

## **The Oakland School**

# Course Planning for Students & Parents

## SCHOOL CURRICULUM

- Academic Programs
- Course Descriptions

2001-2004

### **A Word to Students and Parents:**

The personal and academic objectives of an Oakland School education cannot be separated. We maintain a college preparatory curriculum in the context of a caring and a responsible school community.

We want to give our students necessary academic skills, help them to think and to question, and to introduce them to a wide range of subject matter. We also want to make students sensitive to their own abilities, gifts, and needs, and to enable them to contribute to the world around them. We wish our students to become intelligent and productive adults.

To help our students attain these goals, we offer small classes, individual attention, and an abundance of extra-help opportunities. We emphasize the mastery of fundamental skills in reading, writing, thinking, and imaginative self-expression. To these ends, our students schedule courses according to their academic abilities and individual needs.

This guide contains information to help you plan your Oakland School program in light of your total educational goals.

*The Oakland School*

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## **Academic Programs**

### **Advanced Studies**

This program extends and enriches the education of the able student by offering an individually designed program of challenging studies. Students are encouraged to select courses with the intent of earning advanced studies credit, which is indicated on the student's academic transcript. A weighted value is applied to each course for which the student receives a passing grade and advanced study credit. Students must assume responsibility for additional work and meet higher standards of excellence that are required by the program. Students interested in this program should see the Director of Academics for further information.

### **Independent Study**

Independent study across the curriculum may be approved for students who have proven to be self-directed learners, willing to take responsibility for completing projects while striving for excellence. Such study has helped the motivated student to accelerate or earn extra credit for graduation. Independent study must be arranged with a teacher in the declared subject. The teacher must be willing to work with the student to help design, mentor, and evaluate the study. One term credit is granted for independent study that represents 60 hours of work. More extensive study is judged accordingly. All independent study is supported by a contract between the student and the school. The contract stipulates the scope of the study, its goals, how the study will be evaluated, and an outline of a study schedule with specific deadlines.

### **Tutorials**

Tutorials benefit students who are having difficulty with a subject as well as those students who want to accelerate their studies. Tutorials are offered across the curriculum and may be arranged through the Director of Academics. Pennsylvania requires a 60-hour tutorial as an equivalent of 120 classroom hours and may earn up to one full academic credit.

### **Work Study**

This program is offered to qualified students who have completed their core subjects and who will benefit from a work experience outside of the school for elective credit. Participants fulfill a minimum of two hours daily to earn school credit. Any additional hours spent in employment are at the discretion of the employer and the student. Since the program is individually unique to each employer and student, we offer no specific guidelines beyond what is

established formally between student and employer and informally between the participating employer and the school. Interested students may secure further information from the office.

### **Community Based Learning (CBL)**

This special program is designed for students who wish to serve an apprenticeship with community professionals. Students interested in law may work with lawyers; musicians may sit in on rehearsals at Heinz Hall; art students may work with professional artists; students in the health care profession may work with doctors and nurses. A definite, written commitment is required from the professional and from the student and the parent. A full term credit is earned for every 60 hours spent in apprenticeship.

### **University Studies**

Chatham College High School Guest Program offers tuition-free enrollment in one freshman level course per semester to qualified juniors and seniors. Transferable college credit is awarded by Chatham College. Students earn full high school credit for any class completed successfully in this program. Interested juniors and seniors may secure applications from the office.

Qualified students may take courses at the University of Pittsburgh. Students earn full high school credit and some course credit may be transferable to other colleges. Full university tuition and fees apply and are the responsibility of the individual student and family. Early application is recommended.

## **Graduation Requirements**

The Oakland School provides an academic program aimed at helping students develop their unique talents and abilities. Students fulfill or surpass the mandated requirements of the Commonwealth of Pennsylvania. To qualify for an Oakland School diploma, students must earn 21 Carnegie Credit Units, distributed as follows:

CORE AREA	CREDITS
English/Communications	4
Mathematics	3
Science	3
Social Science	3
Arts/Humanities	2
Computer Competency	1
Health/Physical Education	1
Approved Electives	4

### **Community Service**

Community service with a recognized, approved non-profit agency is a requirement for graduation. A student enrolled at the Oakland School for four years is required to complete a total of 105 hours of service. Students sign a statement of commitment to community service at the time of enrollment. The school awards one humanities credit for every 105 hours of documented service. Necessary application and evaluation forms are available from the school office. Adult mentors willingly assist their mentees with locating a service site.

