# **Thomas Jefferson High School**



# 2008-2009 Academic Handbook

West Jefferson Hills School District Jefferson Hills, Pennsylvania 15025

# ACADEMIC HANDBOOK 2008-2009

## THOMAS JEFFERSON HIGH SCHOOL

310 Old Clairton Road Jefferson Hills, Pennsylvania 15025 Phone 412-655-8610

ADMINISTRATION: GUIDANCE SERVICES:

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Associate Principal: Paul Ware Guidance Counselor: Karen Maple
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Director of Human Resources: Hamsini Rajgopal

Director of Pupil Services/Special Education: Terri Surace

School Psychologist: Marissa Reed Smith

#### **ACCREDITATION:**

Pennsylvania Department of Education

It is the policy of the West Jefferson Hills School District not to discriminate on the basis of sex, handicap, age, race, color, and national origin in its educational and vocational programs, activities, or employment as required by Title IX, Section 504 and Title VI.

For information about your rights or grievance procedures, contact the Title IX Coordinator/Section 504 Coordinator, at this telephone number: (412) 655-8450 or at this address:

West Jefferson Hills School District 835 Old Clairton Road Jefferson Hills, Pennsylvania 15025 www.wjhsd.net

## THOMAS JEFFERSON HIGH SCHOOL

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FOREWORD, MISSION STATEMENT AND VISION STATEMENTS

## **ACADEMIC HANDBOOK**

#### **FOREWORD**

This handbook is issued to help acquaint students with the subject offerings and to enable them to plan wisely the remainder of their high school careers. It is intended to provide students and parents with information about school practices and policies; to assist students in making choices consistent with the students = aptitudes and interest; to enable students to utilize their abilities; and to encourage them to make the best decisions relative to their post-high school plans.

Students and their parents are strongly urged to consult the counselors or other school officials for assistance in interpreting the available information as to aptitudes, interest and limitations; for educational and vocational information; and for help in planning subject selections. We endeavor to regard students as individuals in their own right, entitled to help and guidance in understanding themselves. Group and individual conferences will be held with all students. The program of studies is intended to meet the needs of each student, and should be planned in terms of future educational goals. Parents should feel free to telephone or call personally at the school at (412) 655-8610.

This book is updated yearly. Parents and students are encouraged to check on line annually for the updated versions at the Thomas Jefferson High School link at @wjhsd.net.

### **MISSION STATEMENT**

Students are the primary focus of the West Jefferson Hills School District where, in partnership with families and community, the mission is to educate and prepare all students to become active, contributing members of society by providing a challenging, innovative educational program guided by an exceptional staff in a safe, positive, caring environment, all of which promote excellence.

## **VISION STATEMENT**

In the West Jefferson Hills School District, we advocate for our students by providing instruction that enables them to achieve high academic standards, and by developing relationships with them, their families, and each other that create caring, safe schools where students are valued.

- Our students all achieve high academic standards.
- Our student achievement of high standards includes curricular, artistic, vocational, athletic, and extra-curricular goals.
- We coordinate curriculum across and between grade levels, programs, and buildings.
- Our students are active learners.
- We recognize documented teacher observation over time as an effective form of student assessment.

#### **VISION STATEMENT AND BELIEF STATEMENTS**

## **VISION STATEMENT (CONTINUED)**

- Our staff members are highly qualified and maintain their excellence through continued professional growth.
- We partner with higher education.
- Our district's staff members relate to students, their families, and each other in ways that convey compassion, understanding, respect, and interest.
- We honor the traditions of our past: academic, athletic, and extra-curricular.
- Our facilities are of a quality and nature that support and encourage district programs and goals.
- Our community understands and supports our district's programs and goals.
- We accept our role in the economic growth and well being of our community.

## **BELIEF STATEMENTS**

## We Believe:

- 1. The learning and the educational development of individuals are collaborative efforts involving student, family, school and community.
- 2. High expectations promote high achievement.
- 3. Individuals are responsible for their actions.
- 4. The family is a primary influence and motivator for the student.
- 5. Students are the primary focus of the school system
- 6. Everyone learns at different rates and in different ways.
- 7. All students have an equal opportunity for an education in which they are encouraged to develop their potential.
- 8. Effective learning takes place in a safe, positive and caring environment where respect for others is demonstrated.
- 9. Education involves an interdisciplinary process.
- 10. Learning involves acquiring basic academic knowledge, skills and the ability to analyze, interpret, apply, synthesize and evaluate.
- 11. Education provides skills to enable all students to participate in a lifelong process of learning in a changing world.
- 12. Quality education includes activities inside and outside of the classroom.
- 13. An effective educational program requires giving an exceptional staff a voice in the educational process and providing them with consistent and planned professional development opportunities.
- 14. Advancements in technologies impact knowledge and education.
- 15. Quality public education is essential for a thriving community and requires shared fiscal responsibility.
- 16. Effective communication among school, family, students and community is vital throughout the educational process.

#### ACADEMIC STANDARDS AND OBJECTIVES

#### **ACADEMIC STANDARDS AND OBJECTIVES**

Instruction in the high school program shall focus on the development of abilities needed to succeed in work and advanced education through planned instruction.

Curriculum and instruction in the high school program shall provide all students opportunities to develop the skills of analysis, synthesis, evaluation and problem-solving, and information literacy.

Planned instruction in the following areas shall be provided to every student in the high school program. Planned instruction may be provided as a separate course or as an instructional unit within a course or other interdisciplinary instructional activity.

- (1) Students will study language arts, integrating reading, writing, listening, speaking, literature and grammar.
- (2) Students will study mathematics, including algebra, geometry, probability, statistics, logical reasoning, and discrete math.
- (3) Students will study science and technology, including participation in hands-on experiments and at least one laboratory science chosen from life sciences, earth and space sciences, chemical sciences, physical sciences and agricultural science.
- (4) Students will study social studies to include civics and government, economics, geography and history, the history and cultures of the United States, the Commonwealth and the world.
- (5) Students will study environment and ecology, including scientific, social, political and economic aspects of ecology.
  - (6) Students will study the arts, including art, music, dance, theater and humanities.
- (7) Students will study the use of applications of microcomputers and software, including word processing, database, spreadsheets and telecommunications; and information skills, including access to traditional and electronic information sources, computer use and research.
- (8) Students will study health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts, motor skill development, safety in physical activity settings, and the prevention of alcohol, chemical and tobacco abuse.
- (9) Students will study family and consumer science, including principles of consumer behavior and basic knowledge of child health and childcare skills.

The following planned instruction shall be made available to every student in the high school program:

- (1) Vocational-technical education
- (2) Career education and work
- (3) World languages
- (4) Technology education, incorporating technological problem-solving and the impacts of technology on individuals and society
- (5) College-level advanced placement courses

## SUPPORTIVE PROGRAMS

## INTERMEDIATE UNIT EMOTIONAL SUPPORT RESOURCE ROOM PROGRAM

The Allegheny Intermediate Unit's Social and Emotional Support Program is located within the regular educational facilities provided by the West Jefferson Hills School District. Social and academic objectives form the curriculum and dictate the educational strategies that are employed during the course of a student's enrollment. Integration within the academic mainstream is provided when the student demonstrates the necessary prerequisite academic and social skills. The goal of the Intermediate Unit Program is to help the student to overcome the social and emotional difficulties within the school and to assist the student academically so that the re-entry to regular education can be achieved.

## INTERMEDIATE UNIT LEARNING SUPPORT RESOURCE ROOM PROGRAM

The Learning Disabilities Program, under the auspices of the Allegheny Intermediate Unit, has been incorporated with Thomas Jefferson High School's regular education program. It is an individualized program directed at meeting the special needs of students with learning disabilities in the academic areas. Reinforcement is given in the areas of Reading, Spelling, Math and English with backup in all other content areas. The long-range goal of the Learning Disabilities Program is to enable the student to function independently in the mainstream to the highest level possible.

## **GIFTED PROGRAM**

Thomas Jefferson High School offers an adapted regular curriculum that provides accelerated, honors and advanced placement courses that meet the needs of the "gifted" student. This program is supplemented by the opportunity for students to participate in enrichment activities during the school day. Some of these activities and/or programs include: Calcusolve, Apprenticeships, The Pennsylvania Governor=s School, Citizen Bee, KDKA=s Hometown High Q, and various other academic competitions.

#### ALTERNATIVE HIGH SCHOOL PROGRAM

Students in the regular education program who are not meeting success academically and/or socially will have an opportunity, with administrator, counselor and parent approval, to explore accredited alternative high school programs that are school district-approved.

## **EDUCATIONAL SUPPORT PROGRAM**

In response to Pennsylvania State School Law ACT 211, the Educational Support Program at Thomas Jefferson High School is mandated to identify and to refer students who are exhibiting behaviors that might put their academic success at risk. Through the Educational Support Team's efforts, and with parental permission and involvement, the students who are referred will be redirected and supported in his/her academic efforts to make the improvements needed to actualize his/her potential to the fullest extent. In order to complement the efforts of the Educational Support Program Team, a licensed school based social worker is available to the student population. The social worker can meet with students individually or in a group to assist them in working through difficult situations. These situations can be personal, social, emotional, or academic.

## **GUIDANCE SERVICES**

The Guidance Counselors are to assist you in your endeavors throughout high school. functions of the counselors will be unique to each student=s needs. However, the primary goal of counseling and guidance at Thomas Jefferson will be to meet the developmental needs of students in the educational system for the realization of their maximum potential. Parents are encouraged to make appointments when necessary to speak with the counselor.

The functions of the counselors are varied. The following identify some of the services/activities that are rendered:

- Provide individual counseling to students
- 2. Consult with school staff regarding students
- Implement a system of student records
- 4. Establish orientation activities
- 5. Organize informational resources to provide a basis for students to make educational/vocational decisions
- Administer and interpret the testing program Serve as liaison with community agencies
- 8. Provide assistance for educational and vocational placement and planning
- 9. Serve as a liaison to teachers for students and parents
- 10. Disseminate information pertinent to student=s career planning (i.e., open house programs, scholarships, etc.)

## CAREER CENTER

Students in all grade levels are invited to visit the Career Center located in the Guidance Office. This is a resource center designed to assist the students in their career decision making. Students will find a variety of reference materials:

- College and trade school directories
- Reference books or scholarships
- Study materials on the PSAT and SAT
- A computer that is programmed to print information on two-year and four-year college, trade schools, financial aid, career interest survey and Internet access.

Students who are interested in visiting the Career Center can do so during their homeroom, study halls, lunch or after school. Passes are available before homeroom in the Guidance Office from counselors or guidance secretaries.

## COLLEGE PRESENTATIONS

- Throughout the year counselors arrange college/university/military presentations to be held in the career center.
- Check daily announcements via <u>www.wjhsd.net</u> to keep track of college/university/military presentations.
- Juniors and seniors who are interested in meeting representatives need to receive a pass from the guidance office no later than homeroom of given day.
- Students must report to their period class and acquire a teacher signature before presenting the pass in the guidance office for the presentation.

## **GUIDANCE SERVICES (continued)**

## **MANDATORY TESTING**

Fall, Sophomore Year	P.L.A.N.	*Practice test for ACT
Spring, Junior Year	P.S.S.A Writing–Science–Reading –Social Studies–Math	*Assesses achievement levels in areas of Writing, Reading, Math, Science and Social Studies
Fall, Senior Year	P.S.S.A. Retake	*Any student who does not meet proficiency their Junior year on the P.S.S.A. <u>MUST</u> take this test

### RECOMMENDED TIMETABLE FOR COLLEGE ADMISSION TESTING

Recognizing that more than 80% of the student body chooses to pursue 2 year and/or 4 year colleges upon graduation from Thomas Jefferson High School, the following timetable for college admissions testing is being provided to assist students and parents.

Fall, Junior Year	P.S.A.T./N.M.S.Q.T.	*Practice Test for SAT  *Designed for Juniors (can be taken by Sophomores who are accelerated in Math and English courses)  *Assesses aptitude in area of verbal, writing and numerical reasoning and writing skills  *Provides academically talented juniors an opportunity to compete for scholarship awards offered by National Merit Scholarship Corporation if taken in their junior year
Spring, Junior Year	S.A.T.	*Assesses aptitude in area of verbal, writing and numerical reasoning *Can be taken multiple times
Spring, Junior Year	A.C.T.	*Assesses achievement levels in areas of Math, English, Reading and Science Reasoning *Can be taken multiple times

- The former SAT Verbal section will become the SAT Critical Reading section. The SAT will no longer include analogies. Instead, short reading sections will be added to existing long reading passages. Sentence completion items will remain in this section.
- A new SAT Writing section will be added. This section will contain multiple-choice grammar questions as well as a written essay.
- The SAT Math section will be expanded to cover three years of high school math. Instead of just covering concepts from Geometry and Algebra I, the new SAT Math section will also contain concepts from Algebra II. In addition, quantitative comparisons will be eliminated.

## SOCIAL WORKER

West Jefferson Hills School District has secured the services of an Education, Prevention, Intervention Consultant. High School is a time of both academic preparation and significant developmental growth. When a teenager struggles with life issues, their ability to focus on school becomes jaded. In the office of the social worker, students are given the opportunity to reflect on conflicts stemming from home and personal struggles with their own emotions. For the 20 to 40 minutes they are there, they are able to gain a sense of control, even if temporary, so they can return to daily instruction with a clearer mind. If further assistance is needed, the student and their families are linked with the appropriate resources in the community. The focus of the social worker is to provide accurate information regarding the effects of student choices on topics such as drugs and alcohol and peer relations, encourage alternative choices, and increase their self-confidence to follow-through. Goals such as, balancing emotion with academic expectations, developing positive personal relationships, improving communication skills, and facilitating family interventions are developed and monitored as they are applied to life and school expectations. Grief counseling and supportive services are also provided.

Referrals to the social worker are primarily made by, but not limited to, the Student Assistance Team or Guidance Staff. Parents or the students themselves may also make referrals. If a student wishes to meet with the social worker on an on-going basis, a permission form must be signed and returned by that student's parent or guardian. This permission form will be held on file as long as that student remains at Thomas Jefferson High School.

