1983, BASED ON A LATE NINETEENTH-CENTURY ORIGINAL, SITKA NATIONAL HISTORIC PARK
   1. Totem Poles of Alaska and the Pacific Northwest
   2. Historical Context
   3. Subject Matter and Visual Analysis
I. FUNDAMENTAL ECONOMIC CONCEPTS 10%
   A. Basic Assumptions of Economics
      1. Scarcity
      2. Trade-offs
      3. Opportunity Cost
      4. Rationality
      5. Gains from Trade
   B. Models and Economic Theory
   C. Positive and Normative Economics
   D. Efficiency as a Goal
   E. Microeconomics and Macroeconomics

II. MICROECONOMICS 40%
   A. Perfectly Competitive Markets
      1. Markets
      2. Demand
      3. Shifts in the Demand Curve
         a. Income
         b. The Prices of Related Goods
         c. Tastes
         d. Expectations
         e. Number of Buyers
      4. Supply
      5. Shifts in the Supply Curve
         a. Input Prices
         b. Technology
         c. Expectations
         d. Number of Sellers
      6. Equilibrium
      7. The Characteristics of Competitive Market Equilibrium
   B. Applications of the Competitive Market Model
      1. Changes in Market Equilibrium
      2. Elasticity
      3. Using Elasticity
   C. Evaluating Government Policy: The Impact of Price Controls and Taxes
      1. Price Controls
      2. Taxes
   D. International Trade
      1. An Isolated Economy
      2. Adding the Opportunity to Trade
3. Comparative Advantage and the Gains from Trade
4. The Political Economy of Trade
E. The Profit Motive and the Behavior of Firms
   1. Economic Profits and Accounting Profits
   2. Finding the Firm’s Supply Curve
   3. Entry, Exit, and the Market Supply Curve
F. Imperfect Competition
   1. Monopoly
   2. Monopoly Supply
   3. Welfare Consequences of Monopoly
   4. Dealing with Monopolies
   5. Price Discrimination
   6. Oligopoly
   7. Monopolistic Competition
G. Creative Destruction: The Profit Motive and the Sources of Economic Change
H. Market Failures
   1. Externalities
   2. The Effect of Externalities on Resource Allocation
   3. Private Responses to Externalities
   4. Government Regulation of Externalities
   5. Property Rights
   6. The Effects of Private Ownership
   7. Public and Private Goods
      a. Private Goods
      b. Common Resources
      c. Collective Goods
      d. Public Goods
I. Institutions, Organizations, and Government
   1. Pork Barrel Politics
   2. Rent-Seeking
   3. What Is the Proper Role for Government?

III. MACROECONOMICS 30%
A. Macroeconomic Issues
   1. Economic Growth and Living Standards
   2. Recessions and Expansions
   3. Unemployment
   4. Inflation
   5. International Trade
B. Macroeconomic Measurement
   1. Measuring Total Output: Gross Domestic Product
      a. Market Value
      b. Final Goods and Services
      c. Within a Country
      d. During a Specified Period
2. Understanding What GDP Measures
3. Other Ways to Measure GDP: Expenditures Equal Production
4. Yet Another Way to Measure GDP: Income Equals Production Equals Expenditures
5. Real GDP
6. Measuring Inflation
7. Unemployment
   a. Frictional Unemployment
   b. Structural Unemployment
   c. Cyclical Unemployment
C. Economic Growth, Productivity, and Living Standards
   1. The Circular Flow Model of the Economy
   2. What Determines How Much an Economy Produces?
D. Savings, Investment, and the Financial System
   1. Financial Markets
      a. The Bond Market
      b. The Stock Market
   2. Financial Intermediaries
      a. Banks
      b. Mutual Funds
   3. Saving and Investment in Aggregate
   4. International Capital Flows in an Open Economy
   5. How Financial Markets Coordinate Saving and Investment Decisions
E. Money and Prices in the Long Run
   1. What Is Money?
   2. Measuring Money
   3. The Federal Reserve System, Banks, and the Supply of Money
   4. Bank Runs
   5. Money and Inflation in the Long Run
   6. Why Worry about Inflation?
F. Short-Run Economic Fluctuations
   1. Characteristics of Short-Run Fluctuations
   2. Potential Output, the Output Gap, and the Natural Rate of Unemployment
   3. Explaining Short-Run Fluctuations in Output
   4. The Aggregate Demand Curve
      a. Wealth Effects
      b. Interest Rate Effects
      c. Foreign Exchange Effects
   5. The Aggregate Supply Curve
   6. The Keynesian Model of Short-Run Fluctuations
   7. Inflation in the Keynesian Model
   8. Using Fiscal and Monetary Policy to Stabilize the Economy