### **Course Descriptions**

Not all of the courses described are offered each term during the school year. Whether a course is offered depends upon student interest, need, and teacher availability. Prerequisites and grade requirements are flexible and are adjusted according to the educational background and needs of the individual student.

#### **English /Communications Core Program**

Students are required to successfully complete four years (16 term credits) of English studies. Generally, students enroll in courses that best suit their abilities and grade level. Often, juniors and seniors substitute electives for full-year survey courses. Qualified college bound students are encouraged to consider Honors and Advanced Placement courses.

**English 9,10,11**, are an experience of reading and writing. The reading is supported by a structure called the writing process. Basic language skills are an integral part of the writing process. Approaches integrate small group and whole class reading and discussion. Students are provided opportunities for self-expression through written and oral responses to the literature.

Periods/week: 5                      Credit: 1  
Prerequisite: Sequence        4 terms

**Writing Workshop** provides opportunities for the student to develop writing skills in a setting that engages students in the pursuit of a variety of writing modes. Class time is structured for individual writing, responding time, experimenting with the unfamiliar, and risking failure. Evaluation is normally self-appraised  
Periods/week: 1-3      Credit: .25-.75

**Honors English** is designed to be challenging and to appeal to the curiosity of academically talented students. The course covers a wide range of literature, from the use of the imagination to the real world of nonfiction. Literature is used as a springboard for writing in which students express ideas based upon their own observations and experiences. A required portfolio is the basis of evaluation.  
Periods/week: 5      Credit: 1  
Prerequisite: 3QPA      4 terms

**Advanced Placement English** develops skills in critical reading of imaginative and discursive literature and in writing about literature and related ideas. It is for students capable of college level work. A "B" average must be maintained and students will take the AP English Exam.  
Periods/week: 5      Credit: 1  
Prerequisite: 3QPA      4 terms

## **Social Sciences Core Program**

Students are required to complete three years (12 term credits) of social science courses. Students pursue these studies in a pattern of courses beginning in ninth grade. Students are encouraged to enroll in elective offerings during their junior and senior years.

**American Civics** helps students understand the basic principles of American government and the rights and responsibilities of citizenship. Students analyze case studies, engage in debate, write letters to public officials, hold mock trials, role-play, and conduct interviews and surveys. Students examine the structure and operation of federal, state, and local governments.  
Periods/week: 5      Credit: .50  
Prerequisite: None      2 terms

**United States History** is a survey study of traditional areas of American history. Additional focus is placed on student areas of interest. Students engage in individual and group projects, role-playing, debates, and much discussion that reacts to reading. Students are expected to write in journals in which they respond to the learning.  
Periods/week: 5      Credit: 1  
Prerequisite: None      4 terms

**Street Law** is the concept of educating students about law that is of practical use in everyday life. Students engage in open exchanges of past experience through group discussion and analysis of case studies.  
Periods/week: 5      Credit: .50  
Prerequisite: None      2 terms

**World History** studies ancient cultures and their contributions to modern times, increasing awareness of our interdependent world and of historically and culturally different peoples. Students engage in group discussions of reading assignments, individual and group projects, and field trips. Evaluation is based upon the quality of submitted writings and supplemental reading.  
Periods/week: 5      Credit: 1  
Prerequisite: None      4 terms

**World Geography** examines concepts, principles, and data necessary to understand the impact of geography upon our lives. Students study basic geographic features of the earth and their relationships with the various cultural regions of the world. Students engage in map work, projects, field trips, and writing about their experiences.  
Periods/week: 5      Credit: .50  
Prerequisite: None      2 terms

**Psychology** students are introduced to theories, theorists, methods, and schools of modern physiology and psychiatry. Emphasis is given to learning theory and common psychological

problems. Evaluation is based upon objective and essay examinations and a research paper on a related topic.

Periods/week: 5            Credit: .50

Prerequisite: None        2 terms

## **Mathematics Core Program**

Students are required to complete three years (12 term credits) in mathematics. All students are placed in a sequential pattern of courses that best meet individual needs. Students are strongly encouraged to complete a fourth year, either as advanced study or as refresher courses.

**Algebra** is the study of monomials, simple equations, factoring, linear equations, quadratic equations, and systems of equations and inequalities. Emphasis is placed on "real world" applications of algebra using the University of Chicago Mathematics Program.

