



Curriculum Guide
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The White Oak Team
Prepared by Dale M. Rogers

Lots of schools can provide simple accommodations for students with learning disabilities, but the challenge is to provide accommodations and, at the same time, to provide direct instruction in the academic skills a student needs.

White Oak sees accommodating a student's needs as the starting point of instruction, not the finish line. Students need to learn to do research, to collect data, to write analytical papers, to take great notes, and to do all the other skills that will lead to academic success... and they need to have this direct instruction throughout their day and across the curriculum.

White Oak starts with the Massachusetts Curriculum Frameworks, which identify the grade-appropriate curriculum for every student in the Commonwealth, and then the teacher adds individualized instruction in the core literacy and academic skills necessary for success in that class.

Every day, every student has a full course load of seven 50-minute classes, including a one-to-one tutorial class in reading, spelling, reading analysis and written composition. There are no pull-out sessions for any student. We believe that no child should have to miss part of his or her program in order to be taught appropriately. Even the one-to-one tutorial is individually scheduled into each student's daily schedule, as an independent class.

I. Language Arts

II. Mathematics

III. Oral Expression

IV. Science

V. Social Studies

VI. Electives

Language Arts: Program Description White Oak School

(2 semesters: 1 credit)

The White Oak Language Arts program is focused on preparing our students with the sophisticated literacy skills necessary for college and modern workplace. Because White Oak School's program is specifically designed to assist our students in developing expressive and receptive language skills, students engage daily in three classes dedicated to the acquisition and expansion of language skills. The three classes are English-Language Arts, Oral Expression, and a 1:1 Tutorial. Each class meets each day for fifty minutes of personalized, intensive literacy-skill instruction. This comprehensive approach utilizes research-based instruction and strategies and provides a truly effective language arts program for students with specific language-based learning disabilities.

In their English-Language Arts classes, students are guided step-by-step in developing grammar, vocabulary, reading comprehension, writing, editing, group discussion, and independent work skills. Standard grammar conventions of the English language are a key focus throughout the program. Students work to increase vocabulary knowledge by focusing on using context clues to determine meaning, analyzing meaningful word parts, utilizing reference materials, and through explorations of idioms, figurative language, metaphors and similes. In ninth and tenth grades, MCAS preparation (practice and strategies) is also a key component in the curriculum.

Literature selections – novels, essays, speeches, biographies, short stories, plays, and poetry – are drawn from the approved Massachusetts Curriculum Frameworks Appendices. Literature is read independently and also read aloud collaboratively and discussed in depth, and students respond both orally and in writing to comprehension questions. Students also work to interpret and analyze the structure of texts. They focus on making inferences and predictions and supporting their ideas with details from the text. They work to identify themes and summarize central ideas with supporting details in oral and written formats. The intensity and student-centered pace of this approach allows our students to engage with literary texts to greater depth.

Students engage in writing for a variety of purposes – persuasive, informative or expository, and narrative. They routinely work to strengthen and develop their writing through pre-writing exercises, short- and long-term writing assignments, and revising, rewriting, editing, and giving oral presentations. Writing scaffolds are utilized and adapted as students grow in their writing skills. When developing essays or research projects, they focus on gathering relevant information from valid sources, organizing their information, and clearly expressing their ideas with supporting details in writing before revising, editing, and giving oral presentations of their work.

At each level of the Language Arts program, students focus on comprehending increasingly complex literary and informational texts. They learn to express their ideas, both orally and in writing, with growing richness of language and independence.

Mathematics: Course Descriptions

White Oak School

High School Mathematics Courses

(2 semesters: 1 credit)

White Oak's college-preparatory (CP) mathematics courses are listed below. The skills addressed at each level are in accordance with the MA Curriculum Frameworks and also correspond to the Common Core Curriculum.