IV. COLONIAL AND EARLY AMERICAN ECONOMIC HISTORY 20%
A. The Big Picture: North America as Part of the Larger British Empire
   1. Mercantilism as an Organizing Framework
2. The Navigation Acts: An Important Element of British Mercantilist Policy in North America
3. Income and Its Distribution in the Late Colonial Period
   a. Colonial Incomes
   b. Growth-Supporting Institutions and Technology
   c. Indentured Servitude and Slavery
   d. Regional Resource Differences
   e. Income Distribution
B. The Economics of the American Revolution
1. 1763, A Key Turning Point
2. British Revenue-Generating Policies and the Boston Tea Party
3. The Revolutionary War
4. Shay’s Rebellion
   a. Early National Policies
5. The Articles of Confederation
6. The Constitution
7. Building the Financial System
   a. Payment of the National Debt
   b. The First Bank of the United States (FBUS)
   c. Money in the New Nation
8. Land Distribution, Transportation, and Market Expansion
   a. Land Distribution Policies
   b. Turnpikes
   c. Canal Construction
   d. Steamboats
   e. Railroads
   f. The Growth of Manufacturing
LITERATURE

An Introduction to Early American Literature

I. CRITICAL READING 15%
   A. Purpose and Main Idea
   B. Structure
   C. Restatement of Information
   D. Genres and their Characteristics
   E. Language and Tone
   F. Grammar and Syntax
   G. Vocabulary in Context
   H. Diction

II. HISTORICAL OVERVIEW OF THE LITERATURE OF THE AMERICAN REVOLUTION AND NEW NATION 15%
   A. What is Early American Literature?
   B. American Exceptionalism
   C. American Indians
   D. Expansion and Unity
   E. Federalist Poetics
   F. Age of Revolutions
      1. Print Revolution
      2. French Revolution
      3. Haitian Revolution

III. CHARLES BROCKDEN BROWN, WIELAND; OR, THE TRANSFORMATION, AN AMERICAN TALE (1798)30%
   A. Biography of Brown
      1. Early Life and American Quakers
      3. Novelistic Career (1798–1800)
      4. Magazine Editor and Political Pamphlets (1800–10)
      5. Death and Reputation in the Nineteenth and Twentieth Centuries
   B. The Literary History of the Novel
      1. Origins of the Novel
      2. Early Novelistic Subgenres
      3. Anxiety about Novels
      4. The Seduction Novel as Political Allegory
   C. Characters in Wieland
      1. Clara Wieland
      2. Theodore Wieland
      3. Father Wieland
      4. Catherine Wieland
      5. Henry Pleyel
6. Frances Carwin  
7. Louisa Conway and Other Minor Characters  

D. Settings of *Wieland*  
1. Rural Philadelphia: Mettingen  
2. Urban Philadelphia  

E. Plot Summary  

F. Novelistic Forms of *Wieland*  
1. Epistolary Novel  
2. Seduction Novel  
3. Gothic Novel  

G. Themes  
1. Calvinism to the Enlightenment: Faith versus Reason  
2. Partisan Politics in the 1790s: Anarchy versus Tyranny  
3. Communication and Representation  