Periods/week: 5            Credit: 1

Prerequisite: None        4 terms

**Geometry** is an introduction to the fundamentals of Euclidean geometry. Topics include points, lines, angles, triangles, polygons, areas, volumes, ratios, and proportions. Students are required to keep a geometry journal.

Periods/week: 5            Credit: 1

Prerequisite: Algebra     4 terms

**Advanced Algebra** is based upon the University of Chicago Mathematics Program and emphasizes the concepts of functions and their graphs, systems of linear equations, radical, absolute value, circles, parabolas, ellipses, and hyperbolas. For most students this is a continuation of previously learned skills.

Periods/week: 5            Credit: 1

Prerequisite: Algebra     4 terms

**Trigonometry** introduces functions and ratios with emphasis on "real world" applications. Students focus on growth in analytical problem solving. Students are required to keep a trig journal. This course is part of fourth year Advanced Math.

Periods/week: 5            Credit: .50-1

Prerequisite: Adv Algebra   2-4 terms

**Pre-Calculus** covers analytic geometry of plane and space, elementary functions, vectors, sums and series, limits, and the introduction to elementary calculus. This course is part of fourth year Advanced Math.

Periods/week: 5            Credit: .50-1

Prerequisite: Adv Alg/Geom   2-4 terms

**Calculus** teaches the formal idea of limit, introduces the basic notions of derivative and integral and teaches the basic techniques and applications that accompany them. Honors credit may be awarded.

Periods/week: 5            Credit: .50-1

Prerequisite: Pre-Calculus   2-4 terms

**Senior Math** refreshes basic skills and encourages critical thinking. Includes reviews of whole numbers, fractions, decimals, and percents. Recommended for those who need to review and hone math skills.

Periods/week: 5            Credit: 1

Prerequisite: Adv Alg/Geom   4 terms

**Record Keeping** prepares students for entry-level bookkeeping, clerical office accounting. Improvement of basic math skills is a product.

Periods/week: 5            Credit: 1

Prerequisite: None        4 terms

## Science Core Program

Students are required to successfully complete three years (12 term credits) of science study. Generally, students pursue this study in a sequential pattern of earth science, biology, chemistry, and physics. However, students are provided options to this sequence, depending on needs and abilities.

**Earth Science** focuses on concepts relevant to geology and the study of our earth. Students engage in cartography, map interpretation, plate tectonics, earthquake, seismology, volcanism, earth chemistry, minerals, the rock cycles. Students design contour maps and models, participate in a mapping scavenger hunt of Oakland, build a volcano and construct a functional seismograph. Students must maintain a geological portfolio for evaluation.

Periods/week: 5           Credit: 1  
Prerequisite: None       4 terms

**Biology** offers an in-depth study of life science. Students engage in activities and topics that include cell biology, photosynthesis, respiration, DNA replication, genetics, evolution, taxonomy, and an introduction to botany. Time is devoted to contemporary issues and to ethical and responsible research. A biological portfolio is required for evaluation.

Periods/week: 5           Credit: 1  
Prerequisite: None       4 terms

**Chemistry** studies the structure and composition of matter, the changes that occur in this matter, and the mechanisms that bring about these changes. Students investigate class topics with hands-on experiences with classroom labs.

Periods/week: 5           Credit: 1  
Prerequisite: Algebra     4 terms

**Physics** is quantitative in character and is closely linked to mathematics. This course covers mechanics, heat, wave motion, electricity, magnetism, and atomic and nuclear physics. Students are required to keep a journal for evaluation.

Periods/week: 5           Credit: 1  
Prerequisite: Adv Algebra   4 terms

**Consumer Chemistry** covers basic chemical principles and their relation to daily life and consumer issues. Emphasis is placed upon simple reactions and knowledge of common chemicals, particularly those used in the home. Environmental issues are addressed such as water quality and acid rain.

Periods/week: 5           Credit: 1  
Prerequisite: Algebra     4 terms

**Environmental Science and Aquatic Ecology** introduces students to concepts of environmental science and ecological relationships. Students complete a thematic portfolio of one of the biomes found on Earth. The second half is devoted to the study of aquatic ecosystems by examination of water quality of local streams, ponds and the 3-Rivers of Pittsburgh. A field study aboard the science ship Voyager usually culminates the course.

Periods/week: 5           Credit: .50  
Prerequisite: Biology     2 terms

## Arts and Humanities Core Program

Students are required to successfully complete two full years (8 term credits) of subjects relating to the arts and humanities. Most options for this requirement are electives that cross over into a variety of content areas. Foreign language may be part of this program.