Please be assured that any information that is shared with the social worker will be completely confidential unless the information discussed warrants disclosure. The guidelines of the "Mandated Reporter" will be followed.

ORGANIZATION AND GRADUATION REQUIREMENTS

## ORGANIZATION OF THE WEST JEFFERSON HILLS SCHOOL DISTRICT

The West Jefferson Hills School District is organized on a K-5-3-4 plan. This plan houses the first five grades in three elementary buildings: Jefferson, Gill Hall and McClellan. Grades six through eight are housed in the Pleasant Hills Middle School. Grades nine through twelve comprise Thomas Jefferson High School.

## GRADUATION REQUIREMENTS GRADES 9 THROUGH 12

The following requirements apply to all students. Credits are totaled for grades 9 to 12:

CLASS OF		2009	2010	2011	2012
Language Arts (English)	Credits	4	4	4	4
*Social Studies	Credits	4	4	4	4
Science	Credits	3	3	3	3
**Mathematics	Credits	3	3	3	3
Computers	Credits	.5	.5	.5	.5
Physical Education	Credits	1	1	1	1
Health	Credits	.25	.25	.25	.25
*Arts and/or Humanities	Credits	1	1	1	1
Electives	Credits	5.50	5.50	5.50	5.50
Graduation Project	Credits	.25	.25	.25	.25
TOTAL CREDITS		22.50	22.50	22.50	22.50

In order to graduate with your class you <u>must</u> earn all course-credits needed to fulfill your graduation requirements by the end of your senior year. Course-credit failures earned in grades 9, 10 and 11 <u>must</u> be made up the summer between your junior and senior years; one may not project the use of the summer after graduation for this purpose. The summer after graduation can only be used for course/credit failures (up to one and one half) lost during the senior year.

<sup>\*</sup>Two (2) arts/humanities credits are required for graduation. One (1) credit in arts/humanities will be met by social studies in grade 12 and one (1) credit must be selected as an elective.

<sup>\*\*</sup>With counselor recommendation and administrative approval. Accounting can count as one of the three math credits for graduation for students who have successfully completed Integrated I with a "C" or better average.

#### **GRADUATION REQUIREMENTS**

## **GRADUATION REQUIREMENTS (continued)**

In addition to the courses/credits outlined here and the graduation project all students at Thomas Jefferson High School will also need to demonstrate proficiency in Reading, Writing and Mathematics as defined by the Pennsylvania Academic Standards included in Chapter 4 of the Pennsylvania School Code on either the P.S.S.A., administered in grade 11 or 12 or on local assessments aligned with academic standards in order to graduate. The method used to determine proficiency will initiate with the P.S.S.A in grade 11. The school district will provide extended learning opportunities for students who do participate in the P.S.S.A. or who do not reach proficiency levels and it will provide opportunities for these students to participate in the P.S.S.A. retest and/or an appropriate local assessment to assure proficiency has been reached in Reading, Math and/or Writing prior to their graduation. In preparation for the P.S.S.A. sophomores will be administered an achievement test to assess their levels of achievement based on stated objectives/standards with the expressed purpose of redirecting them to improve performance.

## **GRADUATION PROJECT**

As a mandated requirement adopted by the Board of Education of the State of Pennsylvania, all students must complete an approved culminating project that demonstrates application, analysis, synthesis, and evaluation of researched information. Students must communicate, present, and exhibit significant knowledge and understanding of this project. The presentation must also include a technology component approved by their graduation project teacher. In order to monitor and mentor students through their project, a .25 credit course will be taken by students in their junior year for one semester. The project portion will be completed during the first nine weeks of the semester, followed by a presentation in the second nine weeks of the semester. The graduation project facilitator will follow a planned course of study to guide students through the process. This course will be graded pass/fail based on the successful completion of the graduation project. The evaluation committee may include the project facilitator along with teachers, a counselor, and/or administrators. The project must be completed in the semester that the course was taken. Students who fail the course/project in their junior year will be rescheduled for the course as seniors.

## **HIGH SCHOOL RETRIEVAL PROGRAMS**

Students who choose to withdraw from Thomas Jefferson High School prior to graduating when they are of age, may request to enroll in an approved high school retrieval program to earn their diploma. The high school principal, the withdrawing student and their parents/guardians will sign a contract specifying the criteria of eligibility for this type of program. Students who choose to pursue and successfully earn their GED *will not* be awarded a Thomas Jefferson High School diploma.

**GRADUATION REQUIREMENTS** 

### ALTERNATIVE OPTIONS FOR EARNING CREDIT AND/OR MEETING SEQUENTIAL **COURSE REQUIREMENTS**

Α. Alternative options for earning credit must relate directly to the achievement of Academic Standards. These options include:

Independent Study. Students may demonstrate achievement of Academic Standards as a result of participation in independent study courses approved in advance by the principal for elective credit only. Credit earned through independent study will be graded on the regular letter grade scale and will be computed in the student=s quality point average unless otherwise directed by the principal.

<u>Higher Education Courses</u>. The follow Standards in higher education courses: 2. The following provisions apply to achieving Academic

High school students enrolled in a dual enrollment program from an accredited a. institution of higher education may, with the prior approval of the high school principal, be permitted to use the dual enrollment course to satisfy prerequisite requirements and/or the computer course requirements for graduation. Although high school credit will not be awarded – the college transcript will be attached to the high school transcript provided that:

The course is taught at the college level and is recognized by the higher education institution as a credit-bearing course.

- The student satisfactorily completes the requirements of the college course.
- A transcript of the completed college course is submitted by the higher education institution to the Guidance office.
- b. Students may also leave high school prior to their senior year to attend an accredited institution of higher education on a full-time basis under existing procedures and policies established by the Board of School Directors. The high school diploma will be awarded to these students upon successful completion of the requirements set forth in the policy. (See page 10)
- <u>Education Experiences</u>. Students may demonstrate achievement of Academic Standards and earn elective credit through completion of courses in <u>accredited educational programs</u> 3. outside the school which have a planned course format that meets Chapter 4 regulations and is approved by the principal in advance.

Credits earned in educational programs approved by the principal which do not follow Chapter 4 regulations will be graded on a APASS/FAIL@ basis and will not be computed in the student=s quality point average.

4. Assessment. Students may demonstrate achievement of Academic Standard in a course by successful completion of an assessment (e.g., written or oral exams, demonstration of skills, projects) which has been prepared and administered by school personnel. Credit will be awarded and students will be permitted to advance in sequential courses.

Credits earned through completion of an approved assessment will be graded on a APASS/FAIL@ basis and will not be computed in the student=s quality point average. The assessment option is available only for courses that have been pre-approved by the subject area coordinator and high school principal.

- В. When a sequential course with state pre-requisite is repeated because of a AD@ grade, the repeated course does not receive a credit toward graduation. However, the grade earned will count toward the QPA.
- Integrated II completed with a "C" or better in eighth grade will count toward the credit total C. required for graduation. However, the course will not be considered in the student=s QPA and will not be counted as one of the three math credits required for graduation. This credit will count as an elective credit.

EARLY RELEASE FROM HIGH SCHOOL FOR FRESHMAN YEAR COLLEGE PROGRAM

## EARLY RELEASE FROM HIGH SCHOOL FOR FRESHMAN YEAR COLLEGE PROGRAM

RESOLUTION PROPOSED FOR ADOPTION BY THE SCHOOL BOARD, PROVIDING FOR ISSUANCE OF A DIPLOMA CERTIFYING HIGH SCHOOL GRADUATION FOR STUDENTS LEAVING HIGH SCHOOL AT THE CLOSE OF THE JUNIOR YEAR IN ORDER TO ENROLL ON AN EARLY ADMISSIONS BASIS IN AN ACCREDITED COLLEGE OR UNIVERSITY.

**WHEREAS**, the Department of Public Instruction, in a decision announced by Superintendent Charles H. Boehm in the Newsletter of October 1960, has approved the granting of diplomas by local high schools to former students who withdrew at the close of the junior year under an early admissions program in a college or university.

AND WHEREAS, certain qualified present and future students of Thomas Jefferson High School may wish to pursue such a program at an institution offering early admissions opportunities: NOW, THEREFORE, BE IT RESOLVED, that a diploma certifying high school graduation will

be issued to these students upon the satisfactory completion of the first year of college, subject to compliances with the following regulations:

- 1. Matriculation in and completion of the college freshman year shall have been accomplished at an institution fully accredited by the appropriate regional accrediting association.
- 2. Satisfactory completion of the freshman year shall be interpreted to mean that the student has earned full sophomore status at its completion.
- 3. All records and accounts for any student desiring to receive a high school diploma under the terms of this resolution shall be in that condition which would have permitted his/her graduation and he/she remained in regular attendance through the senior year.
- 4. Application for the diploma shall be filed with the high school principal by the student not later than <u>Feb.1</u> of the year in which he/she is enrolled as a college freshman
- 5. Granting of the diploma shall take place at/or following the regular graduation exercises for the class in which the student would have been a member.

## WRITTEN PERMISSION FROM THE PARENTS FOR PERMISSION TO ATTEND COLLEGE MUST BE ON FILE.

**NOTE:** Students will only be recommended for this early admission program if:

- (1) Their high school transcript contains no grade lower than a B; or
- (2) Their QPA at the end of their junior year is not less than 3.0.

INFORMATION AND POLICIES

## **GRADING SYSTEM AND WEIGHTED SCALE**

The marking system in Thomas Jefferson High School represents five levels of achievement. These levels indicate a student=s achievement as compared with that of others studying the same subject matter.

## **QUALITY POINTS**

See course description for unit of credit

COURSE CREDIT	<u>GRADES</u>	<u>POINTS</u>
1	A - Superior attainment (89.95 – 100%)	4
1	B - Above average (79.95 - 89.94%)	3
1	C – Average (69.95 - 79.94%)	2
1	D - Below average (59.95 - 69.94%)	1
1	F – Failing (0 - 59.94%)	0
<b>COURSE CREDIT</b>	<u>GRADES</u>	<b>POINTS</b>
.5	A - Superior attainment (89.95 – 100%)	2
.5	B - Above average (79.95 - 89.94%)	1.5
.5	C – Average (69.95 - 79.94%)	1
.5	D - Below average (59.95 - 69.94%)	.50
5	F – Failing (0 - 59.94%)	0
COURSE CREDIT	<u>GRADES</u>	<b>POINTS</b>
.25	A - Superior attainment (89.95 – 100%)	1
.25	B - Above average (79.95 - 89.94%)	.75
.25	C – Average (69.95 - 79.94%)	.50
.25	D - Below average (59.95 - 69.94%)	.25
.25	F – Failing (0 - 59.94%)	0

### **WEIGHTED SCALE**

In evaluating student performance in courses that differ substantially in academic challenge, a weighted grading scale has been adopted by the WJH Board of Directors. The following categories, courses and quality points identify the system adopted in November 1991.

### **ADVANCED PLACEMENT COURSES**

Advanced Placement (AP) Courses are first year college level courses that follow the respective College Entrance Examination Board (CEEB) curriculum and prepare students for the AP test in the particular subject area. On the basis of AP test results, students may earn college credit at colleges and universities that participate in this program. Students must take an AP exam in order to earn the extra quality point. The cost of the exam will be the responsibility of the student.

INFORMATION AND POLICIES

## GRADING SYSTEM AND WEIGHTED SCALE (continued)

#### AP

AP English 3	AP Biology
AP Enğlish 4	AP Chemistry
AP U.Š. History	AP Physics <sup>*</sup>
AP European History	AP Computer Science
AP Calculus	AP Studio Art

### AP QUALITY POINT EQUIVALENTS

Α	(89.95 -100%)	5
В	(79.95 - 89.94%)	4
С	(69.95 - 79.94%)	3
D	(59.95 - 69.94%)	1
F	(0 - 59.94%)	0

The AP quality point equivalents are added when class rank is computed only if the course has been completed. When a student accepts placement in one or more of these classes, he/she is expected to remain in the class at least through the end of the first semester. Deviation from this is subject to the approval of the subject teacher, student=s counselor, parent and supported by the principal.

#### **HONORS COURSES**

Honors courses are challenging at the higher levels of cognitive orientation and prepare students for doing extensive college level work in the subject area. These courses deal in greater depth and include additional topics of study beyond the regular level. Course content is rigorous and requires higher than average reading skills. In addition to daily homework which goes beyond basic skills, independent work involving research and analyses is required. Honors courses should lead to an AP course or prepare for an area tested by a CEEB achievement test.

#### **HONORS**

Honors English 2	Honors French 4
Honors Pre-Calculus/Trigonometry	Honors Latin 4
Honors Spanish 4	

## HONORS QUALITY POINT EQUIVALENTS

Α	(89.95 - 100%)	4.5
В	(79.95 - 89.94%)	3.5
С	(69.95 - 79.94%)	2.5
D	(59.95 - 69.94%)	1.0
F	(0 - 59.94%)	0

#### **REGULAR COURSES**

Regular courses have some material which is challenging at the higher cognitive levels and prepares students to do college level work and/or satisfies college entrance requirements. These courses maintain a balance between the development of basic skills and the application of principles. Course content has material which requires reading ability and comprehension in the average range. Daily homework will reinforce concepts developed in class and additional independent work may be



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required.