III. SHORTER SELECTIONS  40%  

A. **Selected Work:** J. Hector St. John De Crèvecoeur, *Letters from an American Farmer*, Excerpts from Letter III and Letter IX (1782)  
   1. Biography  
   2. American Exceptionalism  
   3. Slavery in America  

B. Indian Oration  
   1. **Selected Work:** Canassatego, *Speech at Lancaster* (1744)  
      a. Biography and Haudenosaunee Politics  
      b. Political Significance  
   2. **Selected Work:** Chief Logan’s Speech (1787)  
      a. Biography and Textual History  
      b. Myth of the Noble Savage  

C. **Selected Works:** Phillis Wheatley, “On Being Brought from Africa to America” (1773) and “To the Right Honorable William, Earl of Dartmouth” (1773)  
   1. Biography  
   2. Wheatley’s Anti-Slavery Argument  

D. **Selected Works:** Philip Freneau, “On the Emigration to America” (1785) and “The Indian Burying Ground” (1788)  
   1. Biography and Textual History  
   2. American Romanticism  

E. Familiar Letters  
   1. **Selected Work:** Letter from Alexander Hamilton to Elizabeth Schuyler, August 1780  
   2. **Selected Work:** Letter from Abigail Adams to John Adams, March 31, 1776  

F. **Selected Work:** Judith Sargent Murray, Excerpt from “On the Equality of the Sexes” (1790)  
   1. Biography and Textual History  
   2. Women’s Rights in the Early Nation  

G. **Selected Works:** Alexander Hamilton, Federalist No. 1 and James Madison,
FEDERALIST NO. 10 (1787)
1. Textual History
2. Federalist No. 1
3. Federalist No. 10

H. SELECTED WORKS: WASHINGTON IRVING, “THE AUTHOR’S ACCOUNT OF HIMSELF” AND “RIP VAN WINKLE” (1819)
   1. Biography
   2. American Resources

I. SELECTED WORK: DAVID WALKER, EXCERPTS FROM APPEAL IN FOUR ARTICLES (1829)
   1. Biography and Textual History
   2. Secular and Sacred Jeremiad

J. SELECTED WORK: WILLIAM APESS, “AN INDIAN’S LOOKING-GLASS FOR THE WHITE MAN” (1833)
   1. Biography and Textual History
   2. Secular and Sacred Jeremiad
MATHEMATICS

Algebra and Trigonometry

I. ALGEBRA 60%

A. Basic Properties of the Real Numbers

B. Linear and Quadratic Equations
   1. Linear Equations
   2. Quadratic Equations
      a. Equations of the form \( x^2 - p = 0 \)
      b. Equations of the form \( k(x + r)^2 - p = 0 \), where \( k \neq 0 \)
      c. Equations of the form \( ax^2 + bx + c = 0 \), where \( a \neq 0 \)
      d. The discriminant

C. Polynomial Equations
   1. Equivalent Polynomials
   2. Addition and Subtraction of Polynomials
   3. Multiplication of Polynomials
   4. Division of Polynomials
   5. Division of Polynomials and Solving Polynomial Equations
   6. Proof of the Rational Root Theorem
   7. Proof of the Factor Theorem
   8. Complex Numbers
      a. Addition of complex numbers
      b. Multiplication of complex numbers
      c. Division of complex numbers

D. Functions
   1. Preliminaries
   2. Definition of a Function
   3. Many-to-One Functions versus One-to-One Functions
   4. Inverse Functions

E. Graphing
   1. The Graph of a Linear Function \( y = ax + b \)
   2. The Graph of a Quadratic Function \( y = ax^2 + bx + c \)
      a. The case \( y = x^2 \)
   3. The Graphs of Polynomials
   4. The Graph of the Exponential Function \( y = a^x \)
   5. The Graph of the Logarithmic Function \( y = \log_a x \)
   6. Transformations of Graphs
      a. Graphing \( y = f(x + c) \) from the graph of \( y = f(x) \)
b. Graphing \( y = f(x) + C \) from the graph of \( y = f(x) \)
c. Graphing \( y = f(ax) \) from the graph of \( y = f(x) \)
d. Graphing \( y = Af(x) \) from the graph of \( y = f(x) \)