Essentials of Algebra I

In this college-preparatory course, students lay the groundwork for higher mathematics as preparation for the MCAS. Students focus on expanding their understanding of the real number system; interpreting and writing algebraic expressions; performing operations on polynomials; understanding, creating, representing graphically, and solving equations and inequalities; interpreting, constructing, comparing, and analyzing introductory functions; and interpreting, summarizing, and representing data and linear models. An emphasis upon language skills is the foundation for content exploration, and students work on developing skills in the areas of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

Essentials of Geometry

In this CP course, students lay the groundwork for higher mathematics and prepare to take the MCAS. Students explore transformations in the plane, make geometric constructions, use measurement units and a variety of formulas to define dimensions, and study congruence, similarity, right triangles, and circles. They also focus on expressing geometric properties with equations, solving problems with equations, and modeling geometric concepts. An emphasis upon language skills is the foundation for content exploration, and students work on developing skills in the areas of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

Essentials of Algebra II

In this CP course, emphasis will be on practicing and expanding algebraic topics learned in Algebra I to enable students to use mathematics as a modeling language for real-life problems. Students will perform arithmetic operations with polynomials, interpret the structure of rational expressions, and write expressions in equivalent forms to solve problems. Students will also focus on representing and solving equations and inequalities graphically and interpret, analyze, and build functions that model relationships between two quantities. They will work to construct and compare linear, quadratic, and exponential models and solve problems. Trigonometric functions and studies on statistics and probability will be introduced and explored as time permits. An emphasis upon language skills provides the foundation for content exploration, and to that end, students will focus on developing skills in the areas of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

College-Preparatory Integrated Math

Integrated Math, typically taken senior year, is a synthesis of algebraic and geometric concepts and its real-life applications. Given college-level placement assessments, students will identify areas of personal challenge and focus on guided spiraling review of targeted mathematical topics in arithmetic, algebra, functions, geometry, statistics, and probability. They will explore previously addressed mathematical topics to greater depths, extending their studies and working to strengthen and expand their critical thinking and problem-solving skills. An emphasis upon language skills provides the foundation for content exploration, and to that end, students will focus on developing skills in the areas of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

Grades 4 – 8 General Mathematics Courses

Pre-Algebra

Students focus on the ‘big ideas’ of algebra and bridging the gap between arithmetic and algebra. They will investigate ratios and proportional relationships, review and refine their abilities to compute with rational numbers, and focus upon solving real-life and mathematical problems by utilizing numerical and algebraic expressions and equations. They will work with integers and exponents, analyze and solve linear equations, and define and evaluate functions. As time permits, they will also focus on understanding and solving problems utilizing geometric concepts: congruence and similarity, the Pythagorean Theorem, and volume of cylinders, cones, and spheres. Students will draw, construct, and describe geometrical figures. In addition, studies in statistics and probability will be covered. An emphasis upon language skills provides the foundation for content exploration, and to that end, students will focus on developing skills in the areas

of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

Basic Mathematics

Students will focus on performing the four operations with whole numbers, build familiarity with factors and multiples, and identify and define patterns. Base Ten place value and operations with multi-digit numbers, and understanding and operations with fractions, decimals, and percents will all be key areas of focus. Students will also work to solve problems involving measurement and conversion of measurements. They will focus on representing and interpreting data, drawing and identifying lines and angles, and work to solve one-variable equations and inequalities. Students will focus on solving real-world and mathematical problems involving area and volume and explore basic concepts in statistics and probability. An emphasis upon language skills provides the foundation for content exploration, and to that end, students focus on developing skills in the areas of number identification, numerical sequencing, computations, mathematical language, and strategies for organization and independent work.

Oral Expression

The acquisition of language and the ability to understand and utilize that language in its printed and written forms is a hierarchical process. Students first must comprehend and produce language in oral forms before they can successfully acquire and use language in its written forms. Therefore, Oral Expression is a critical part of the White Oak School curriculum. For the language learning disabled student, word retrieval, auditory discrimination, language processing and the semantic organization needed to produce coherent oral language all are issues which frequently pose difficulty. At the most basic levels of the Oral Expression curriculum, issues of auditory discrimination, syllabication, vocabulary development, sequencing, and comprehension of auditorily presented materials are addressed. In this first level students also begin to learn basic skills for oral presentation, producing simple PowerPoint presentations to introduce them to the use of this technology, a tool that is used with expanding complexity at each level of the Oral Expression curriculum.