**Studio Art** explores basic concepts of art through a variety of two and three-dimensional projects and is offered to all students regardless of past experience. Students learn to organize and develop ideas into concrete art forms, to gain proficiency with various materials, and to understand and use art vocabulary.

Periods/week: 5           Credit: .25  
Prerequisite: None       1 term

**Advanced Placement Art** is for the highly motivated art student who is seriously committed to the study of art. Work involves significantly more time than a basic high school art course. Students are required to concentrate in depth on a specific artistic concern, to demonstrate proficient abilities in a variety of techniques, and to develop original quality artwork. The course challenges the student with an intensive study of creative problem solving. AP portfolio required

Periods/week: 5                      Credit: 1  
Prerequisite: Studio Art              4 terms

**Film Appreciation** explores classic films from the 20<sup>th</sup> Century. Students learn to describe, analyze, and interpret such film concerns as space and time, lighting, plot development, and editing techniques. In addition to viewing various artistic film styles, students are required to write descriptive and analytic essays.

Periods/week: 5                      Credit: .50  
Prerequisite: None                      2 terms

**Art History** investigates the development of the arts from prehistoric times through the 20<sup>th</sup> Century. Students learn to describe, analyze, and interpret artworks from various stylistic periods. Slides, films, and field trips are components of the course.

Periods/week: 5                      Credit: .50  
Prerequisite: None                      2 terms

**History of Fashion** investigates the development of fashion as an integral part of social history from 2000 BC to the present day. Students learn the social effects of various stylistic periods.

Periods/week: 5                      Credit: .25  
Prerequisite: None                      1 term

**Instrumental Music** introduces basic skills and ensemble work. Students develop knowledge of chord structure, scale patterns, and sight-reading of music. Advanced students focus on ensemble playing and original composition while helping novices to practice. All are welcome.

Periods/week: 5                      Credit: .25  
Prerequisite: None                      1 term

**Play Production** teaches the basic skills of theatre. Students develop concentration skills, vocal and physical stage presence, and an understanding of what it means to create a dramatic or comic character. They become set builders, make-up artists, stage managers, and lighting technicians.

Periods/week: 5                      Credit: .50

## **Foreign Language Program**

Students are encouraged to successfully complete a minimum of two years (12 term credits) of foreign language study. Six language choices are available: Latin, Spanish, French, German, Japanese, and Russian. The latter two are by special arrangement with tutorial instructors who charge additional fees, which are the responsibility of the student. Students are enrolled in the language of choice at a level commensurate with ability and language background.

**Latin** 1-2 introduce the language and the civilization of the Roman world. Latin 3 & 4 feature the reading of specific authors and the study of literary milieus they represent. Latin classes at all levels are introduced to the study of linguistics.

Periods/week: 5                      Credit: 1  
Prerequisite: Sequence              4 terms

**French** 1-4 present the language and the cultures of the French speaking nations on five continents. The central experience is the practice of the four major skills: listening, speaking, reading, and writing. A major goal is to develop an interest in the study of language as a life-long personal practice.

Periods/week: 5                      Credit: 1  
Prerequisite: Sequence              4 terms

**Spanish** 1-4 is a progressive development in the mastery of Hispanic language and culture. The courses stress fluency in reading and conversation. The student increases knowledge of the history and customs of Spanish-speaking countries.

Periods/week: 5                      Credit: 1

Prerequisite: Sequence    4 terms

**German** study is at the beginning, intermediate, and advanced levels. The language and culture of German speaking societies are studied. Reading and speaking skills are emphasized with special stress on comprehension and fluency.

Periods/week: 5                      Credit: 1

Prerequisite: Sequence    4 terms

**Japanese and Russian** are for students dedicated to the mastery of a difficult language. Both languages are available by special arrangement with language tutors who usually teach on site. Sessions are held 2-3 times/week at the conversational and advanced levels.

## **Computer Competency Program**

Computer competency may be achieved by successful completion of one year (4 term credits) of computer courses, passing a competency examination, or by a combination of courses and demonstrated competency. Students are encouraged to enroll in computer classes early, preferably in ninth or tenth grade.

**Word Processing** teaches basic commands and fundamental keyboard typing techniques. Students work with Microsoft Word and Apple Works to hone skills. Students are expected to generate documents that may be used in their content classes.

Periods/week: 5                      Credit: .25

Prerequisite: None            1 term

**Spreadsheet/Data** uses Microsoft Excel and the applications of information storing and retrieving as well as appropriate mathematical and accounting applications.