F. Non-polynomial Equations
1. Rational Equations
   a. Solving rational equations
   b. Graphs of rational functions
2. Exponential Equations
   a. Basic properties
   b. Solving exponential equations
3. Logarithmic Equations
   a. Basic properties
   b. Solving logarithmic equations
4. Radical Equations
   a. Method 1
   b. Method 2

G. Inequalities
1. Linear Inequalities
2. Quadratic Inequalities
   a. Inequalities of the form \( ax^2 + bx + c > 0 \) and \( a > 0 \)
   b. Inequalities of the form \( ax^2 + bx + c < 0 \) and \( a > 0 \)

H. Coordinate Geometry
1. The Pythagorean Theorem
2. Points
3. Lines
   a. Slope form
   b. Point-point form
   c. Slope-point form
   d. Mutual positions of lines
4. Circles
5. Solving Geometry Problems Using Coordinate Geometry

II. TRIGONOMETRY

A. Trigonometric Functions
1. The Sine Function for Acute Angles
2. The Tangent Function for Acute Angles
3. The Cosine and Cotangent Functions for Acute Angles
4. Relations among Trigonometric Functions
5. Trigonometric Functions of Special Angles
6. Trigonometric Functions of Angles of Any Measure
   a. Definitions and properties
b. Negative angles
7. Trigonometric Identities
   a. Sum and difference identities
   b. Double-angle identities
   c. Half-angle identities
   d. Sum-to-product identities
   e. Product-to-sum identities
8. Graphs of Trigonometric Functions
9. Inverse Trigonometric Functions
10. Trigonometric Equations
11. The Law of Sines and Cosines
12. Radians
MUSIC

An Introduction to Early American Music

I. BASIC ELEMENTS OF MUSIC THEORY 20%

A. Sound and Music
   1. Definitions
      a. Music Is Sound Organized in Time
      b. Music of the Western World
   2. Physics of Musical Sound
      a. Sound Waves
      b. Instruments as Sound Sources

B. Pitch, Rhythm, and Harmony
   1. Pitch
      a. Pitch, Frequency, and Octaves
      b. Pitch on a Keyboard
      c. Pitch on a Staff
      d. Pitch on the Grand Staff
      e. Overtones and Partialis
      f. Equal Temperament: Generating the Twelve Pitches by Dividing the Octave
      g. Scales: Leading Tone, Tonic, Dominant
      h. Intervals
      i. Intervals of the Major Scale
      j. Minor Scales and Blues Inflections
      k. Melody Defined; Example, Using Scale Degrees
      l. Contour
      m. Range and Tessitura
   2. Rhythm
      a. Beat
      b. Tempo
      c. Meter: Duple, Triple, and Quadruple
      d. Rhythmic Notation
      e. Time Signature
      f. Simple and Compound Subdivision
      g. Mixed and Irregular Meter
      h. Syncopation
      i. Polyrhythm
   3. Harmony
      a. Common-Practice Tonality
      b. Chords
         i. Triads
         ii. Inversions
      c. Keys
         i. Keys and Key Signatures
ii. Hierarchy of Keys: Circle of Fifths
d. Harmonic Progression
   i. Dissonance and Consonance
   ii. Diatonic Triads
   iii. The Dominant Triad’s Special Role
   iv. Bass Lines
   v. The Dominant Seventh Chord
   vi. Example: A Harmonized Melody
e. Other Diatonic Chords
f. Chromatic Harmonies and Modulation
g. Beyond Common Practice
C. Other Aspects of Musical Sound
   1. Texture, Counterpoint, Instrumentation, More Timbre
   2. Dynamics, Articulation, Ornamentation
D. Form in Music
   1. Perceiving Musical Form
   2. Elements of Form
      a. Motive
      b. Phrase
      c. Cadence
      d. Theme
      e. Introduction and Coda
   3. Common Forms
      a. Repetition
      b. Variation
         i. Theme and Variations
         ii. 12-Bar Blues
         iii. Improvisation
      c. Contrast
         i. Ternary and Rondo Forms
         ii. 32-Bar Form
         iii. Verse-Chorus Form
      d. Development
         i. Fugue
         ii. Sonata Form
E. Which Is the Real Music? Scores, Recordings, and Performance