The second level of the curriculum continues to work in the above-mentioned areas at an increasingly complex level, but also addresses areas of notetaking from auditorily presented materials and comprehension and expression of directions. It is at this second level as well that the curriculum begins to address the use of language in the social context, an area of oral language usage that can sometimes be challenging for language learning disabled students. Social language usage continues to be an important part of the curriculum from the second level onward, as the focus of the curriculum exercises begins to shift toward a greater emphasis on classroom and work-place scenarios for which the student needs rehearsed strategies which will afford him/her the confidence necessary to survive in the world beyond White Oak. Thus, the third level of Oral Expression addresses speech preparation and delivery skills, social introduction and conversation skills, and the comprehension of proxemics and the use of contextual clues in various conversational settings.

In the final level of the curriculum, conversational skills, proxemics, and abstract language usage are all addressed using the context of a video production class. In this class students are expected to arrange interviews focused on selected topics, conduct and film these interviews, and use computer technology to edit the finished work. Additionally, and most critically, students are expected to learn to define and describe their learning differences and the impact those differences have upon their lives so that they may be viable self-advocates in the academic community, the work place, or within social contexts in their adult lives. Facing the world of adulthood with a previously outlined and rehearsed scripts to follow for “what to say” in certain predictable situations (i.e. job interviews, requests for modifications from college

professors or supervisors in the work place, meeting strangers in social settings) can afford students the confidence to express themselves in a manner that will allow them to display their true levels of competence and intellect and thus succeed in a society which might otherwise judge them to be “lazy, and disorganized”.

Science: Course Descriptions

White Oak School

High School Science Courses

(2 semesters: 1 credit)

All high school science courses contain significant lab experiences and skills. Biology and Physics courses alternate yearly for Grades 9 and 10. Chemistry and Anatomy & Physiology courses alternate yearly for Grades 11 and 12. The skills addressed at each level are in accordance with the MA Curriculum Frameworks and also correspond to the Common Core Curriculum.

Biology

Grades 9/10

Students investigate key topics in the chemistry of life, cell biology (structure and functions), cells and energy, and heredity and genetics. They also focus on MCAS preparation and critical thinking skills. In addition, an emphasis upon language skills is the foundation for content exploration, and students work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Physics

Grades 9/10

In this introductory physics course, topics in the areas of motion and forces, conservation of energy and momentum, heat and heat transfer, waves, electromagnetism, and electromagnetic radiation. Mathematic skills are utilized throughout this course. Students make observations, raise questions, formulate hypotheses, design and conduct scientific investigations, and analyze, interpret, and report upon the results of those investigations. They also focus on MCAS preparation and critical thinking skills. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Anatomy & Physiology

Grades 11/12

The focus of this course is on the structures and functions of organs and the relationships within the body systems of an organism. Students engage in studies on the digestive system, circulatory system, respiratory system, nervous system, muscular/skeletal system, sexual reproductive system, communication among cells, and the interaction between systems to maintain homeostasis. An emphasis upon language skills is the foundation for content exploration, and

students work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Chemistry

Grades 11/12

Topics covered in this course include properties and states of matter, solids, liquids, and gases, Kinetic Molecular Theory, atomic structure and nuclear chemistry, the Periodic Table of Elements, chemical bonding, chemical reactions and stoichiometry, thermochemistry, solutions, rates of reaction, and equilibrium, acids and bases and oxidation-reduction reactions. Students will make observations, generate questions, form hypotheses, and investigate the credibility and validity of scientific claims. Students will also explore careers that require training in chemistry and investigate the Love Canal Tragedy and the environmental waste case in Woburn, MA, that became the basis for A Civil Action. An emphasis upon language skills will be the foundation for content exploration, and students work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Grades 4 – 8: General Science

The General Science curriculum includes semesters of revolving content: Earth and Space Science, Environmental Science, Life Science, and Physical Science.