#### **REGULAR COURSES**

#### **REGULAR**

English 1, 2, 3, 4
Public Speaking
Group Communications
Theatre Orientation
Performing Arts
Written Expression
Creative Writing
Journalism
Mass Media
Graduation Project
PSSA Preparation/Reading

U. S History II, III, IV Global Studies I, II, III Government Economics Psychology Sociology Law

Integrated I
Integrated IA
Integrated IB
Integrated II
Integrated IIA
Integrated IIB
Integrated III
Pre-Calculus/Trigonometry
Calculus
PSSA Preparation/Math

Accounting I
Accounting II
Business and Personal Finance
Exploratory Business
Marketing & Management
Retail Management

Digital Design Intro to Java Programming Software Applications Visual Basic I Visual Basic II

Applied French 1, 2 Academic French 1, 2, 3 Applied Spanish 1, 2 Academic Spanish 1, 2, 3 Academic Latin 1, 2, 3 Physical Science
Applied Biology
Academic Biology
Environmental Science
Academic Chemistry
Applied Chemistry
Academic Physics
Applied Physics
Anatomy and Physiology

Fabric, Fashion and Design Level I, II, III Fabric, Fashion and Design Level II, III Foods and Nutrition Interior Design Child Development (offered 1<sup>st</sup> semester only) Child Development I (offered 2<sup>nd</sup> semester only) Adult Living

Introduction to Family and Consumer Science

Technology Systems
Innovation and Invention
Construction Technology
Computer Aided Drafting
Pre-Engineering Applications
Automation
Design Engineering
Engineering Applications

### Art:

General Art
Drawing
Painting
Photography/Video Production
Basic Graphic Design

## Crafts:

Ceramic Studio Sculpture Studio Metal Working Studio Mixed Media Arts

Music Theory and History Varsity Choir Concert Choir Marching/Symphonic Wind Ensemble Marching/Concert Band Majorettes Color Guard

Physical Education 9, 10, 11, 12 Health 10

Steel Center Vocational/Technical Program

INFORMATION AND POLICIES

## REGULAR QUALITY POINT EQUIVALENTS

Α	(89.95 - 100%)	4
В	(79.95 - 89.94%)	3
С	(69.95 - 79.94%)	2
D	(59.95 - 69.94%)	1
F	(0-59.94%)	0

## **CLASS RANK**

Class rank is determined at the end of grades 11 and 12 by ranking the students in order according to quality point averages.

The class rank is based on a system of quality point values in which any AA@ grade earns four points; a AB@, three; a AC@, two; a AD@, one; and an AF@, zero points. Every subject (excluding PSSA Preparation/Reading, PSSA Preparation/Math, Majorettes, Graduation Project and Color Guards which are not used in calculating rank) regardless of title or department is given equal rank. There is one exception: In Honors and Advanced Placement courses additional quality points are earned. The number of quality points assigned to each course is based on the final grade received in the course and whether it is a one credit course or a half-credit course. For instance, a AB@ in a one-half credit course is worth 1.5 quality points. The student=s quality point average is then calculated by totaling the quality points of all the subjects taken and dividing by the number of credits taken. The rank is then completed by listing the students from top to bottom in order of quality point average.

All ties are resolved by assigning the same number to all those tied with the same number of quality points or credits taken. If a course is repeated, both grades and credits are figured in computing class rank. Only one credit is allowed toward graduation requirement. Students who are repeating courses to improve grade performance will also receive quality points for the letter grade earned. Quality points will also be given for grades in courses that are taken in summer school that enable a student to be accelerated in sequential subjects. If a course is failed, no value is added to the QPA but the credit value for the course is added to the total credits used to compute class rank.

CLASS RANK AND QPA CANNOT BE GIVEN OVER THE PHONE.

## HONOR ROLL

An Honor Roll will be compiled at the end of each nine-week period. Honor Roll status is based upon a student=s earned quality point average as follows:

3.000 - 3.399 - Honors 3.400 and above - High Honors

The following courses which meet less than five (5) times per week do not qualify for honor roll status: Majorettes, Color Guard, Graduation Project, PSSA Preparation/Reading and PSSA Preparation/Math. In addition, students with an AF@, AD@ or AI@ (incomplete) are not eligible for honor roll status.

**COMPUTE QPA** 

## **EXAMPLE OF THE METHOD USED TO COMPUTE QPA**

Student A earned the following number of credits and quality points in each of the listed grades.

GRADE 9	GRADE	CREDIT	Q.P.s
English 1-1 Integrated I Global Studies I Biology Physical Education Academic Spanish 1 Varsity Band U.S. History	B D C B C B A B	1.000 1.000 .500 1.000 .250 1.000 1.000 .500 6.250	3.000 1.000 1.000 3.000 .500 3.000 4.000 <u>1.500</u> 17.000

GRADE 9 QPA = 
$$\frac{Q.P.s}{Credits - QPA}$$
 =  $\frac{17.000}{6.250}$  = 2.720

GRADE 10	<u>GRADE</u>	CREDIT	<u>Q.P.s</u>
English 2 - Honors Integrated II Government Academic Chemistry Physical Education Academic Spanish 2 U.S. History	C C D B D C C	1.000 1.000 .500 1.000 .250 1.000 <u>.500</u> 5.250	2.500 2.000 .500 3.000 .250 2.000 <u>1.000</u> 11.250

GRADE 10 QPA = 
$$\frac{Q.P.s}{Credits - QPA}$$
 =  $\frac{11.250}{5.250}$  = 2.143

## **CUMULATIVE QPA:**

<u>GRADE</u>	<u>CREDITS - QPA</u>	<u>Q.P.s</u>
9	6.250	17.000
10	<u>5.250</u> 11.500	11.250 28.250
	11.500	ZU.ZUU

**CUMULATIVE QPA** = 
$$28.250 = 2.457$$
  $11.500$ 

# THOMAS JEFFERSON HIGH SCHOOL

COMPUTE QPA

## **EXAMPLE OF THE METHOD USED TO COMPUTE QPA** - cont=d.

Student B earned the following number of credits and quality points in each of the listed grades.

GRADE 9	<u>GRADE</u>	CREDIT	Q.P.s
English 1-1	В	1.000	3.000
Integrated I	C	1.000	2.000
Applied Biology Global Studies I	B D	1.000 .500	3.000 .500
U.S. History II	Č	.500	1.000
General Art	Α	.500	2.000
Software Applications	В	.500	1.500
Concert Choir Physical Education	A	1.000 <u>.250</u>	4.000
i fiyalcai Eddcation	D	<u>.250</u> 6.250	<u>.250</u> 15.250

GRADE 9 QPA = 
$$\frac{Q.P.s}{Credits - QPA}$$
 =  $\frac{15.250}{6.250}$  = 2.440

GRADE 10	<u>GRADE</u>	CREDIT	Q.P.s
English 2-3	C	1.000	2.000
Integrated II	Α	1.000	4.000
Applied Chemistry	С	1.000	2.000
Government	D	.500	.500
Economics	С	.500	1.000
Concert Choir	Α	1.000	4.000
Ceramics	В	.500	1.500
Performing Arts	Α	.500	2.000
Physical Education	С	<u>.250</u>	<u>.500</u>
,		6.250	17.500

GRADE 10 QPA = 
$$\frac{Q.P.s}{Credits - QPA} = \frac{17.500}{6.250} = 2.800$$

## **CUMULATIVE QPA:**

<u>Q.P.s</u>	CREDITS - QPA	<u>GRADE</u>
15.250 17.500	6.250 6.250	9 10
32.750	12.500	10

**CUMULATIVE QPA** = 
$$\frac{32.75}{12.50}$$
 = 2.620

HOMEWORK - HOMEBOUND

## HOMEWORK HOTLINE

A homework hotline service is available to high school students. Using this service, students who are absent from school will be able to obtain their homework assignments from home.

Each teacher will provide his/her students a 4-digit homework hotline extension. His/her student will compile a list of hotline numbers for their home reference. Teacher hotline mailboxes are informational only with teachers giving assignments via a prerecorded message.

Students and parents who want to receive homework assignments should proceed as follows using a touch tone telephone:

- 1. Dial the high school telephone number (412-655-8610) after 3:30 P.M.
- 2. When answered by the automated attendant, enter the 4-digit hotline extension associated with the teacher(s) for whom they want homework assignments.
- 3. To access other teachers, simply enter their 4-digit hotline extension.
- 4. Homework hotline extensions can also be found at www.wihsd.net.

## HOMEBOUND INSTRUCTION

Students who anticipate being absent from classes due to <u>illness for a duration of ten school</u> days or <u>longer</u> should have their parents contact their counselor. Homebound instruction is appropriate for extended absences and can only be considered by the school upon receipt of a physician=s written recommendation.

## **LETTERGRADE**

LetterGrade is a student information system. This program will enable our schools to easily post grades, assignments, attendance, and other relevant student data on-line and let parents have immediate access to this information.

LetterGrade software is designed to provide an opportunity for parents for improved communication with the school administration, counselors, and teachers. A parent/guardian will be able to inquire about his or her child's school assignments, upcoming events, grades, attendance, and course selections. A link to this Url is listed on the <a href="www.wjhsd.net">www.wjhsd.net</a> website. Computer access is available at the local libraries or any Internet access site.

Features and benefits:

- Fully integrated web site based grade book, on line community, and student information system.
- Improved productivity for staff, teachers, administrators, and clerical staff.
- Students and parents access to upcoming homework assignments, preparation for exams, and timely grade checks. Access to information anytime.
- Current grade averages are automatically calculated and available for progress reports.
- On-line attendance (homeroom and period), which updates student information system for state reporting requirements.
- Future ability for parents to communicate with faculty and administrators via email.

SCHEDULE CHANGE PROCEDURE

## SCHEDULE CHANGE PROCEDURE

Ordinarily, students are expected to retain the program they have selected with the advice and consent of their parents. There are, however, circumstances which arise which necessitate a change in the course elected. When valid reasons are presented and the parents request a change, adjustments may be made whenever possible.

## Valid Reasons for a Change

- 1.
- 2. 3.
- Scheduling error
  Summer school work completed
  Insufficient credit for graduation
  Curriculum program change, i.e., academic curriculum to applied curriculum 4.
- 5. Previous Failure - Repeated class taught by a teacher with whom the student previously failed and when another instructor is available
  Placed in wrong level of a course and test scores indicate student is misplaced
- 6.
- 7. Evaluation of transfer students
- 8. Requests regarding not fulfilling academic requirements will be reviewed by teaching staff and the administration when necessary

## **Invalid Reasons for a Change**

- 1. Poor work in class (not based on misplacement)
- After-school employment 2.
- 3. Unjustified request for teacher change

#### **Procedures**

The counselor will make corrections in schedule errors without additional approval during the first week of the school year. These changes will be made through the use of Schedule Correction Sheets.

**After the first week**, all requests for schedule changes must be done in the following manner:

- Student must obtain a Schedule Change Request Form from the Guidance Office. 1.
- Parents/guardians must sign the form.
- 2. 3. The signed form must be presented to the teacher for his/her signature then to the counselor at the time a request is made for a change.
- 4. The counselor will review the request with the student=s current and receiving teachers and the student=s grade level principal to determine the following:
  - Should the student be permitted to drop the course? a.
  - How will the student=s Permanent Record Card and report card be b. marked according to the course adjustment/withdrawal policy?
  - Should a class transfer be made? C.

The counselor will contact the student regarding the decision. Should the occasion arise when it is necessary to make a reassignment in a student=s schedule, the student=s report card will show only the reassigned subject and grade earned. The grades earned in the original course will be transferred to the new teacher and they will become part of the student=s final average for the new course.

- The counselor will complete all paperwork and distribute it to the proper places. 5.
- The decision will be final.

SCHEDULE CHANGE PROCEDURE

## NOTES:

## FOR A FULL YEAR AND FALL SEMESTER COURSE:\*

A student withdrawal from a class, <u>without penalty to academic standing or QPA, MUST</u> take place within the first fifteen days of the first nine-week period. At this time no course will be added to replace course dropped. The student=s second semester schedule will be adjusted if needed to maintain the full credit requirement minimum.

## FOR A SPRING SEMESTER COURSE:\*

A second semester course withdrawal <u>without penalty to academic standing or QPA MUST</u> occur within the first fifteen days of the third quarter, <u>provided that the minimum requirements of five credits carried annually can be maintained.</u>

\*Course adjustments made after the end of the first fifteen days will fall under Category III or IV of the Course Adjustment/Withdrawal Policy.



## **THOMAS JEFFERSON HIGH SCHOOL**

SCHEDULE CHANGE REQUEST FORM (SAMPLE)

# THOMAS JEFFERSON HIGH SCHOOL Schedule Change Request Form (SAMPLE)

Directions: Please complete the information below. A parent or guardian will have to sign and give a current phone number. Return this form to your guidance counselor.

Student=s Code No
Date
Date

COURSE ADJUSTMENT/WITHDRAWAL POLICY

## COURSE ADJUSTMENT/WITHDRAWAL POLICY

I. Course adjustments that are considered to be track changes involve only the following subject areas:

English 1, 2, 3 and 4
Math taken in grade 9, or a required math for a student in grade 10, 11 or 12

These course adjustments will be based on below average or failing grades with supportive test data. They can be teacher and/or counselor initiated and must have administrative approval. These adjustments are to be made by the end of the first semester unless otherwise administratively approved. Grades earned in the original subject are to be averaged with grades earned in reassigned subject in determining the year-end grade.\*

II. Course adjustments from Academic to Applied Sciences as outlined below are permitted if the student has a grade percentage of 65% or below with supporting test data and faculty approval. The adjustment will be made during the first nine weeks only and can be initiated by the teacher and/or the student. The adjustment must also meet with teacher, counselor, parent and administrative approval. Grades earned in the original subject are to be averaged with grades earned in reassigned subject in determining the year-end grade.

Academic Physics to Applied Physics Academic Chemistry to Applied Chemistry Academic Biology to Applied Biology

- III. Course adjustments in Elective subjects may be made at semesters for students whose yearend prognosis is impending failure. This adjustment must meet with teacher, parent, counselor and administrative approval. The student=s permanent record card will be marked withdrawal at semester and an AF@ grade will be entered in the final grade column. No credit will be earned.
- IV. Course adjustments not covered in categories I and II such as a medical withdrawal and/or an incomplete withdrawal with administrative approval will be reviewed on an individual basis. Any deviation must be reviewed by the principal.

Student Permanent Record Cards will be marked accordingly.

- A. Medical Withdrawal
  - 1. Withdrawal will be posted (W).
  - 2. No credit will be earned
  - 3. Footnote denoting AMedical Withdrawal/Administrative Approval@ will be entered.
- B. Incomplete Withdrawal
  - 1. An I will be posted (I).
  - 2. No credit will be earned.
  - 3. Parents/students will be advised that the AI@ will carry the weight of an AF@ in tabulation of QPA.
  - 4. Footnote denoting AIncomplete Withdrawal/Administrative Approval@ will be entered.

<sup>\*</sup>Semester recommendations for course adjustments that are considered to be track changes involving the subject areas mentioned in (I) will be reviewed on an individual basis.