II. WORSHIP AND WORK 27%
A. Music and Faith
   1. Leaving (Most of) the Old World Behind
   2. Sing, Sing a Psalm
      a. Psalters from Overseas
      b. A Home-Grown Psalter
      c. Confused and Disorderly Noises
   3. By Note, Not by Rote
      a. The Singing School Solution
b. Tunebooks for Teachers
c. Resistance to Regular Singing and the Continuance of the Usual Way

4. Onward to Polyphony
   a. Made in America?
   b. Daniel Read’s Biography
   c. LISTENING COMPANION 1: “SHERBURN” (1785) – DANIEL READ

B. Other Religious Paths
   1. The Musical Moravians
   2. Esoteric Ephrata
      a. The Ephrata Codex
      b. Early Equality?
      c. LISTENING COMPANION 2: “DIE SANFTE BEWEGUNG, DIE LIEBLICHE KRAFFT” (1746) – SISTER FÖBEN (CHRISTIANNA LASSLE)

C. Foolish Songs and Ballads
   1. The Broadside Tradition
   2. Singing the News
      a. The Death of Timothy Myrick as Source Material for “Springfield Mountain”
      b. LISTENING COMPANION 3: “SPRINGFIELD MOUNTAIN” (AFTER 1761) – ANONYMOUS

D. Music in the Military
   1. Music’s Role in the Military
   2. From the Battlefield to the Ballroom
   3. Tunes for Troops
      a. Giles Gibbs, Jr.
      b. LISTENING COMPANION 4: “LADY HOPE’S REEL” (1757) – ANONYMOUS

E. African-American Musicians
   1. Land of the Free?
   2. Music among the Enslaved
      a. Music in the Fields
      b. LISTENING COMPANION 5: “WOH HOO” (TRADITIONAL) – ANONYMOUS

III. PERFORMING FOR PLEASURE 27%

A. Native Americans and the Natural World
   1. First Nations Foundations
   2. A Democratic Role Model
   3. Music in the Eastern Woodlands
      a. The Longhouse “Sings”
      b. The Community-Building Social Dance
      c. The Women’s Shuffle Dance
      d. Viewing the Past Through the Present
      e. LISTENING COMPANION 6: “HO WAY HEY YO” (C. 1993) – BETSY BUCK

B. Music for Music’s Sake
   1. Francis Hopkinson’s Biography
   2. LISTENING COMPANION 7: “MY DAYS HAVE BEEN SO WONDROUS FREE” (1759) – FRANCIS HOPKINSON

C. More Music for Music’s Sake
1. Concerts in the Colonies
2. More From the Moravians
   a. Patriotic Non-Combatants
   b. The First Fourth of July
   c. Home-Grown Chamber Music
   d. LISTENING COMPANION 8: QUINTET NO. 6 IN E-FLAT MAJOR, MVT. 3 “PRESTISSIMO” (1789) – JOHANN FRIEDRICH PETER

D. Sociability in the English Tradition
1. The Anacreontic Society
2. Glee Clubs in the New Nation
3. The Anacreontic Song Finds a New Home
   a. Enter Francis Scott Key
   b. LISTENING COMPANION 9: “THE ANACREONTIC SONG (TO ANACREON IN HEAVEN)” (EXCERPTS) (1771) – JOHN STAFFORD SMITH

E. Theater (and Its Risks)
1. The Birth of Ballad Opera
2. Theater Comes to the Colonies
3. Theater on “Pause”
4. What Does “First” Mean?
5. Hazards in the Orchestra Pit
7. Other Roles for “Alknomook”