Periods/week: 5                      Credit: .25

Prerequisite: None            1 term

**You and the Internet** offers extensive interaction with the Internet, learning how to appropriately search the WEB and utilize the information found there.

Specific research projects are undertaken in collaboration with content class work.

Periods/week: 5                      Credit: .25

Prerequisite: None            1 term

**Competency Examination** is a hands-on demonstration of computer competency, given as needed during each school term. The exam requires successful demonstration of skills in word processing, database, and spreadsheet, and the Internet.

## **Health and Physical Education Program**

Students are required to take one course in health and to participate in planned physical activities during the school year. Students may earn credit from activities outside of school. Some of these might include tennis, swimming, weightlifting, biking, skiing, karate classes, bowling, and running.

**Health Issues for the Young Adult** is a study of the many issues relevant to young adults in a contemporary society. Issues include human sexuality with an emphasis on contraception and abstinence; alcohol and drug addiction; sexually transmitted diseases; and drug use. Research paper required

Periods/week: 5                      Credit: .25

Prerequisite: None            1 term

**Physical Education** classes are held in nearby community indoor facilities or in Schenley Park as weather permits. Classes are co-educational and include, volleyball, walking, softball, running, Frisbee, tennis, bowling, basketball, and kickball. Evaluation is based upon full participation in all activities

## **Elective Courses**

Students will need to successfully complete four years (16 term credits) of electives to fulfill graduation requirements. Students choose extra courses from core programs as well as from these elective selections to meet this need.

**Study Skills** prepares students to deal effectively with the increasing demands of high school courses. Areas of concentration include time management, speed reading, study habits, textbook reading, note-taking methods, memory, vocabulary development, and test-taking strategies.

Periods/week: 5                      Credit: .25 Prerequisite: None                      1 term

**Cooking** develops basic cooking skills and introduces elements of safety in food preparations and in handling kitchen appliances. The course fosters health conscious eating habits. Students design menus, prepare meals, and serve their creations, often sharing with the whole school.

Periods/week: 5                      Credit: .25  
Prerequisite: None                      1 term

**Chess** players of all levels welcome! Learn the rules of play or develop your skills and strategy.

Periods/week: 5                      Credit: .25 Prerequisite: None                      1 term

**Orienteering** teaches competence with topographic and other kinds of maps and use of the compass. Field experiences put skills to practice. This outdoor class is not offered in Winter months.

Periods/week: 5                      Credit: .25  
Prerequisite: None                      1 term

**Mind and Body** promotes physical and mental health. Time is devoted to information and techniques that increase awareness and development of skills for self-defense and protection. Students take responsibility for their own safety and employ techniques to predict and avoid violent situations. Students practice basic techniques from a variety of martial arts. The class studies Yoga techniques to utilize positive self-concept and relaxation.

Periods/week: 5                      Credit: .25 Prerequisite: None                      1 term

**Investigations in Forensic Science** observes, evaluates, and replicates the techniques used in interpreting evidence collected from scenes of various crimes. Students use critical thinking skills to analyze document forgeries, shoeprint impressions, and tire track impressions and ransom notes. Physical science methods are used to compare fibers and fingerprint analysis; biological investigations examine DNA, hair analysis, and dental forensics. Archaeology is used to examine skeletal remains using radio carbon testing. Requires a major project associated with a crime scene investigation.

Periods/week: 5                      Credit: .50  
Prerequisite: None                      2 term

## **Eighth Grade Academic Program**

The academic program for eighth grade provides a basic preparation for the college preparatory studies of high school. Qualified students may be scheduled for some ninth level courses as appropriate.

**English 8 (4 terms)** is reading, writing, speaking, and listening. Basic language skills are emphasized through writing practice. Reading experiences include short stories, novels, biographies, and plays. A stress is placed upon building vocabulary.

**Pre-Algebra (4 terms)** introduces algebraic topics of signed numbers, simple equations, monomials, and factoring. Focused, individual attention to the work is the benefit.

**Science 8 (4 terms)** visits each of the four disciplines of science: biology, physics, chemistry, and earth science. Hands-on activities bring concepts to life.

**World Geography (2 terms)** looks at the basic features of the earth and relationships with various cultural regions of the world. Local geography is also explored.

**Art (4 terms)** encourages the development of ideas into concrete art forms using a variety of materials.

**Astronomy (2 terms)** explores the universe. Students study the planets and the stars through a variety of activities, including field trips for star watching.