COURSE ADJUSTMENT/WITHDRAWAL POLICY

## MAKING UP FAILED SUBJECTS

If a subject is failed, such deficiency may be removed by repeating the subject the following school year, or by repeating it at an accredited summer school program or an administratively approved tutoring program (120 hours of instruction are required for one credit); any exceptions must be approved by the principal. Students who choose to make up failed subjects in the summer must complete and submit the <u>Summer Course Work Form</u> shown in this handbook to the high school principal prior to registering or beginning any courses that are to appear on the student=s high school transcript.

Students are permitted to make up a maximum of **one and one half credits** in an approved summer school or tutoring program. Seniors who owe up to one and one half credits will be permitted to participate in graduation exercises, and will receive their diplomas upon completion of the credits in summer school.

August 15 is the deadline for completion of such summer credits for all students unless otherwise approved by the principal.

Students who have failed courses are not recommended to take a sixth subject. (If a student cannot successfully complete the minimum required subject load, it is not educationally sound to expect that the student can successfully complete an even more demanding load.) This restriction does not apply to students who could possibly graduate at the end of the year by successfully completing a maximum subject load.

Students who fail a required semester length subject may repeat the subject (one only) during the second semester if the student so requests, with these restrictions: (1) The guidance counselor must approve the additional subject load for the second semester. (2) The student=s parent must give written permission to the guidance counselor before the course will be added. (3) Available space must exist in the requested class.

**COURSE REQUIREMENTS** 

# TAKING COURSES TO SATISFY SEQUENTIAL COURSE REQUIREMENTS, MAKING UP FAILED COURSES OR COURSES TAKEN FOR PERSONAL PROMOTION

Students who plan to take courses during the summer in order to satisfy sequential course requirements, who plan to make up failed course or who plan to take courses for personal improvement (i.e., computer courses) must complete and submit a Summer Course Work Form to the counselor for approval before registering or beginning any courses that are to appear on the student=s high school transcript. August 15 is the deadline for completion of such summer course work for all students unless otherwise approved by the principal. Course taken will become part of the student=s academic record.

SUMMER COURSE WORK FORMS ARE AVAILABLE IN THE GUIDANCE OFFICE. STUDENTS MUST HAVE NECESSARY PAPERWORK FROM THEIR COUNSELOR <u>PRIOR TO STARTING</u> SUMMER SCHOOL.

SUBJECT LOAD AND COURSE AUDITS

## SUBJECT LOAD

All students are required to carry a minimum of 5 ¼ credits annually with the understanding that all students must have accumulated 22 ½ credits to graduate. Steel Center students must carry subjects totaling 3 1/4 credits each year at Thomas Jefferson High School. Mon Valley students must carry subjects totaling 4 ¼ credits each year at Thomas Jefferson High School. A student may be permitted to carry six (6) subjects, with the recommendation of his/her counselor. In conferences each year, every effort is made to give individual attention to course selection, sequential pattern of courses, and to meeting all requirements of both the State of Pennsylvania and Thomas Jefferson High School for graduation. College-bound students should carry at least four (4), and preferably five (5), strong academic subjects each year. Colleges urge students to carry a heavy subject load in the senior year in order to prepare for the rigorous loads and faster pace which they will encounter during the college freshman year.

If six (6) credits are selected by the student and approved by his/her parents and counselor, all six (6) are expected to be carried all year. An exception to this may only occur upon a strong recommendation from both the teacher and counselor for sound educational reasons.

## COURSE AUDITS

Students are permitted to audit courses for no credit provided that:

- 1. Space is available in the course request
- 2. Teacher approval is granted
- Student=s existing schedule has free periods to assign course to be audited
- 4. Students who choose to give up lunch in part or in full are not eligible for audits but would be considered for Independent Study courses. (Refer to page 12)
- 5. Course audit must begin within first two weeks of the course.

Although course audits do not carry any credit and do not effect class rank or quality point averages, the course audited and the grade earned (A, B, C, D, or Pass/Fail) will be typed on the student=s Permanent Record Card at the end of each semester. A progress report will also be placed in the student=s cumulative folder.

SAMPLE NINTH GRADE PROGRAM

## **NINTH GRADE PROGRAM**

At the ninth grade level, students select subjects according to the requirements of the curriculum they intend to follow. Such selections enable students to begin certain subject sequences in the ninth grade but not preclude a later shift from one curriculum to another.

## SAMPLE NINTH GRADE PROGRAM

	Periods Per Week	Unit of credit
English 1	5	1
Social Studies: U.S. History Global Studies (1 semester each-1/2 credit each)	5	1
Mathematics: Integrated IA Integrated I Integrated IB Integrated IIA Integrated II Special Integrated II	5	1
Science: Academic Biology Applied Biology	6	1
**Computer Elective	5	1/2
***Elective	5	1
Physical Education	3	1/4

<sup>\*\*</sup>One half credit in a computer elective will be required for graduation. Although recommended to be taken in grade 9, this course can be taken in grade 10, 11 or 12.

<sup>\*\*\*</sup>Subjects meeting less than 5 periods per week are not electives for meeting this requirement.

HIGH SCHOOL SUBJECTS

## HIGH SCHOOL SUBJECTS

English 1, 2, 3, and 4

\*Honors English 2 (Grade 10)

\*AP English 3
\*AP English 4

Public Speaking

Group Communications

Theatre Orientation

Performing Arts

Written Expression

Creative Writing

Journalism

**Graduation Project** 

Introduction to Film Criticism

PSSA Preparation/Reading

## **Social Studies**

U.S. History II

\*AP U.S. History

\*AP European History

U.S. History III U.S. History IV

Global Studies I Global Studies II

Global Studies III

Government

**Economics** 

Law

Psychology

Sociology

## **Mathematics**

Integrated I

Integrated IA

Integrated IB

Integrated II

Integrated IIA

Integrated IIB

Integrated III

\*Special Integrated II

\*Special Integrated III

Pre-Calculus/Trigonometry

\*Honors Pre-Calculus/Trigonometry

Calculus

\*AP Calculus

PSSA Preparation/Math

## **Business**

Accounting I

Accounting II

Business and Personal Finance

**Exploratory Business** 

Marketing & Management

\*Retail Management

## Information Technology

Digital Design

Intro to Java Programming

Software Applications

Visual Basic I

Visual Basic II

AP Computer Science

Science Physical Science

Applied Biology (Lab)

Academic Biology (Lab) Environmental Science

\*AP Biology
Academic Chemistry
Applied Chemistry
\*AP Chemistry

Academic Physics

Applied Physics \*AP Physics

Anatomy and Physiology

### **World Languages**

Applied French 1 and 2

Academic French 1, 2, 3 and \*4 (Honors)
Applied Spanish 1 and 2
Academic Spanish 1, 2, 3, and \*4 (Honors)
Academic Latin 1, 2, 3, and \*4 (Honors)

<sup>\*</sup>Admission is based on previous demonstration of qualifications leading to faculty recommendation and/or approval.

HIGH SCHOOL SUBJECTS

## **HIGH SCHOOL SUBJECTS - continued**

## Family & Consumer Science

Introduction to Family and
Consumer Science
Fabric Fashion and Design I
Fabric Fashion and Design II, III

Foods and Nutrition Interior Design

Child Development (offered 1<sup>st</sup> semester)
Child Development I (offered 2<sup>nd</sup> semester)
Adult Living

## **Technology Education**

Technology Systems
Innovation and Invention
Computer Aided Drafting
Pre-Engineering Principles
Design Engineering
Engineering Applications
Construction Technology
Automation

## <u>Art</u>

General Art
Painting
Drawing
Photography/Video Production
Basic Graphic Design
AP Studio Art

## **Crafts**

Ceramic Studio Metal /Jewelry Sculpture Studio Mixed Media Arts

## **Music**

\*Music Theory and History
\*Color Guard
Varsity Choir
Concert Choir
\*Marching/Symphonic Wind
Ensemble
\*Marching/Concert Band
\*Majorettes

## **Physical Education**

Physical Education 9, 10, 11 & 12 Health 10

A course may not be offered if the enrollment is too low to justify the course.

<sup>\*</sup>Admission is based on audition and/or departmental interview.

TECHNICAL EDUCATION PROGRAMS

## **TECHNICAL EDUCATION PROGRAMS**

\*The following programs are offered at Steel Center Area Vocational Technical School:

**Automotive Mechanics** 

Baking

**Building Trades Maintenance** 

Carpentry

Collision Repair & Refinishing

Computer Aided Drafting

Computer Programming and Information Technology

Cosmetology

**Diesel Mechanics** 

**Electrical Construction** 

**Electronics Engineering** 

Food Service

**Graphic Communications** 

Health/Medical Assistant

Heating, Air Conditioning and Refrigeration

Machinist Technician

Retail Merchandising and Production

Microcomputer Information Systems

**Protective Services** 

\*COURSES MAY BE ADDED OR DELETED AS DETERMINED BY STEEL CENTER

ARTS AND HUMANITIES ELECTIVE SUBJECTS

## **ARTS AND HUMANITIES ELECTIVE SUBJECTS**

This is a listing of subjects that will meet the state's requirements in the Arts and/or Humanities.\*

## **ARTS**

Theatre Orientation Performing Arts

Family and Consumer Science
Introduction to Family and
Consumer Science
Child Development
Independent Living
Interior Design
Family Living
Foods and Nutrition
Fabric, Fashion and Design II, III

Technology Education
Technology Systems
Automation
Construction Technology
Innovation and Invention
Computer Aided Drafting
Pre-Engineering Principles
Design Engineering
Engineering Applications

Art

General Art
Painting
Drawing
Photography/Video Production
Basic Graphic Design
AP Studio Art

#### Crafts

Ceramics Studio Metal Working Studio Sculpture Studio Mixed Media Arts

## Music

Marching/Symphonic Wind Ensemble Marching/Concert Band Concert Choir Music Theory and History

Technical Education Programs offered by Steel Center Area Vocational Technical School

\*Refer to page 10 for Graduation Requirements

## **HUMANITIES**

Communications
Public Speaking
Group Communications
Journalism
Mass Media
Written Expression
Creative Writing
Introduction to Film Criticism

Social Studies
U. S. History IV
Law
Psychology
Sociology
Global Studies II
Global Studies III
Government
Economics

World Languages
Applied French 1, 2
Academic French 1, 2, 3, 4 (Honors)
Applied Spanish 1, 2
Academic Spanish 1, 2, 3, 4 (Honors)
Academic Latin 1, 2, 3, 4 (Honors)

SEQUENTIAL SUBJECTS

#### SEQUENTIAL SUBJECTS

The second and succeeding years in certain sequential subjects may be elected only by students who have demonstrated, that they have acquired basic competence necessary for continued study in the subject. These sequential subjects include:

Applied French 1, Applied French 2
Applied Spanish 1, Applied Spanish 2
Academic French 1, Academic French 2, Academic French 3, Honors French 4
Academic Spanish 1, Academic Spanish 2, Academic Spanish 3, Honors Spanish 4

Academic Latin 1, Academic Latin 2, Academic Latin 3, Honors Latin 4 Integrated I, IA, IB, I, II, III, IIB, Pre-Calculus/Trigonometry, Calculus

Software Applications, Digital Design

Any two Business Courses, Retail Management (see course description for explanation)

Visual Basic I, Visual Basic II, Intro to Java Programming, AP Computer Science Written Expression, Creative Writing

CAD, Pre-Engineering Principles, Design Engineering, Engineering Application

Accounting 1, Accounting 2
General Art, Drawing, Painting\*
Fabric Fashion and Design I, Fabric Fashion and Design II, III
Child Development I, Child Development II

Successful achievement at an accredited summer school or an administratively approved tutorial program may be used to meet prerequisite requirements.

### **MATHEMATICS SEQUENCING 2008-2009**

Refer to Class description in the mathematics course offering section for specifics on grade and course requirements.

#### SCIENCE SEQUENCING 2008B2009

Refer to Class description in the science course offering section for specifics on grade and course requirements.

<sup>\*</sup>Students with exceptional ability demonstrated through a portfolio may progress to a higher sequence without the preliminary requirements. However, students may not regress and acquire credits for lower sequence courses.

<sup>\*\*</sup>These courses do **NOT** satisfy the  $\frac{1}{2}$  credit computer requirement for graduation. Please refer to course descriptions for Business and Information Technology on pages 64-67 of this manual for further information.

SAMPLE PROGRAM

# SAMPLE PROGRAM COLLEGE PREPARATORY

## **GRADE 9**

English 1
Social Studies
Integrated I or Integrated II\*\*\*
Academic Biology\*\*\*
World Language or other elective\*
Physical Education
Computers

## **GRADE 10**

English 2
Social Studies
Integrated II or Integrated III\*\*\*
Chemistry\*\*\*
World Language or other elective\*
Physical Education
Health

## **GRADE 11**

English 3
Social Studies
Integrated III or Pre-Calculus/Trigonometry or Honors Pre-Calculus/Trigonometry\*\*\*
Physics\*\*\*
World Language or other elective\*
Physical Education
Graduation Project

## **GRADE 12**

English 4
Social Studies\*\*
AP Science/Anatomy and Physiology/Environmental Science\*\*\*
Mathematics\*\*\* Pre-Calculus or Calculus
Physical Education
3 Electives\*\*

\*The elective must be one (1) full credit course or 1/2 credit course each semester.

\*\*Must be used to meet Arts and/or Humanities requirement if not already met.

\*\*\*Level of Mathematics and/or Science taken will depend on the Mathematics and/or Science taken the previous year and the grade earned.

SAMPLE PROGRAM

#### SAMPLE PROGRAM

#### **GENERAL CURRICULUM**

#### **GRADE 9**

English 1
Social Studies
Integrated IA or Integrated I\*\*\*
Applied Biology\*\*\*
Physical Education
Computer Elective
Elective\*

#### **GRADE 10**

English 2
Social Studies
Integrated II\*\*\*
Physical Science/Chemistry\*\*\*
Physical Education
Health
Elective\*

#### **GRADE 11**

English 3
Social Studies
Integrated IIA or Integrated III\*\*\*
Chemistry/Physics\*\*\*
Physical Education
Elective\*
Graduation Project

#### **GRADE 12**

English 4
Social Studies\*\*
Environmental Science/Physics\*\*\*
Mathematics or Calculus\*\*\*
Physical Education
3 Electives\*\*

<sup>\*</sup>The elective must be one (1) full credit course or 1/2 credit course each semester.