Earth and Space Science

Grades 4 – 8

Students will explore Earth's structure and history, investigate causes and effects of heat transfer, and learn about the earth's atmosphere. They will investigate various maps of the earth and be able to describe the earth's layers, the role of tectonic plates, causes for earth's seasons, and the causes and effects of earth's natural processes (rock formation, sedimentary deposits, weathering, erosion) upon its surface. They will study weather phenomena and the water cycle. Students will generate questions, make predictions, seek out solutions, record the procedures used, evaluate their conclusions, and develop reports on their investigations. Students will also focus on the role of gravity upon the solar system, describe lunar and solar eclipses, compare and contrast planets, and explore the Milky Way. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Environmental Science

Grades 4 – 8

In this course, students focus on evolution and biodiversity, biomes and interactions between living things and their environment, food webs, food chains, natural resources, and changes in ecosystems over time. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Life Science

Grades 4 – 8

Students will investigate the classification of organisms, structure and function of cells, systems in living things, reproduction and heredity, and energy and living things. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Physical Sciences (Chemistry and Physics)

Grades 4 – 8

Key topics in this general science course include properties of matter; elements, compounds, and mixtures; motion of objects, forms of energy, and heat energy; and simple machines. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, lab, research, vocabulary, classroom discussion and organization, and independent work skills.

Social Studies Course Descriptions

White Oak School

The skills addressed at each level are in accordance with the MA Curriculum Frameworks and also correspond to the Common Core Curriculum.

U.S. Geography:

(Grade 4)

Utilizing the five themes of geography (location, place, human interaction with the environment, movement, and regions), students will study cultural and physical features of the United States today. Students will become familiar with immigrants and immigrants' rights, resources (both natural and limited), and the different regions of the U.S. and their key geographic features. They will also learn about contemporary Canada, Mexico, Central America, and the island cultures in the Caribbean Sea. Geography skills include understanding and being able to utilize absolute and relative location, longitude and latitude, key terms, the compass rose, map keys, and map scales. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

U.S. History:

(Grade 5)

“Students study the major pre-Columbian civilizations in the New World; the 15th and 16th century European explorations around the world, in the western hemisphere, and in North America in particular; the earliest settlements in North America; and the political, economic, and social development of the English colonies in the 17th and 18th centuries. They also study the early development of democratic institutions and ideas, including the ideas and events that led to the independence of the original thirteen colonies and the formation of a national government under the U.S. Constitution.” (Massachusetts History and Social Science Curriculum Framework, Pg. 27) Geography skills include recognizing various types of maps and using timelines. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

World Geography:

(Grade 6/7 alternate years with Ancient Civilizations)

Students will study the world beyond North America, continent by continent, utilizing the five themes of geography (location, place, human interaction with the environment, movement, and regions). “Location refers both to absolute location indicated by longitude and latitude and to relative location, indicated by direction, distance, or travel time. The concept of place refers to the physical and man-made characteristics of a

place such as a town or city. Human interaction with the environment encompasses the many ways in which people have adapted to their surroundings or altered them for economic reasons. The movement of people, goods, and ideas is the fourth concept. The fifth, region, refers to ways of categorizing areas of the earth, such as by climate or religion.” (MF, Pg. 33) Students will continue to develop the skills to be able to identify and/or locate specific places and cities, absolute and relative location, climates, major physical characteristics, major resources, and data about population. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

Ancient Civilizations: (Grade 6/7 – alternate years with World Geography)

Students will investigate the origins of human beings in Africa and early river valley civilizations to maritime civilizations in the Mediterranean. Topics for first semester include human origins and ancient river civilizations (Mesopotamia, Egypt, China, and India). Second semester topics focus upon the roots of Western Civilization with emphasis on the cultures of Greece, Rome, and Israel. Studies will focus upon “religions, governments, trade, philosophies, and art of these civilizations as well as the powerful ideas that arose in the ancient world and profoundly shaped the course of world history. These ideas include monotheism, democracy, the rule of law, individual worth, personal responsibility, the alphabetic principle for a writing system, and scientific reasoning.” (MF, Pg. 42) Geography topics will include types of maps, vocabulary terms, graphs and charts, and absolute and relative location. Students will also focus upon comparing historical and modern maps, using primary and secondary sources, learning about multiple causes and effects, and learning new terms for economics and government. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