IV. MUSIC AND PATRIOTISM 26%
A. John Dickinson, "Heart of Oak" and "The Liberty Song"
   1. LISTENING COMPANION 11: “THE LIBERTY SONG” (BASED ON “HEART OF OAK”) (1759/1768) – WILLIAM BOYCE

B. Shaking Up the Singing Schools
1. William Billings’s Biography
   a. The New England Psalm-Singer
   b. The Singing Master’s Assistant
   c. LISTENING COMPANION 12: “CHESTER” (1770/1778) – WILLIAM BILLINGS

2. Patriotic Music in the Colonies
   a. Billings’s “Jargon”
   b. Billings and the Bible
   c. LISTENING COMPANION 13: “LAMENTATION OVER BOSTON” (1778) – WILLIAM BILLINGS

C. The Struggle for Unity
1. The Theatrical Battlefield
2. LISTENING COMPANION 14: THE FEDERAL OVERTURE (KEYBOARD ARRANGEMENT; EXCERPTS) (1794) – BENJAMIN CARR
I. THE STRUCTURE OF MATTER 40%
   A. Atomic Theory and Atomic Structure
      1. The Determination of Atomic Masses
      2. Atomic Number, Mass Number, and Isotopes
         a. The Use of Symbols for Isotopes
         b. Standard for Atomic Mass $^{12}_{6}\text{C} = 12.00000$
         c. Properties and Importance of Commonly Recognized Isotopes—$^2\text{H}, ^{14}\text{C}, ^{60}\text{Co}$
         d. Calculating Weighted Averages
      4. The Wave and Particle Nature of the Electron and Photon
      5. Electron Orbitals
      6. Periodic Relationships—Definitions, General Trends, and Causes
      7. Trends Across a Period of the Periodic Table
      8. Trends Down a Group of the Periodic Table
      9. Electronegativity
   B. Chemical Bonding and Intermolecular Forces
      1. Binding Forces
         a. Intramolecular Forces
      2. Polarity of Bonds
         a. Intermolecular Forces
      3. The Importance of Hydrogen Bonding in Living Systems
      4. The Effect of Bond Types on the Structures of Solid Compounds
         a. Ionic Lattice
         b. Covalent Network or Molecular Solid
      5. How Intermolecular Forces Determine States of Matter (Solid, Liquid, Gas) at Room Temperature
   C. Molecular Models
      1. Lewis Structures for Atoms and Covalent and Ionic Compounds
      2. Valence Bond Concept
      3. Hybridization of Atomic Orbitals as an Explanation for Molecular Shapes
      4. The Formation of Molecular Orbitals
      5. Oxidation States
      6. The VSEPR Model
      7. The Resonance Concept Model
      8. The Geometry of Molecules and Ions
      9. Dipole Moments of Molecules
      10. The Relationship between Molecular Properties and Molecular Structure
   D. Nuclear Chemistry
      1. Nuclear Equations, Half-lives, and Radioactivity
         a. Nomenclature for Isotopes (Nuclides)
         b. Decay Equations and Predicting the Products of Decays
c. Alpha Bombardment Reactions
2. Fission and Fusion Reactions

E. Chemistry in the Age of Revolutions: Section I Topics
1. The Scientific Revolution
2. John Dalton’s Law of Partial Pressures and Atomic Theory
3. Henry Cavendish and the Discovery of Hydrogen