<sup>\*\*</sup>Must be used to meet Arts and/or Humanities requirement if not already met.

<sup>\*\*\*</sup>The level of Mathematics and/or Science taken will depend on the Mathematics and/or Science taken the previous year and the grade earned.

SAMPLE PROGRAM

#### **TECHNICAL EDUCATION**

**PREREQUISITE:** A student must have earned 10th grade standing and must be able to project graduation with his/her class or agree to follow a five-year plan for high school if required course and/or credit failures have occurred.

#### **GRADE 9**

English 1
Social Studies
Applied Biology\*\*\*
Integrated IA, Integrated I\*\*\*
Physical Education
Software Applications/Computer Elective
Arts and Humanities Elective - 1 credit

#### **GRADE 10**

English 2
Social Studies
Integrated I, Integrated IA, Integrated IB, or Integrated II\*\*\*
Physical Education and Health
Technical Education - 4 credits

#### **GRADE 11**

English 3
Social Studies
Integrated IB, Integrated I, or Integrated II, Integrated III, or Pre-Calculus\*\*\*
Physical Education
Technical Education - 4 credits
Graduation Project

#### **GRADE 12**\*\*

English 4
Social Studies\*
Environmental Science or Integrated IB, Integrated I, or Integrated II, Integrated III, or Pre-Calculus\*\*, \*\*\*
Physical Education
Technical Education - 4 credits

<sup>\*</sup>Must be used to meet Arts and/or Humanities requirement

<sup>\*\*</sup>Each student and their counselor will determine which course better suits their career plans and academic needs.

<sup>\*\*\*</sup>Level of Mathematics and/or Science taken will depend on the Mathematics and/or Science taken the previous year and the grade earned.

# **ENGLISH**

The Thomas Jefferson English program allows students the opportunity to be challenged in the areas of reading, writing, listening, speaking, and thinking. Classroom activities foster reading and listening comprehension; creative and critical expression; technical, library and study skills; and cultural literacy and appreciation. The high school English program provides for the needs of all students at all levels.

GUIDELINES FOR ADDMISSION TO HONORS AND ADVANCED PLACEMENT COURSES IN ENGLISH SUMMER READING

## GUIDELINES FOR ADMISSION TO HONORS AND ADVANCED PLACEMENT COURSES IN ENGLISH

- 1. Current English Grades: Students should have an "A" in their current Academic English course.
- 2. Standardized Test Scores: Standardized test scores should reflect high aptitude and/or high achievement in the language arts.
- 3. Teacher Assessment: Students should have their current teacher's recommendation for advanced work in English. If uncertain, students should discuss with their current teacher their capability for an Advanced English class.
- 4. Work Ethic: Students should welcome intellectual challenge and be willing to work diligently.
- 5. Timeliness: Students should be responsible in meeting course requirements by assigned dates.
- 6. Maturity: Considering that AP courses are college level, students should be prepared to read and discuss any work of literary merit.
- 7. Attendance: Students should demonstrate their commitment to education through exemplary attendance and lack of tardfies.
- 8. Responsibility: Students should demonstrate their greater commitment to English by completing an extensive summer reading project.
- 9. AP Exam: Students are highly encouraged to take the AP exam at the end of each AP course.

#### **ENGLISH SUMMER READING**

Summer reading is required curriculum for <u>all students</u>. The following selections should be completed before entering each grade level in the fall:

- ➤ Before entering <u>ninth</u> grade, all students should have read *The Giver* by Lois Lowry.
- > Before entering tenth grade, all students should have read *Night* by Elie Wiesel.
- > Before entering <u>eleventh</u> grade, all students should have read *The Things They Carried* by Tim O'Brien.
- > Before entering <u>twelfth</u> grade, all students should have read *Tuesdays with Morrie* by Mitch Albom.

#### COURSE OFFERINGS ENGLISH

#### **BASIC ENGLISH 1 (Grade 9)**

The ninth grade Basic English program emphasizes the development of reading comprehension, and writing and listening skills. Correct grammar usage and narrative, descriptive, informational and persuasive compositions are required. Improvement of listening skills are stressed. Constant reinforcement of basic skills in writing, speaking and reading of literature is practiced using basic texts and supplemental materials. A research paper is required.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **APPLIED ENGLISH 1 (Grade 9)**

In the ninth grade Applied English course, students investigate a variety of genres of world literature in order to increase their awareness, understanding, and appreciation of the various forms and styles of writing. Literary selections are arranged according to form (short story, mythology/legend, nonfiction, novel, poetry, and drama) and theme. Writing skills are emphasized through multi-paragraphed compositions that are analytical, critical, and creative and written in a variety of modes (persuasive, narrative, expository, informational, and descriptive). Language, reading, listening, speaking, study, and research skills are integrated into studies throughout the year. A research project incorporates skills learned and practiced during the course and must be completed satisfactorily in order to pass the course for the year.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ACADEMIC ENGLISH 1 (Grade 9)**

The ninth grade Academic English program incorporates literature, grammar and the writing of multi-paragraphed papers. The various genres of literature studied include the short story, drama, novel, poetry and nonfiction. Basic writing skills and paragraph development as well as oral presentation are integrated with the literature units. Composition assignments may be narrative, persuasive, or expository; in addition, students will have opportunities for creative expression. A research project is required.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### BASIC ENGLISH 2 (Grade 10)

The tenth grade Basic English program utilizes a basic text (i.e., anthology) that has relevant composition and grammar assignments. The various types of literature covered are: short stories, essays, plays, lyric poems, and personal narratives. In literature, characters, motives, and situations that students can relate to are stressed in addition to themes, literary techniques, etc. Also, short and informal/formal compositions are preferred over lengthy, formal papers. Papers may be expository, narrative, etc. A career research project is another requirement. Two adolescent novels are also covered.

## **COURSE OFFERINGS ENGLISH - continued**

#### **APPLIED ENGLISH 2 (Grade 10)**

The Applied English program in tenth grade combines the challenging as well as the practical aspects of literature, writing, and oral communication. Short stories, plays, poems, novels, and nonfiction are analyzed through class discussions and compositions. Thematic units on courage and justice, a practical unit on career research, and three modern novels are included. Papers are written for each unit of study, including narrative, descriptive, persuasive, expository and creative. Also, a research project on careers is a major requirement.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ACADEMIC ENGLISH 2 (Grade 10)**

The tenth grade Academic English program includes literature, writing, and oral communication skills with a major emphasis on the first two areas. Short stories, contemporary plays, novels, poems, Greek drama, Shakespearean drama, Arthurian style legends, and nonfiction are critically analyzed in terms of theme, writing techniques, style, etc., via papers and class discussions.

Writings include narrative, descriptive, expository, persuasive, creative, and analytical, with a

thorough research paper being a major requirement.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **HONORS ENGLISH 2 (Grade 10)**

Previous performance, aptitude and faculty recommendation are required for this class. Students should already be proficient in reading, the mechanics of language, oral communication and especially in writing.

This program further develops oral and written language skills through the study of the short story, drama, novel, poetry and nonfiction with a focus on world literature. Logical thinking, oral communication skills, clear expression and independent study are essential tools. Writing instruction is designed to give students the fundamentals of critical and research writing and also to foster an appreciation of various literary forms through expository and creative writing.

Because the reading and writing pace is accelerated and evaluative standards are high, students

are awarded quality points under the honors scale for this course.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **BASIC ENGLISH 3 (Grade 11)**

High interest literature geared to a relatively easy reading level is coupled with everyday language skills in eleventh grade Basic English. Written assignments focus on logical expression of personal experiences and development of practical skills such as writing friendly and business letters, classified ads, and resumes.

## **COURSE OFFERINGS ENGLISH - continued**

#### **APPLIED ENGLISH 3 (Grade 11)**

Applied English in grade 11 is a chronological study of the major periods of American literature from the colonization of America in the early 1600s to the present day. Authors are examined in relation to the historical background of the times in which they lived. Literary changes and developments are studied by comparing different time periods and movements. Writings will include narrative, persuasive, descriptive, expository, creative. A research project is required in the course.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ACADEMIC ENGLISH 3 (Grade 11)**

The major thrust of the 11th grade Academic English course is to develop an understanding of and a chronological approach to American literature from the seventeenth through the twentieth centuries. Values, techniques and backgrounds for each literary period are stressed. The students examine their native literature in oral and written expression with a balance of expository analyses and creative projects, such as power point presentations, newspapers, poetry, and descriptive, narrative and/or persuasive prose. A research project is a course requirement.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

### ADVANCED PLACEMENT ENGLISH 3 (Grade 11), English Language and Composition

Students enrolled in this course should welcome academic challenge. They should also have demonstrated strong reading, grammar, and composition skills. In this introductory college-level course, students read a variety of academic texts and work to improve their writing style and analytical strategies through step-by-step writing and the study of rhetoric. As students digest the course's core texts from American literature and culture, they examine how a given historical climate produces and influences both fiction and nonfiction. Students also scrutinize and engage in persuasive, expository, narrative, and descriptive writing as they investigate rhetoric and its implications in language and composition. Students who enroll in this course are prepared for and encouraged to take the AP English Language and Composition exam in the spring. For further information about selection of this course, please see the Guidelines for Admission to Honors and Advanced Placement Courses at the beginning of the English course section.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **BASIC ENGLISH 4 (Grade 12)**

The content of the Basic English course includes literature, grammar, vocabulary, and the writing of analytical essays. The areas of literary study include short story, novel, drama, and non-fiction. Integrated within the study of literature are lessons devoted to the development of basic writing and oral presentation skills. Narrative, persuasive, descriptive or expository writing assignments parallel the reading assignments. A research paper is required in the course.

#### **COURSE OFFERINGS ENGLISH - continued**

#### **APPLIED ENGLISH 4 (Grade 12)**

Beginning with works form the Anglo-Saxon era through contemporary literature the content of the Applied English course considers major Western texts in chronological order. Western texts will also be considered against non-western tests. Narrative, persuasive, descriptive and/or expository writing assignments parallel the reading assignments. A research paper and an in-depth interview writing are required for the course.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ACADEMIC ENGLISH 4 (Grade 12)**

The twelfth grade Academic English program includes extensive exposure and reinforcement in literature and composition. English literature is presented chronologically and thematically. Critical thinking is encouraged, practiced and coordinated with each major unit of study. The expository and creative writing program is correlated with the study of literature. Creative oral projects provide the student with opportunities to participate in group activities. A major research project is a requirement of the course.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

## ADVANCED PLACEMENT ENGLISH 4 (Grade 12), English Literature and Composition

Admission to this course is based on the provisions set forth in the Guidelines for Admissions to Honors and Advanced Placement Course in English.

This course includes classical, world, and English literature. After reading significant poetic works, plays, and novels, the students should be able to clearly express and logically defend their ideas. Critical thinking is balanced with creative expression so that these supporting ideas are not limited to discussions and compositions, but also include oral presentations and dramatic interpretations. Accordingly, the ability to work well in group situations is essential. A major requirement is an extensive research project.

Taking the AP test in May is an important component of this course and is highly encouraged.

Quality points for this course are awarded under the advanced placement scale.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### WRITTEN EXPRESSION

This course focuses on the development of basic skills in creative writing. Personal observations serve as a springboard for the writing of journals, object and place descriptions, poems, dialogues and character sketches. Narrative techniques are developed in both short story and play forms. Students learn correct sentence and paragraph structuring through the use of supplemental exercises used throughout the semester. Techniques of criticism are taught as students share their imaginative writings with one another through class activities.

This course is recommended for juniors and seniors.

Periods per week: 5 Unit of Credit: 1/2 First semester offering

#### **COURSE OFFERINGS ENGLISH - continued**

#### **ELECTIVE ENGLISH COURSES**

#### **CREATIVE WRITING**

For students who are highly interested in writing creatively, this course offers the opportunity to develop skills in the writing of short stories, plays and poems. Autobiographical sketches, children's short stories, science fiction/fantasy tales and childhood narratives reflect each student's understanding of narrative techniques. Individual and group satires are written in play format and presented to the class as videos. Journals, a requirement for Written Expression students for nine weeks, are now used by students for independent writing. Poetic forms are reviewed and compiled as a poetry notebook which includes each student's best samples of haiku, tanka, cinquain, sonnet, limerick and free verse writings. Students illustrate their critical abilities through class evaluations and through reviewing works to be included in the <u>Spectrum</u>, T.J.'s literary magazine. This course is recommended for juniors and seniors. Although Written Expression is not a prerequisite, it is strongly encouraged.

Periods per week: 5 Unit of Credit: 1/2 Second semester offering

#### **JOURNALISM**

In a one semester journalism course the students will develop a basic understanding of the history and ethics of journalism, journalistic style, layout procedures and production approaches. An analysis and evaluation of professional newspapers will precede student writing of news assignments. Writing assignments will span the range found in newspapers and will allow the student to practice and refine skills explored in the classroom. A basic familiarity with the Adobe Workshop will allow students to transcribe their stories and print them. As a culminating project, students will produce their own newspapers utilizing digital cameras, the scanner and desktop publishing skills.

This course is recommended for juniors and seniors. Sophomores may take the course after an interview with the instructor. While not required, members of the class are encouraged to be involved with the publication of the <u>Statesman</u>. All editors of the <u>Statesman</u> are encouraged to take the

course.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### MASS MEDIA

Mass Media will help students develop a critical attitude toward the various media such as films, television, radio and magazines according to purpose, audience, coverage and style. Students will also study the history of the media and production techniques. A study of advertising techniques will lead to a project requiring the development of an ad campaign suitable for the various media studied. Mass Media will build upon the fundamental ideas and skills acquired in Journalism.

This course is designed for juniors and seniors. Although Journalism is not a prerequisite, it is encouraged.

#### **COURSE OFFERINGS ENGLISH - continued**

#### **PUBLIC SPEAKING**

This course is an elective for grades 10, 11 and 12.

