Below is a comprehensive, grade-appropriate list of subject matter and specific topics/skills a typical U.S. 9th-grade (age ~13–15) student should master. I group items into core academic subjects first, then common electives and life skills. If you want this mapped to a particular state standard, textbook, or a semester-by-semester scope-and-sequence, tell me and I'll tailor it.

Core subjects

1. Mathematics (Algebra I or Integrated Math I)
    - Real numbers: integer/rational/irrational, absolute value, properties
    - Expressions, equations, and inequalities: simplify, factor, expand, solve linear equations and inequalities, systems of linear equations (substitution, elimination)
    - Functions: concept of function, function notation, domain and range, linear functions, slope, intercepts
    - Linear models and applications: graphing, word problems, systems of equations applications
    - Quadratic basics: graphing quadratics, solving by factoring and quadratic formula (intro)
    - Polynomials: operations, factoring techniques (GCF, trinomials)
    - Exponents and radicals: laws of exponents, simplifying radical expressions, rational exponents
    - Rational expressions and equations: simplify, solve, applications
    - Intro to statistics & probability: interpreting data, measures of center and spread, basic probability (varies by curriculum)
    - Problem solving & algebraic reasoning: modeling real-world situations
2. English Language Arts (Reading, Writing, Speaking)
    - Literature: reading of short stories, novels, drama, poetry; understanding theme, plot, character, point of view, symbolism, tone, figurative language
    - Informational texts: analyzing essays, articles, speeches; identifying claims and evidence
    - Vocabulary and academic language: context clues, Greek/Latin roots, word choice
    - Writing: narrative, expository, persuasive/argumentative essays; thesis statements, organization, using evidence, integrating citations
    - Research skills: gathering credible sources, note-taking, evaluating bias, MLA/APA basics, avoiding plagiarism
    - Grammar and conventions: sentence structure, punctuation, clauses/phrases, subject-verb agreement, verb tense, pronoun usage, modifiers
    - Speaking and listening: presentations, group discussion, listening skills, formal debate basics
    - Media literacy: interpreting multimedia texts, recognizing bias and persuasive techniques
3. Science (Biology or Physical Science, depending on school)
    - Nature of science: scientific method, experimental design, data analysis, variables, control groups, lab safety
    - Biology topics (typical 9th-grade course):
    - Cell structure and function, cellular processes (photosynthesis, cellular respiration)
    - Genetics: DNA structure, Mendelian genetics, inheritance basics
    - Evolution and natural selection
    - Ecology: ecosystems, food webs, energy flow, biomes, human impact
    - Organization of life: tissues, organs, organ systems
    - Physical science alternative (if not biology): matter and its properties, atomic structure,

chemical reactions, forces and motion, energy (work, power, conservation)
- Scientific literacy: interpreting graphs, experimental error, forming claims with evidence and reasoning

4. Social Studies / History

- World History/Geography or Modern World (common 9th-grade focus):
- Early civilizations through modern eras (scope varies): major political, economic, cultural developments
- Geography skills: mapping, human-environment interaction, spatial reasoning
- Major themes: cultural diffusion, imperialism, industrialization, nationalism, global conflicts, colonization and decolonization
- Historical analysis: primary vs. secondary sources, cause and effect, continuity and change over time
- Civics/government basics often included: foundations of government, rights and responsibilities, systems of government

5. Foreign Language (e.g., Spanish I, French I)

- Basic communication: greetings, introductions, asking questions, common expressions
- Grammar fundamentals: present tense verbs, subject pronouns, basic conjugations, noun-adjective agreement, articles
- Vocabulary: everyday topics (family, school, food, weather, numbers, time)
- Listening and speaking practice, reading simple texts, writing short paragraphs
- Cultural awareness: customs, holidays, basic geography of language-speaking countries

Supportive subjects and skills

6. Physical Education & Health

- Fitness fundamentals: cardiovascular, strength, flexibility, building an exercise routine
- Team and individual sports skills, movement skills
- Health education: nutrition, sexual health and relationships (age-appropriate), mental health, substance abuse prevention, personal safety, first aid basics

7. Computer Science / Technology & Digital Literacy

- Basic computer skills: file management, typing, internet safety, email etiquette
- Productivity tools: word processing, spreadsheets (basic formulas), presentations
- Digital citizenship: privacy, online ethics, evaluating sources
- Intro to coding/computational thinking (often optional): block coding or beginner text-based (Python/JavaScript basics), algorithms, debugging
- Media creation basics: digital presentations, simple video/audio editing (optional)

8. Visual and Performing Arts

- Visual arts: basic drawing/painting techniques, color theory, art elements/principles, art history overview
- Music/drama: basic music theory, ensemble participation, performance skills, theatre basics
- Critique and creative process: analyzing and creating artistic work

9. Electives / Career & Technical Education (varies by school)

    - Options often include: business/marketing basics, woodworking, engineering/robotics, family and consumer science, journalism/yearbook, photography
    - Skills: project planning, design thinking, hands-on technical skills, collaboration

10. Life Skills / Practical Knowledge

    - Financial literacy: budgeting, saving, banking basics, intro to credit, reading pay stubs and simple interest
    - Study skills and organization: note-taking methods, time management, test-taking strategies, goal-setting
    - Career exploration: resume basics, career research, workplace behavior
    - Civic and community skills: volunteering, civic participation basics

Assessment & mastery expectations

- Ability to read and analyze grade-level texts, write clear multi-paragraph essays with evidence
- Mastery of Algebra I concepts (or Integrated Math I) with readiness for Geometry/Algebra II
- Understanding core scientific concepts and ability to design/interpret experiments
- Competence in basic second-language communication and cultural awareness
- Demonstrated physical fitness and personal health knowledge
- Digital literacy and safe, ethical online behavior

Standards references (optional to consult)

- Common Core State Standards (Math, ELA)
- Next Generation Science Standards (NGSS)
- State-specific social studies standards and foreign language frameworks

If you’d like:

- a downloadable checklist or printable scope-and-sequence,
- this mapped to Common Core/NGSS,
- or a semester-by-semester course plan with suggested resources and assessments — tell me which and I’ll create it.