II. STATES OF MATTER 25%
A. Gases
1. Laws of Ideal Gases
2. Partial Pressures and the Correction of Gas Volumes Collected over Water
3. Kinetic-Molecular Theory (KMT)
4. The Relation of Particle Speed to Mass, Collision Frequency, Volume, and Pressure
5. Avogadro’s Law
6. Volume and Mass of One Mole of Ideal Gas at Standard Temperature and Pressure (STP)
7. The Dependence of Kinetic Energy of Molecules on Temperature
8. The Ideal Gas Equation
9. The Behavior of Gases under Extreme Conditions
10. The Dependence of Relative Rates of Diffusion and Effusion on Molecular Mass and Temperature
B. Liquids
C. Solids
D. Phase Diagrams of One-Component Systems
1. Water and Its Phases and Phase Transitions
2. Carbon Dioxide
E. Solutions
1. Types of Solutions and Factors Affecting Solubility
2. Aqueous Solutions
3. Organic (Nonpolar) Solvents
4. Methods of Expressing Concentration
   a. Percent Composition
   b. Molarity
   c. Molality
5. Raoult’s Law and Colligative Properties
F. Chemistry in the Age of Revolutions: Section II Topics
1. Jacques Charles and Charles’ Law
2. Amedeo Avogadro and Avogadro’s Law
4. Joseph Black and the Discovery of Carbon Dioxide

III. REACTIONS 35%
A. Types of Reactions
B. Acid-Base Reactions
1. Arrhenius Acids and Bases
2. Brønsted-Lowry Acids and Bases
3. The Acidity Scale: pH
4. Titration—Mixing Acidic and Basic Solutions to Measure the Concentration of an Unknown
5. Acid-Base Reactions and Salts
C. Precipitation Reactions
1. Precipitates
D. Oxidation-Reduction Reactions
1. Oxidation Numbers
2. The Role of the Electron in Oxidation-Reduction
E. Electrochemistry
1. Cell Potentials
2. The Nernst Equation
F. Stoichiometry
1. Ionic and Molecular Species Present in Chemical Systems: Net Ionic Equations
2. Balancing Redox Equations
3. Mass and Volume Relations
G. Equilibrium
1. Chemical Equilibrium
2. Equilibrium Constants
3. Quantitative Treatment of Equilibrium
4. Activity
5. Equilibrium Constants for Gaseous Reactions: Kp, Kc
6. Equilibrium Constants for Reactions in Solution
   a. Constants for Acids and Bases: pK; pH
7. Solubility Product Constants and their Application to Precipitation and the Dissolution of Slightly Soluble Compounds
H. Kinetics
1. The Concept of Rate of Reaction
2. The Effect of Temperature, Concentration, and Surface Area Changes on Reaction Rates
I. Thermodynamics
1. State Functions
2. The First Law of Thermodynamics
3. Hess’s Law
4. The Second Law of Thermodynamics
J. Relationship of Change in Free Energy to Equilibrium Constants and Electrode Potentials
K. Chemistry in the Age of Revolutions: Section III Topics
1. Antoine Lavoisier, the Conservation of Mass, and the Birth of Modern Chemistry
2. Luigi Brugnatelli and the Development of Electroplating
SOCIAL SCIENCE

The American Revolution and the Founding of the Nation

I. REVOLUTIONARY ORIGINS, 1763–76 20%
   A. Native and European Societies in North America
      1. Native American Society before European Colonization
         a. Algonquian Peoples
         b. The Iroquois Confederacy
      2. British and French Colonization of North America
      3. Colonial Relationships with Native Peoples
         a. French–Native Relations
         b. British–Native Relations
      4. British Colonial Identity
   B. The Seven Years’ War/French and Indian War and its Aftermath
      2. War Begins: The Battle of Jumonville Glen
      3. The British Strategy in North America
      4. The Aftermath of the Seven Years’ War
         a. Treaty of Paris, 1763
         b. Pontiac’s War, 1763
         c. The Royal Proclamation of 1763
   C. Massachusetts and the Origins of the Revolution
      1. The Stamp Act Controversy, 1765–66
         a. The Stamp Act Congress of 1765
         b. Virtual Representation
      2. The Townshend Acts
         a. Colonial Reactions to the Townshend Acts
      3. The Boston Massacre
      4. The Tea Act and the Boston Tea Party
      5. The Intolerable Acts and the First Continental Congress

II. THE REVOLUTIONARY WAR, 1775–83 30%
   A. New England: The Beginnings of War
      1. Lexington and Concord
      2. The Siege of Boston
         a. The Battle of Bunker Hill
   B. The Mid-Atlantic: Stalemate
      1. The New York Theatre
         a. The British Seizure of New York City
         b. The Battle of Trenton
         c. The Battle of Saratoga
      2. The War in Pennsylvania: 1778
         a. The British Occupation of Philadelphia
         b. Valley Forge
c. The Continental Navy