This course most benefits students looking to gain greater confidence in oral communication and/or those interested in careers in communications, education, law, business, or leadership in any field. Units in the ethics of communication, building confidence, speech organization, methods of delivery, and effective use of body, voice and language are included. The student is provided with the opportunity to develop communication skills in the preparation and delivery of speeches to inform, demonstrate, entertain, persuade and inspire. The student learns to think critically, express ideas clearly, gain confidence in front of an audience, and listen analytically to others.

Periods per week: 5 Unit of Credit: 1/2 First semester offering

#### **GROUP COMMUNICATIONS**

This course is an elective for grades 10, 11 and 12.

Group Communications may be of special interest to those students who are interested in careers in communications, education, law, business or any other career with a focus on people skills. This course focuses upon the dynamics of group communication in order to learn how to function better as a group or team - skills that industry leaders tell us are increasingly important in today=s working world. The techniques of group membership, leadership, decision making, problem solving and conflict resolution are emphasized. Students are encouraged to develop their own values while understanding multiple points of view. Units include orientation to the group process, different types of discussions, interviewing, debate and teaching. A culminating unit focuses upon a creative teaching project whereby groups plan, prepare and present a lesson to younger students.

Periods per week: 5 Unit of Credit: 1/2 Second semester offering

#### THEATRE ORIENTATION

This course is a one-semester offering for students with no or little theatre experience to introduce them to theatre at the high school. The nature of this program will be participatory with a focus on the student's own qualities as a means of self-expression.

In this course the student takes the first steps in developing the voice, body and mind as the tools of an actor. It continues with a study of the stage and the actor's relationship to it. Next the study of literature is introduced, and the student has the opportunity to present a monologue, dialogue and/or a short play. This course is required for Performing Arts.

#### COURSE OFFERINGS **ENGLISH** - continued

#### PERFORMING ARTS

This course is designed for tenth, eleventh and twelfth graders as a comprehensive activity-centered study of theater. It will be offered each semester and follow a three-year sequence so that students may elect this course any semester for three years. The nature of the program will be twofold: to build the students' own skills in self-expression through the study of acting; and to develop technical skills in all other aspects of theater, namely stagecraft, makeup, lighting and publicity.

Students will be encouraged to join the extracurricular productions as cast or crew in order to

apply the concepts they are learning in class. The nature of theater makes this subject interdisciplinary, with students often working in teams to solve problems.

This course will be comprised of two types of units. Core units will be offered each year in the interest of developing basic skills in acting and statecraft. Flexible units will be offered once every three years in the interest of acquainting students with the varied elements of technical theater and the many types of theatrical productions.

**Prerequisites:** If taken in a previous semester:

C" or higher in previous semester of Performing Arts,

AND

Approval from theatre teacher

OR

If never previously taken:

"D" average or higher in Theater Orientation

Only those students who are interested in pursuing the theater arts as a possible career or pastime should take the course.

Periods per week: 5 Unit of Credit: 1/2 per semester Semesters: 1 or 2

#### INTRODUCTION TO FILM CRITICISM

"Introduction to Film Criticism" is a course designed for students interested in learning about film beyond its original, superficial context and subsequently improving their critical thinking skills in the process. Students will learn about the history of film, cinematic conventions, and how to examine different types and genres of film in order to determine the directors' intentions and make a judgment about the impact of the work. This course is both discussion and writing rich, and thus only students serious about engaging in a genuine academic conversation about film should enroll in the course.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### PSSA PREPARATION/READING

This class will provide mediation and instruction to prepare students for the PSSA test in grade 11.

# SCIENCE

The philosophy of the Science Department at Thomas Jefferson High School is to educate every student in the disciplines of the life sciences and the physical sciences. The purposes of scientific investigation and discovery are to satisfy ones quest for knowledge and understanding and to preserve and enhance the quality of life experience. We as teachers will work diligently to expose today's youth to the richness and excitement of scientific discovery through reading, writing and analysis of scientific problems. As educators, it is our duty to further our education in the scientific world, which is continuously changing. We must make informed decisions regarding contemporary issues by taking into account economic cost, respect for living things and public policy and legislation.

The development of a scientific mind requires curiosity, patience, persistence, attention to accuracy and precision, and the respect for historical contributions.

SCIENCE COURSE SEQUENCE AND REQUIREMENTS

#### COURSE OFFERINGS **SCIENCE**

Each student is required to complete 3 credits in science in order to graduate. In preparation for the PSSA, students must complete the following sequence of science courses: biology, chemistry and physics, by the end of their junior year. Students taking Applied Biology followed by Physical Science and then Environmental Science will have successfully completed this requirement.

#### **BIOLOGY**

#### APPLIED BIOLOGY

This course is designed to introduce the ninth grade student to the structure and behavior of living organisms, both plant and animal. Emphasis is placed on cell structure and function, evolution, Chemistry, Biochemistry, genetics, taxonomy, ecology and current developments in bio-research and technology. Activities are designed to provide a variety of learning experiences.

Students who have failed Academic Biology may take Applied Biology to fulfill their Biology requirement.

**Prerequisite**: "C" or below in Middle School Science

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

#### ACADEMIC BIOLOGY

This course is designed for ninth grade students who have excelled in middle school math and science. It includes lectures and class discussions which are reinforced by weekly hands-on discovery through laboratory inquiries. This will enable the students to develop their observation, reasoning and problem solving skills. Students will explore such topics as biochemistry, cell structure and function, genetics, the evolution theory, classification of organisms and their interaction with the environment.

"B" or higher in Middle School Science  $\boldsymbol{and}$  a "B" or higher in Integrated I Prerequisite:

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

#### ADVANCED PLACEMENT BIOLOGY

This collegiate level course is designed to prepare students for the AP Biology test and is equivalent to an introductory biology course offered to college freshmen intending to major in a biological science. This is a broadly based course encompassing such diverse areas of biology as molecules and cells, genetics and evolution, organisms and populations. Extensive laboratory work includes the use of various types of laboratory apparatus and instruments which are incorporated into exercises designed to complement and supplement lecture topics. Taking the AP test in May is an important component of this course and is highly encouraged.

Students selecting AP courses must have teacher recommendation.

Students must take Physics before or concurrently with AP Biology.

AP classes require a summer work assignment. Students selecting this course must see the appropriate teacher before the end of the previous school year.

#### COURSE OFFERINGS SCIENCE - continued

#### ADVANCED PLACEMENT BIOLOGY - continued

**Prerequisites**: "B" or higher in Academic Biology, **and** a "C" or higher in Academic Chemistry, **and** a

teacher recommendation

Periods per week: 7 Unit of Credit: 1 Semesters: 2

(includes 2 lab periods)

#### PHYSICAL SCIENCE

#### PHYSICAL SCIENCE

A comprehensive study of matter and energy will be presented. Students will develop an understanding of the basic principles of chemistry and physics and will be prepared for additional courses in the sciences. Students are exposed to a broad spectrum of science study while developing critical thinking and problem-solving skills that are needed in our ever-changing modern technological world. A variety of experiments and activities will be used to accommodate students with different learning styles.

"C" or "D" in Applied Biology, or a Prerequisite:

"D" in Academic Biology, or a "D" or below in Applied Chemistry or Applied Physics

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### CHEMISTRY

#### APPLIED CHEMISTRY

This introductory course investigates the fundamental concepts of chemistry. Topics include scientific measurement, properties of matter, atomic structure, and the periodic table, ionic and covalent bonding, chemical nomenclature, chemical reactions, thermochemistry, gas laws, solutions and acids and bases. Laboratory work is an integral part of the course and includes experiments that reinforce the concepts presented in lecture. Practical applications of chemistry to the student's daily life are emphasized throughout the course.

Students who have failed Academic Chemistry may take Applied Chemistry to fulfill their Chemistry requirement.

**Prerequisites**: "C" or higher in Applied Biology, or a "C" in Academic Biology, or a

"B" or higher in Physical Science

#### AND

"C" or higher in Integrated I (completion of Integrated Ia and Ib = Integrated I)

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

<sup>\*</sup>Applied Chemistry students must be approved by a Science department committee to include: the sending teacher, the AP Biology teacher, the department coordinator and the student's counselor.

#### **COURSE OFFERINGS SCIENCE - continued**

#### **ACADEMIC CHEMISTRY**

This course is designed to prepare students for the challenges of a college level chemistry course. It is recommended for those students planning to major in the sciences, mathematics or engineering. The topics covered include: matter, energy, measurements, problem solving, thermochemistry, atomic theory, quantum mechanics, periodic law, ionic and covalent bonding chemical nomenclature, chemical reactions, solids, liquids, gases, acids and bases, and equilibrium. Learning is accomplished through lecture, laboratory work, demonstrations, and the presentation of scientific data

Prerequisites: "B" or higher in Academic Biology

AND

"B" or higher in Integrated II, and Integrated III is taken concurrently

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

#### ADVANCED PLACEMENT CHEMISTRY

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For some students, this course enables them to undertake, as a freshman, second-year work in the chemistry sequence at their institution. For other students, the AP Chemistry course fulfills the laboratory science requirement of their school and frees time for other courses. Therefore, this course is designed solely to prepare students to take the AP chemistry test. This course is recommended for those planning to enter the fields of pure and applied science, medicine or engineering. The topics covered are: advanced stoichiometry, gases, advanced bonding theory, quantum mechanics, solutions, chemical kinetics, chemical equilibrium, acids and bases, titrations, buffers, thermodynamics, electrochemistry, nuclear chemistry and organic chemistry. Learning is accomplished through lecture, laboratory work, demonstrations, the proper recording of research and the presentation of scientific data. Taking the AP test in May is an important component of this course and is highly encouraged.

Students selecting AP courses must have teacher recommendation.

Students must take Physics before or concurrently with AP Chemistry.

AP classes require a summer work assignment. Students selecting this course must see the appropriate teacher before the end of the previous school year.

Prerequisites: "B" in Academic Chemistry

AND

"B" or higher in Integrated III

Periods per week: 7 Unit of Credit: 1 Semesters: 2

(includes 2 lab periods)

#### **COURSE OFFERINGS** SCIENCE - continued

#### **PHYSICS**

#### **APPLIED PHYSICS**

This course is designed for the student who does not plan to pursue a career in a science-related field but who desires to have a well-balanced education in science. The topics covered will include laws of motion, vectors, forces, work and energy, wave phenomena, sound, light, electrostatics, electricity, magnetism and nuclear energy. These topics are similar to those of Academic Physics but with a somewhat less rigorous mathematical approach. Emphasis will be on non-mathematical concepts.

Students who have failed Academic Physics may take Applied Physics to fulfill their Physics requirement.

Prerequisites: "C" or "D" in Academic Chemistry, or a

"C" or higher in Applied Chemistry, or a "B" or higher in Physical Science

"C" or higher in Integrated II and Integrated III may be taken concurrently

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

#### ACADEMIC PHYSICS

This course is available to juniors and seniors who plan to major in the sciences, mathematics or engineering. The topics of study are: systems of units, linear motion, projectile motion, vectors, torques, gravitation, work, energy, momentum, optics, waves, light, electric charges, electric field, electrical potential, and thermodynamics. The fundamentals will be emphasized through classroom discussions, lectures and labs. There is a strong emphasis on problem solving in Academic Physics. Equations are developed through lab experience, which will enhance the students understanding of difficult concepts. Some advanced theories will be introduced for student enrichment.

**Prerequisites**: "B" or higher in Academic Chemistry, or an

"A" in Applied Chemistry,

#### AND

"B" or higher in Integrated III

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes 1 lab period)

#### **HONORS PHYSICS**

This course is designed for those junior students who excel in mathematics and science and who plan on entering the fields of physics or engineering. This course is similar in content to Academic Physics, but covers the additional topics of electricity, magnetism, rotational motion and nuclear & quantum physics. No previous physics course is required to enter into Honors Physics. This course is also available to those seniors who want to take a second year physics course but do not meet the parameters set forth in AP Physics C.

#### **COURSE OFFERINGS** SCIENCE - continued

**HONORS PHYSICS - continued** 

**Prerequisite(s)**: <u>Current Sophmores:</u> "A" in Academic Chemistry

Current Juniors: "A" in Academic Physics

**AND** 

"A" in Integrated III

Periods per week: 6 Unit of Credit: 1 Semesters: 2

(includes lab period)

#### ADVANCED PLACEMENT PHYSICS

This is a calculus based physics course intended for senior students who plan to enter the fields of engineering and/or physics. The course is designed for those students to earn college credit (4 or 8 credits) with the appropriate passing score on the AP Exam(s) as designated by the college or university of their choice. This course focuses on vectors, kinematics and dynamics in one and two dimensions as well as electricity and magnetism. This physics course integrates the mathematical concepts of limits, derivatives and integrals. Less time in AP Physics C is devoted to lab work since most of the lab work will have been done in Honors Physics the previous year. The remaining time will be spent on rigorous problem solving, conceptual development and preparation for the AP Exam in May. Taking the AP test in May is an important component of this course and is highly encouraged. Students can register for the AP Physics C Exam in Mechanics or Electricity and Magnetism. Some may choose to take both exams.

#### Students selecting AP courses must have teacher recommendation

**Prerequisites**: "A" in Academic Physics, or

"B" in Honor Physics,

AND

Calculus or AP Calculus is taken concurrently

Periods per week: 7 Unit of Credit: 1 Semesters: 2

(includes 2 lab periods)

#### **OTHER SCIENCES**

#### **ENVIRONMENTAL SCIENCE**

This course will focus on society's impact on the environment, natural resources and energy use. The course is dynamic in the sense that it addresses issues of current concern regarding the environment. The course topics include the study of ecosystems and community structure, population dynamics, aquatic biology, watershed management, endangered species management, pesticide issues as well as alternative pest controls, toxic waste management and environmental ethics and laws.

Activities include case studies of historical environmental cases and issues, organized debates, group presentations, labs that simulate various environmental conditions, outside field sampling and water quality analysis utilizing chemical test kits as well as digital probes linked to the computer

This course is recommended to a student with a background in biology that wants to further their studies of environmental topics. A background in chemistry is recommended but not required. This course will meet the third year science requirement needed for graduation for students who have

## **COURSE OFFERINGS SCIENCE - continued**

#### **ENVIRONMENTAL SCIENCE – continued**

completed Physical Science.