U.S. History I: Foundations and Framework of the American Government (Grade 8)

Students will focus upon the political and intellectual origins of the American Revolution and the Constitution. First semester topics will include political, economic, intellectual, and historical factors leading to the Revolution, key documents (the Mayflower Compact, Declaration of Independence, Articles of Confederation), Thomas Jefferson’s political philosophy, and major battles and characters of the Revolutionary War. Second semester topics focus on the birth of the new nation, the creation and contents of the Constitution, the Bill of Rights, checks and balances, the separation of powers, roles of Federal, State, and local governments, Massachusetts state government, and the rights and responsibilities of American citizens. Primary source documents will be read and discussed throughout these studies. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing,

vocabulary, geography, research, group discussion, organization, and independent work skills.

U. S. History II: Growth of the Nation and Civil War (Grade 9)

Students will study the political developments in the U.S. under Washington, Adams, and Jefferson, Jacksonian Democracy, John Marshall and the Supreme Court, Suffrage, westward expansion, comparisons of life (education, transportation, slavery, economy, and culture) in the North and the South, Abolitionism, and key developments that led to the Civil War, during the first semester. Second semester topics include Lincoln's presidency, the Emancipation Proclamation, Civil War leaders and key battles, the effects, policies and consequences of Reconstruction, and the rise of Jim Crow laws. Primary source documents will be read and discussed throughout these studies. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

U.S. History III: (Grade 10/11)
The Industrial Revolution and U.S. International Growth (1870 – 1940)

Students will explore the causes and consequences of the Industrial Revolution, immigration, union, political parties, increasing U.S. involvement in world affairs, World War I, Progressivism and the New Deal, causes and consequences of the Great Depression, etc. Primary source documents will be read and discussed throughout these studies. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

U.S. History IV: Modern U.S. History, 1939 – Cold War (Grades 10/11)

World War II is the focus for the first semester. Topics include American Isolationism, German and Japanese aggression, Fascism, key battles, key leaders, and key documents, Japanese internment, women in the workforce, etc. During the second semester, students will investigate the causes and consequences of domestic Cold War trends, policies of Truman and Eisenhower, McCarthyism, the Civil Rights Movement, the policies of Kennedy, Johnson, and Nixon, and more. Primary source documents will be read and discussed throughout these studies. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

Twentieth Century World History (Grade 12)

Students will investigate twentieth century struggles for democracy, the decline and fall of the Soviet Union, Apartheid, changes in Central and Eastern Europe and in China, global interdependence, current events, and unresolved problems of the modern world. Primary source documents will be read and discussed throughout these studies. With an emphasis upon language skills as the foundation for content exploration, students will work on developing notetaking, writing, vocabulary, geography, research, group discussion, organization, and independent work skills.

Tutorial

Tutorial meets daily in a one-to-one setting for fifty minutes each day. This class focuses on the remediation and development of the student's literacy skills and provides explicit instruction in English language structure and usage. The curriculum for each Tutorial is designed based on the student's individual needs as determined through both formal and informal testing and analysis of student work samples. As the teacher uses a diagnostic-prescriptive approach to instruction, revisions are made on a continuous basis as the student's skills evolve and expand. Specific instruction is provided in phonemic awareness and analysis in order to improve the student's decoding and encoding skills. Through this instruction the Tutorial seeks to improve the student's ability to decode textual material, improve comprehension of literature, and develop the student's ability to organize and compose written language that will adequately demonstrate the student's comprehension of material he or she has read or heard read.

Daily class activities include development of phonemic awareness, syllabic structure of words, morphemic study and analysis for the development of vocabulary skills, and decoding practice with controlled text and with selected literature that is at the current instructional decoding level. Whenever possible, the selected literature includes text from grade-level English classes. Writing activities are done in concert with the literature being read, and are designed to teach the student organizational scaffolds to compose written assignments typical of writing assignments students are asked to complete in grade-level academic classes.