3. European Alliances
   a. France
   b. Spain
   c. The Netherlands

C. The South: Civil War
   1. Black Loyalists and Patriots
   2. The Siege of Savannah
   3. West Point and the Culper Ring
      a. Benedict Arnold’s Betrayal at West Point
      b. The Culper Ring
   4. War in the Carolinas
      a. The Battle of Kings Mountain
   5. A Turning Point: 1781
      a. The Battle of Yorktown
      b. Continued Hostilities
   6. The Western Frontier
      a. The Gnadenhutten Massacre
   7. The Treaty of Paris, 1783

D. The Revolutionary Homefront
   1. Communities Divided: Loyalist, Patriot, and Undecided
      a. Loyalists
      b. Patriots
   2. Women in War and on the Homefront
      a. Women on the Homefront
      b. Women at War
   3. Contributions by Black Americans
      a. Black Loyalists
      b. Black Patriots
      c. Jack Sisson
      d. James Armistead Lafayette
   4. Native Americans
      a. Iroquois Neutrality
      b. The End of the Iroquois Confederacy
      c. Native Allies in the Southern Theatre
      d. The End of the War

III. CREATING A NEW NATION: THE POLITICAL REVOLUTION, 1776–1800

A. The Second Continental Congress
   1. Attempts at Reconciliation
      a. The Olive Branch Petition
      b. Declaration of the Causes and Necessity of Taking Up Arms
   2. The British Response
   3. The Movement toward Independence
      a. Common Sense
      b. The Lee Resolution
4. The Declaration of Independence
   a. The Committee of Five
   b. Debate in Congress
   c. The Document
   d. Reception
B. Congress of the Confederation
   1. The Articles of Confederation, November 1777
   2. The Congress of the Confederation, 1781–88
      a. The Northwest Ordinance, 1787
C. The Federal Constitution
   1. The Economic Crisis of the 1780s
      a. Shays’ Rebellion, 1786–7
   2. The Constitutional Convention, May 25, 1787–September 17, 1787
      a. The Virginia and New Jersey Plans
      b. The Connecticut Compromise
      c. Slavery and the Constitution
   3. The Ratification Process
      a. Federalists
      b. Antifederalists
      c. Ratification
      d. The Bill of Rights
D. The Washington Administrations, 1789–96
   1. Politics without Parties: Washington’s Cabinet
   2. Hamilton’s Financial Plans
   3. The Whiskey Rebellion, 1794
E. The Adams Administration, 1797–1801
   1. The Election of 1796
      a. The First Contested Election
      b. Washington’s Farewell Address
   2. The XYZ Affair and the Quasi War with France
   3. The Alien and Sedition Acts, 1798
F. The Election of 1800
   1. Adams v. Jefferson
   3. “We Are All Republicans, We Are All Federalists”

IV. CREATING A NEW WORLD—THE SOCIAL REVOLUTION
   20%
   A. The Age of Revolution
      1. The American Revolution in Global Context
         a. The First French Revolution, 1789–99
         b. The Haitian Revolution
   B. Revolutionary Legacies: Women
      1. Women and the Vote
      2. Republican Motherhood
      3. Female Education
   C. Revolutionary Legacies: Black Americans
1. Early Abolitionism
2. State Legislatures and Slavery
   a. Gradual Emancipation in the North
   b. Individual Manumissions and Protection for Slavery in the South
3. Cotton and the Growth of Slavery in the South
4. Growing Free Black Populations
   a. African-American Identity and Religion
D. Revolutionary Limitations: Native Americans
   1. The Western Confederacy
   2. The Battle of Fallen Timbers
   3. The Treaty of Greenville of 1795
E. Revolutionary Achievement: Yeoman Farmers and Artisans
   1. Voting