Students may choose to take Environmental Science after completing Biology as long as they continue to follow the required science course sequence.

Ex. Sophomores may take Environmental Science concurrently with Chemistry. Juniors may take Environmental Science concurrently with Physics.

Periods per week: 5 Units of Credit: 1 Semesters: 2

#### ANATOMY AND PHYSIOLOGY

This course is offered to students who wish to further their study of the human anatomy and its systems. The course focuses on the biological, biomedical and physiological bases of human body. Included in the course is an in-depth study of the development and anatomy of the various systems of the human body. The student will gain an understanding of the interrelationships of the body systems and an appreciation of the relationship which exists between the human body and nature and society.

Students may choose to take Anatomy & Physiology after completing Academic Biology as long as they continue to follow the required science course sequence.

Ex. Sophomores may take Anatomy & Physiology concurrently with Chemistry. Juniors may take Anatomy & Physiology concurrently with Physics.

The course is recommended for students planning to take AP Biology.

Prerequisite: "B" or higher in Academic Biology

Period per week: 5 Units of Credit: 1 Semesters: 2

Students who encounter a scheduling conflict, may have their schedule reviewed by a Science Department panel which will include: the sending teacher, the receiving teacher, the department coordinator, the student's counselor and an administrator. The request for a review must be submitted in writing to the principal by August 1, prior to the start of the school year.

# **SOCIAL STUDIES**

The goal of the Social Studies Curriculum is to prepare our students to take their place in American and World Society. Students are required to develop skills analogous to that of the historian—i.e. a problem solver. In addition, students obtain a knowledge and understanding of both American and World History. This combination of skills and understanding prepares Thomas Jefferson High School students to face an ever changing and complex global society.

#### SOCIAL STUDIES SEQUENCE

#### **GRADE 9**

U. S. History II (1850 - 1900) Global Studies I (Origins - 1450)

#### **GRADE 10**

Government Economics

#### **GRADE 11**

U. S. History III (1900 – 1945)
U. S. History IV (1945 – Present)
or

Advanced Placement U. S. History

#### **GRADE 12**

Global Studies II (1450 – 1789) Global Studies III (1789 – Present)

Advanced Placement European History

#### **ELECTIVES FOR GRADES 11 & 12**

Psychology Sociology Law

## COURSE OFFERINGS SOCIAL STUDIES

#### **U.S. HISTORY II (1850-1900)**

This course will study the growth and development of the United States in the second half of the nineteenth century and the early years of the twentieth century. This course will focus on the following areas: Westward expansion, sectional conflict, Civil War, Reconstruction, industrialization, immigration, and urban problems.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate the student's progress.

#### COURSE OFFERINGS SOCIAL STUDIES

#### **U.S. HISTORY III (1900-1945)**

This course will provide students with a study of U.S. History from the beginning of World War I to the end of World War II. Possible topics in this course will be as follows: World War I, the Roaring Twenties, the Great Depression, and World War II.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and

examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### U.S. HISTORY IV (1945-PRESENT)

U.S. History IV will provide students with a study of U.S. History from the end of World War II through to the present day. Possible topics in this course will be as follows: the Cold War, Social History, the Civil Rights Struggle, the Vietnam War Era, the Fall of Communism, and U.S. involvement in the Middle East.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semester: 1

#### **GLOBAL STUDIES I (Origins-1450)**

This course will focus on providing students with a knowledge and understanding of the origins of human society through the year 1500 A.D. Both Western and Non-Western history and culture will be stressed. Possible topics in this course will be as follows: Early Civilizations, Ancient Greece, Ancient Rome, African Civilization, Indian Civilization, Chinese History, Islamic Development and Medieval Society.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate the student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **GLOBAL STUDIES II (1450-1789)**

This course will provide students with a knowledge and understanding of Global history and culture from 1450 AD to 1789 AD. Possible topics in this course will be as follows: the Renaissance, the Reformation, Colonization, Absolutism, the Enlightenment, the French Revolution, and the unification of Germany and Italy.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semester: 1

#### GLOBAL STUDIES III (1789-Present)

This course will provide students with a knowledge and understanding of Global history and culture from 1789 with an emphasis on 1945 to the present. Possible topics in the course will be as follows: the Industrial Revolution, the Growth of Western Democracies, Imperialism, New Global Pattern, Southeast Asia, the Middle East, Africa, and Laline Aparticia.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Unit of Credit: 1/2 Periods per week: 5 Semester: 1

#### COURSE OFFERINGS SOCIAL STUDIES (continued)

#### **GOVERNMENT**

This course will provide students with an understanding of the American governmental system. Possible topics in the course will be as follows: Citizenship, the Constitution, the Federal Government, State Government, and Local Government.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **ECONOMICS**

This course will provide students with a study of economics with a primary emphasis on the American economic system. Possible topics in this course will be as follows: économic systems, demand, supply, prices, marketing, capital, government impact, free enterprise, banking, the federal reserve, and trade.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### ADVANCED PLACEMENT U.S. HISTORY

This course will cover an intensive study of American history for selected students in grade 11. Extensive collateral reading will be required. There will be an emphasis on a critical and interpretative approach to the study of American history from the Age of Exploration to the present. Admission will be based on previous demonstration of qualifications leading to faculty recommendation. Quality points are awarded according to the advanced placement scale.

This course will replace U.S. History III and IV.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress. Taking the AP test in May is an important component of this course and is highly encouraged.

**Prerequisite:** Social Studies department faculty recommendation

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### ADVANCED PLACEMENT EUROPEAN HISTORY

This course will provide an intensive study of European history for selected seniors. Extensive collateral reading will be required. There will be an emphasis on a critical and interpretative approach to the study of European history from the Renaissance to the present. Admission will be based on previous demonstration of qualifications leading to faculty recommendation. Quality points will be awarded according to the advanced placement scale.

This course will replace Global Studies II and III effective with the 2006-2007 school year.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress. Taking the AP test in May is an important component of this course and is highly encouraged.

Semesters: 2 Periods per week: 5 Unit of Credit: 1

#### **COURSE OFFERINGS** SOCIAL STUDIES (continued)

#### LAW

"Ignorance of the law is no excuse" is an often repeated phrase, but seriously, it is a binding principle that holds us all accountable for our daily acts. A little knowledge of the law can be quite useful and will help any student to know his/her legal rights and responsibilities as well as when legal counsel is needed.

Worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **PSYCHOLOGY**

This course will deal with personality and human behavior. Possible topics for study will be as follows: learning theories, thought and memory, language development, sensation, perception altered states of consciousness, personality, psychological disorders, childhood and adolescence.

Worksheets, quizzes, homework, class participation, projects, reports, and examinations will be

used to evaluate student progress.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### SOCIOLOGY

Most people spend their entire lives as members of one group or another. They are born into the family group. Later they get together to study in school, to work, to play, to worship or, in some instances, to commit crime or to make war. This tendency to form groups lies at the very foundation of human society. If we want to know why people act as they do, we must understand how the grouping process operates. The chief function of the science called sociology is to study the rules that govern group living. Sociologists want to learn how these rules originated, how they operate, why some change and why others die out and disappear. In this course the student will assume the role of a sociologist.

Map assignments, worksheets, quizzes, homework, class participation, projects, reports, and examinations will be used to evaluate student progress.

# **MATHEMATICS**

The mathematics program at Thomas Jefferson High School is a contemporary approach to teaching mathematics that exposes all students to a variety of math topics including algebra, geometry, probability, statistics, logic, and discrete math. All of these areas are introduced in Integrated I and then further developed in levels II and III. The program is in complete compliance with national and state standards. In addition, successful completion of the program through Precalculus/Trigonometry assures that each student has been introduced to the skills and background necessary for success in subsequent post-secondary math courses.

The following math courses may not be elected without a recommendation from the mathematics and guidance department:

IA

ΙB

IIA

IIB

#### COURSE OFFERINGS **MATHEMATICS**

#### <u>INTEGRATED I</u>

Integrated I explores algebraic and geometric concepts in a unified way that allows frequent reinforcement of essential concepts while, at the same time, fostering the students appreciation for the understanding of the connections among mathematical disciplines and applications in the real world. The course also investigates probability, statistics, discrete math, and logic, all of which are necessary for students to succeed in an increasingly technological and information-oriented society. The various strands include such topics as linear equations, linear inequalities, systems of equations, multiplication of binomials, factoring, quadratic equations, graphs, matrices, functions, angles, polygons, circles, area, volume, analyzing and displaying data, calculating theoretical and experimental probabilities, as well as observations of patterns leading to conjectures. A "C" average is needed to enroll in Integrated II.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **INTEGRATED IA**

Integrated IA covers the same topics as offered in the first semester of Integrated I. However, the material is covered at a slower pace and not to the same depth. This course is offered to students who have experienced difficulty with Passport Math.

**Prerequisites:** Mathematics Department teacher recommendation

The next sequential course is Integrated IB.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **INTEGRATED IB**

Integrated IB covers the same topics as offered in the second semester of Integrated I. However, the material is covered at a slower pace and not to the same depth.

**Prerequisites:** "C" average or higher in Integrated IA, or "D" or "F" average for second semester of Integrated I

#### AND

Mathematics Department teacher recommendation

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **INTEGRATED II**

Integrated II builds on the topics and problem solving techniques introduced in Integrated I. The spiraling approach of the Integrated Mathematics program takes the student into areas involving quadratic equations, rational equations, complex numbers, transformational geometry, inductive/deductive reasoning, and operations with matrices.

Prerequisites: "C" average or higher in Integrated I, or a

"C" average or higher in Integrated IB and Mathematics Department teacher recommendation

#### COURSE OFFERINGS **MATHEMATICS - continued**

#### **INTEGRATED IIA**

Integrated IIA covers the same topics as offered in the first semester of Integrated II. However, the material is covered at a slower pace and not to the same depth.

**Prerequisites:** "C" average or higher in Integrated IB

AND

Mathematics Department teacher recommendation

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### INTEGRATED IIB

Integrated IIB covers the same topics as offered in the second semester of Integrated II. However, the material is covered at a slower pace and not to the same depth.

**Prerequisites:** "C" average or higher in Integrated IIA

"D" or "F" average for the second semester in Integrated II

AND

Mathematics Department teacher recommendation

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **SPECIAL INTEGRATED II**

Special Integrated II is intended to offer appropriate challenges for those students who have demonstrated a high level of proficiency in previous math courses. The topics covered are the same as those covered in Integrated II. The differences are mainly in the depth to which the material is covered.

**Prerequisites:** "A" average for both the first and second semesters in Integrated I (or a

comparable course)

AND

A high recommendation from the previous Mathematics teacher

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **INTEGRATED III**

Integrated III builds upon the topics and problem-solving strategies introduced in Integrated I and developed in Integrated II. In addition, the spiraling approach of the Integrated Mathematics program takes the student into areas involving polynomial functions, exponential functions, logarithmic functions, parametric equations, inscribed figures, vectors, variability, standard deviation, z-scores, sequences and series, recursion, and limits.

Successful completion of Integrated III with a "C" average or better qualifies the student

for admittance into Pre-Calculus/Trigonometry.

## COURSE OFFERINGS MATHEMATICS - continued

#### **INTEGRATED III** - continued

Prerequisites: "C" average or higher in Integrated II

OR

"C" average or higher in Integrated IIB and Mathematics Department teacher recommedation

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **SPECIAL INTEGRATED III**

Special Integrated III is intended to offer appropriate challenges for students who have demonstrated a high level of proficiency in Special Integrated II.

Prerequisites: For Special Integrated II students:

"A" average in Special Integrated II, or a

high recommendation from the Special Integrated II teacher

OR

For Integrated II students:

"A" average for second semester in Integrated II,

AND

a high recommendation from the Integrated II teacher

Successful completion of this course with a "C" average or better qualifies the student for Pre-Calculus/Trigonometry.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### PRE-CALCULUS/ TRIGONOMETRY

This course includes advanced techniques using a graphing calculator with special emphasis in the areas of polynomial and rational functions, exponential and logarithmic functions, trigonometry, systems of equations and inequalities, matrices, sequences, counting, and probability.

Prerequisites: "C" average or higher in Integrated III, or a

"C" average or higher in Special Integrated III

Successful completion of this course with a "C" average qualifies the student for Calculus.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### HONORS PRE-CALCULUS/TRIGONOMETRY

This course includes advanced techniques using a graphing calculator with special emphasis in the areas of polynomial and rational functions, zeros of rational functions, exponential and logarithmic functions, trigonometry, systems of equations and inequalities, matrices, sequences, counting, probability, and an introduction to Calculus. Quality points are awarded for this course.

## COURSE OFFERINGS MATHEMATICS - continued

#### **HONORS PRE-CALCULUS/TRIGONOMETRY** - continued

Prerequisites: "A" average in Special Integrated III

OR

"A" average in Integrated III, and

a high recommendation from the Integrated III teacher

Successful completion of this course with a "C" average qualifies the student for Calculus. Completion of this course with an "A" average for both the first and second semester qualifies the student for AP Calculus.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **CALCULUS**

This course is designed to provide a firm background and understanding of the basic concepts of calculus, including limits, differentiation, applications of derivatives, exponential/logarithmic functions, and an introduction to techniques and applications of integrations.

Prerequisite: "C" or higher in Pre-Calculus/Trigonometry, or a

"C" or higher in Honors Pre-Calculus/Trigonometry

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### ADVANCED PLACEMENT CALCULUS

AP Calculus is an advanced placement course offered to selected students who have been successful in Honors Pre-Calculus. This course will include the study of rate of change, differentiation and integration methods. Applications to curve sketching, max-min problems and related rates will also be studied. Area, volumes, length of a curve, surface area, centroid and work applications will also be discussed. A detailed study of natural log, exponentials, trig functions and inverses will also be included.

Admission is based on previous demonstration of qualifications leading to faculty recommendation and/or approval. Students successfully taking the AP test may also earn college credit or entrance into an honor course depending on the college and the score. Quality points for this course are awarded according to the advanced placement scale. Taking the AP test in May is an important component of this course and is highly encouraged.