White Oak School Electives

Art I Grades 7 - 9 ($\frac{1}{2}$ Year: $\frac{1}{4}$ Credit; 1 Year: $\frac{1}{2}$ credit)

Students explore a variety of media and materials and investigate their artistic interests. Students receive direct instruction and opportunities to understand and practice the elements of art and principles of design. They work to develop skills in drawing, painting, printmaking, fabric design, papermaking, and sculpture. Art history, appreciation, and art literacy are additional areas of focus.

Art II Grades 10-12 ($\frac{1}{2}$ Year: $\frac{1}{4}$ Credit; 1 Year: $\frac{1}{2}$ credit)

Students continue to expand upon their previous experiences in art as they work to hone their skills in drawing, painting, printmaking, sculpture, papermaking, and fabric design. Assignments increase in complexity and level of difficulty. Emphasis is placed upon developing a unique, personal style. Students will increase their knowledge of art history and art processes, techniques, methods, and materials. Students who are interested in art careers will focus upon developing portfolios.

Culinary Arts Grades 7-12 ($\frac{1}{2}$ Year: $\frac{1}{4}$ Credit)

Basic knowledge of nutrition and training in food preparation are covered in this class. Baking and cooking basics, measurement skills, meal planning, supermarket strategies, and proper dining etiquette are also key areas of focus. Students will create weekly menus for breakfast, lunch, and dinner. They will explore recipes and cook and bake a variety of dishes as preparation for living independently in the future.

Drama

Grades 7 – 12

(½ Year: ¼ Credit)

Confidence building, socialization, and development of teamwork skills are the goals of the White Oak Drama program. All students are invited to participate and are given any necessary support to do so; it is an inclusive program. Students are introduced to all aspects of a dramatic production with emphases on improving memory, articulation, enunciation, intonation, acting, and pragmatic skills. Also included are scene studies, prop design and construction, set design, and costuming. As an annual event, students participate in the performance and full production of a play for the benefit of the White Oak School and Community.

Photography

Grades 7-12

(½ Year: ¼ Credit)

Prerequisite: A digital camera is necessary for enrollment. This class introduces students to the history of photography and the basics of color and black and white photographic images. Assignments and class projects give students a hands-on approach to mastering the subject. Each student will also be responsible for investigating in depth the work of a major photographer and will develop a presentation that includes factual information as well as visuals to share with the class. Digital photography skills will be explored and honed through the use of ADOBE PHOTOSHOP ®.

Pottery I:

Grades 7 – 12

(½ Year: ¼ Credit; 1 Year: ½ credit)

Pottery I is given for two semesters. Students explore the processes of creating functional and/or artistic clay projects that include preparing the clay, utilizing a variety of techniques (pinch, slab, coil, and throwing on the wheel) to construct functional and/or sculptural forms, and glazing and firing. Design elements (pattern, form, color, rhythm, balance, etc.) and historical pottery references are key areas of instruction, practice, and class discussions.

Pottery II: Grades 7 – 12 (½ Year: ¼ Credit; 1 Year: ½ credit)

Prerequisite: Two semesters of Pottery I. Students continue to develop clay construction skills and build increasingly complex functional and/or sculptural projects with increasing skills and by combining methods of clay construction (pinch, slab, coil, and throwing on the wheel). Additional design possibilities are explored including patterning through carving, painting, decorating with slip, sgraffito, and under-glazing effects, etc. Students are encouraged to develop unique creative solutions for each assignment. The work of both contemporary and historical potters provides examples and inspiration to experiment with their ideas.

Woodshop Skills with Practical Math Grades 7 – 12

(½ Year: ¼ Credit; 1 Year: ½ credit)

Each Woodshop level (I-IV) is given for two semesters. Projects increase in skills required and complexity.

Woodshop/Practical Math offers training and practice in the areas of practical mathematical concepts/skills and hands-on woodworking skills development. Students will explore the processes for planning and constructing a variety of wood projects (box, bench, table, baseball bat, etc.) Key areas of focus include:

- Utilization of practical mathematical concepts and operations as needed for precise measuring and planning in the construction of wood projects
- The safe use of common stationary woodworking machinery and portable power tools
- Reading and preparing shop drawings
- Compiling material cut lists
- The use of hand tools such as planes, chisels, etc.
- The finishing processes with emphasis on attention to detail