**Prerequisites:** "A" average for both the first and second semesters in Honors Pre-Calculus/

Trigonometry,

#### AND

recommendation and/or approval from Mathematics Department faculty

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### PSSA PREPARATION/MATH

This class is designed to provide remediation and instruction to prepare students for the PSSA test in grade 11.

# BUSINESS AND INFORMATION TECHNOLOGY

The West Jefferson Hills School District's computer curriculum is based on the basic belief that ALL students should become equipped with the knowledge and technological skills necessary for being successful in post-secondary education and employment. Our software courses provide students with the knowledge and skills necessary to operate a personal computer and utilize the associated software. Our programming courses provide students with the knowledge and skills necessary to write, modify and troubleshoot computer programs.

Two courses fulfill the Computer Credit Requirement:

- Software Applications
- Visual Basic I

The West Jefferson Hills School District business education curriculum is based on two basic beliefs. The first is based on the belief that every student needs to develop skills necessary to become an educated consumer and citizen while strengthening their basic reading, writing, mathematical, and interpersonal skills. The second is that student should become equipped with the knowledge and technological skills necessary for being successful in post-secondary education and employment in a business-related field.

In order to carry out our philosophy, our courses teach the following basic skills:

- Provide students with the knowledge and skills necessary to operate a personal computer and utilize the associated software.
- 2. Facilitate and encourage time management, leadership, and personal development.
- 3. Encourage intelligent consumer-related decisions.
- 4. Recognize the importance of entrepreneurship in today's global society.
- 5. Develop interpersonal and intrapersonal skills necessary to function effectively in life.
- 6. Promote the knowledge and skills necessary to obtain and maintain entry-level employment in business.
- 7. Foster a desire for continual learning, study, and growth in a business field.
- 8. Manage personal and business affairs independently.

## COURSE OFFERINGS BUSINESS AND INFORMATION TECHNOLOGY

#### **BUSINESS**

#### **ACCOUNTING I**

This class is **essential** for students who plan to pursue business as a career. Accounting I provides a thorough background in the basic accounting procedures used to operate a business. Students who desire preparation for any business-related career will gain the knowledge necessary to process and interpret financial data. A required part of this course includes a simulation that is completed at the end of the course which includes all accounting work for a merchandising business for an entire month. This course may qualify as a math credit.

Prerequisites: Must be in grade 10, 11, or 12

AND

"C" average or higher in Integrated I

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ACCOUNTING II**

Accounting II is offered to students with determined career objectives in business and/or the accounting profession. With an emphasis on corporate accounting, it is designed to complement and expand the student's ability to understand accounting procedures. Upon completion of each chapter, time will be spent in the computer lab learning automated accounting procedures.

**Prerequisite**: "C" average or higher in Accounting I

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **BUSINESS AND PERSONAL FINANCE**

This course provides students with a foundation for becoming educated consumers and successfully maintaining their own financial lives. Practical application is made to simulate lifelike situations and on-the-job experiences. Students will be exposed to personal matters such as cash control systems, credit, lending, insurance, taxes, and investments. Marketing, sales, purchasing, distribution, bookkeeping, and corporate financial management will also be introduced. This course is perfect for any student looking to understand and control his or her own financial destiny.

Prerequisite: Must be in grade 10, 11, or 12

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **EXPLORATORY BUSINESS**

**Open to 9<sup>th</sup> or 10<sup>th</sup> grade students ONLY**, this semester course will introduce students to the many aspects of business, serving as a background for other business courses the students may elect in high school and in college. This course will prepare students for future employment while they gain the knowledge, skills, and aptitudes necessary to secure and succeed in their first job and manage their personal finances as well as help them to become an educated consumer.

**Prerequisite**: Must be in 9<sup>th</sup> or 10<sup>th</sup> grade only

## COURSE OFFERINGS BUSINESS AND INFORMATION TECHNOLOGY - continued

#### **MANAGEMENT & MARKETING**

This course provides students with a realistic framework for starting their own businesses. Students will learn to analyze, organize, promote, and finance a small business, as well as be introduced to the latest trend in business – sports and entertainment marketing. As a concluding project, the students will apply knowledge gained throughout this course in preparing a detailed business plan for a new business venture.

Prerequisite: None

Period per week: 5 Unit of Credit: 1 Semesters: 2

#### **RETAIL MANAGEMENT**

This course is for the **serious** business student who plans to pursue a career in entrepreneurship, management, marketing, or sales. The students will be responsible for learning the intricate details of the daily operations of a retail establishment and will be operating a small retail store within our school environment to serve our community. The student will be responsible for purchasing, inventory control, marketing, publicity, bookkeeping, website management, etc.

Prerequisite: 2 Business courses with "B" averages in each

#### **AND**

department faculty recommendation and approval.

Period per week: 5 Unit of Credit: 1 Semesters: 2

#### **INFORMATION TECHNOLOGY**

#### **DIGITAL DESIGN**

This course has four components: Desktop Publishing, Powerpoint, Web Page Design, and Animation. First a computer simulation will be completed where students are responsible for developing all advertising media for a business about to begin operation. Next a brief unit on advanced techniques of using Powerpoint will be introduced. For the remainder of the course, students will be taught web page development using *Dreamweaver* and will create their own animations using *Flash* software that can be integrated into their web page and/or Powerpoints.

**Prerequisites**: Software Applications with a "C" average or higher

#### AND

Must be in grade 10, 11, or 12

**Note to Class of 2009:** This course will meet the computer requirement for graduation and you are exempt from the above prerequisite. Students who had previously taken <u>Multimedia</u> may enroll in this course for credit.

## COURSE OFFERINGS BUSINESS AND INFORMATION TECHNOLOGY - continued

#### INTRO TO JAVA PROGRAMMING

This course is designed to teach programming using structured techniques. This course will develop the student's abstract problem solving techniques. Structured programming emphasizes proper top-down program design and coding. This course will use the Object-Oriented approach to programming and introduce the students to the Java programming language. Several topics for the AP Computer Science Exam subset A will be covered.

#### This course is a prerequisite to AP Computer Science.

Prerequisites: Visual Basic II with a "C" or higher

OR

Visual Basic I with a "B" or higher and teacher recommendation

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **SOFTWARE APPLICATIONS**

This course introduces the students to advanced capabilities of word processing and spreadsheet software. In word processing, the student will learn advanced formatting techniques such as those used in research papers; with spreadsheets the student will learn to build formulas and create attractive charts. Object linking and embedding will be used to integrate the software applications.

#### This course fulfills the computer requirement for graduation.

**Prerequisite**: None

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **VISUAL BASIC I**

This is an introductory course for programming taught at a ninth grade level. Students will be able to code and troubleshoot a program and design games. This course will introduce the students to problem solving logic techniques. Visual Basic will emphasize Object-Oriented Programming design. This course will teach the students Visual Basic programming and game designing language.

Prerequisite: Integrated I with a "C" or higher

OR

Integrated IA with a "B" or higher

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **VISUAL BASIC II**

This course will continue where *Visual Basic I* left off. Computer animation will be emphasized and more complex data structures will be introduced. This course will use the Object-Oriented approach to programming and introduce the students to Visual Basic programming language.

Prerequisite: Visual Basic I with a "C" or higher

## COURSE OFFERINGS BUSINESS AND INFORMATION TECHNOLOGY – continued

#### **ADVANCED PLACEMENT COMPUTER SCIENCE**

This course is designed to allow students the opportunity to learn a structured programming language. Class work will consist of written assignments, problem solving, examinations and programs written in Java programming language. An extra quality point is awarded for this course. Taking the AP test in May is an important component of this course and is highly encouraged.

Prerequisites: "B" average or higher in Intro to Java Programming

AND

department faculty recommendation and approval

# TECHNOLOGY EDUCATION

Industrial Technology is the application of knowledge and resources to meet human needs and solve everyday problems. We use technology in an attempt to improve our environment. The improvements may relate to survival needs or human aspirations and can include unexpected benefits and risks.

Industrial Technology supports many subject areas: science, mathematics, social sciences, and various other disciplines. It introduces a hands-on form of self-projects. It promotes enthusiasm for career exploration through use of computers, machines, and other tools. Industrial Technology also provides for the development and application of three basic skills: problem solving, creativity, and critical thinking. Specific activities allow students to build these life-long skills. Students are encouraged to create and explore at their own pace, to work together in a supportive environment, and to evaluate their work with detailed guidelines.

TECHNOLOGY EDUCATION COURSE OFFERINGS

#### COURSE OFFERINGS TECHNOLOGY EDUCATION

#### TECHNOLOGY SYSTEMS (formerly Intro to Technology)

Technology Systems is a semester elective, primarily for students in grade 9. It is designed to broaden students' knowledge of technology while developing creative thinking and problem solving skills. It offers unique opportunities to apply numerous academic concepts through practical, handson applications. Students will study the five systems of technology including construction, transportation, manufacturing, communication, and biotechnology.

This course may be selected either one or two semesters.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1 or 2

#### **COMPUTER AIDED DRAFTING**

Computer Aided Drafting is a two semester elective course for students in grades 9, 10, 11, and 12. It is designed for the novice user to develop the fundamentals of drafting using AutoCAD. AutoCAD is a state-of-the-art design and drawing software package used in today's engineering, architectural, and design industries.

**Prerequisite:** For Freshmen ONLY:

"B" average or higher in 8th grade Math

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### PRE-ENGINEERING PRINCIPLES (formerly CAD II)

Pre-engineering principles is a two semester sequential elective course for students in grades 10, 11, and 12. Students will study architectural design, mechanical modeling, and animation using several AutoCAD software packages.

**Prerequisite:** "B" average or higher in Computer-Aided Drafting

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **DESIGN ENGINEERING (formerly CAD III)**

Design Engineering is a two semester sequential elective course for students in grades 11 and 12. This is an advanced course in which students apply knowledge of the AutoCAD systems with the principals of design in order to solve real world problems.

**Prerequisite:** "B" average or higher in Pre-Engineering Principles

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **ENGINEERING APPLICATIONS (formerly CAD IV)**

Engineering Applications is a one semester sequential elective course for students in grade 12. Students' focus on a self initiated independent research and development project using CAD software to solve a problem.

Prerequisite: "B" average or higher in Design Engineering Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

TECHNOLOGY EDUCATION COURSE OFFERINGS

## COURSE OFFERINGS TECHNOLOGY EDUCATION - continued

#### **AUTOMATION (formerly Robotics)**

Automation is a two semester elective course for students in grades 10, 11, and 12. The use of computers and robotics to perform various functions is continually growing. This course is for students who want to apply modern industrial techniques to solve problems. Students will use the computer to operate tools and machines. The final project will be to use the machines to aid in the construction of a robotic device that will perform a specified function.

Technology Systems is strongly recommended before taking Automation.

Prerequisite: Must be in grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **CONSTRUCTION TECHNOLOGY (formerly Residential Maintenance)**

Construction Technology is a one semester elective for students in grades 10, 11, and 12. It is designed toward developing the necessary knowledge and skills needed to maintain one's home. Students will study current issues in construction, specifically in the areas of electric, plumbing, framing, and finish carpentry.

**Prerequisite:** Must be in grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **INNOVATION AND INVENTION (formerly Power Energy and Transportation)**

Innovation and Invention is a one semester elective that is focused on developing advanced creative thinking and problem-solving skills. Students will work in teams to design, develop, and test a fully functional prototype.

Prerequisites: "B" average or higher in Technology Systems

#### AND A

"B" average higher in Computer Aided Drafting

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

# WORLD LANGUAGES

The West Jefferson Hills World Language Department recognizes the factors that are calling for change in the language curriculum that reflect the changing world. They include:

- Given the necessary level of support and opportunity, all students can learn a language.
- Learning a language requires active participation.
- Language instruction must be relevant, student centered, process driven to accommodate the needs of a changing world.
- Learning is a collaborative responsibility among students, educators, parents and community.

The World Language Department will encourage students to become motivated, enthusiastic learners in all phases of instruction. This will be accomplished by incorporating:

- A communication based curriculum.
- Contextualized learning.
- Learner centered instruction.
- Cooperative learning.
- A developmental approach to grammar.
- A contextualized approach to vocabulary.
- An integrated, participatory approach to culture.

#### COURSE OFFERINGS WORLD LANGUAGES

All world language courses are offered 5 periods per week for two semesters and one (1) credit is awarded for each course.

#### **APPLIED FRENCH 1 and 2**

Applied French 1 and 2 are designed for students whose primary purpose in electing the course is fulfillment of a 2 year language requirement for college entrance. This is the less difficult course option and is intended for students who may need extra help in improving their English and spelling skills. This is a sequence of only 2 years. Students are introduced to the same course content as in the academic option, but the pace is slower and the testing is less comprehensive. It is important that students choosing this option understand that Academic French 3 and 4 are <u>not</u> open to them upon successful completion of Applied French 1 and 2. Since the applied courses are less rigorous, they do not prepare the students adequately for the 2 advanced levels. This option is ideal for students who are planning a 2 year study only.

**Prerequisite:** Applied French 2

Applied French 2 "C" average or higher in second semester in Applied French 1

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### ACADEMIC FRENCH 1, 2, 3 and HONORS FRENCH 4

These courses are designed for students who have a **genuine** interest in language study, **and** are serious students with a willingness to study, memorize, and learn vocabulary, grammar rules, and cultural concepts. This is the more difficult course option and is intended for higher level students who are college bound and are also enrolled in similarly difficult courses such as Academic English and any of the academic sciences. Good spelling and English skills, an attention to details, and a

long-term memory are essential for success.

Four years are offered. Additional years beyond the first are elective only to those who complete the year with a "C" or better in the second semester. Basic elements of French are presented in the first two years. These elements are limited to those most frequently used by native speakers in daily life. The four skills: listening comprehension, speaking, reading and writing are integrated in a proficiency-oriented approach. The student's awareness and understanding of French life, its customs and culture are an important part in the learning process. The third year is a continuation and reinforcement of the four basic skills and culture. Emphasis is placed on advanced grammar/structure, idioms, speaking, listening comprehension and writing which strengthen the student's communication skills. Reading varies with short stories, newspaper and magazine articles, and readings on French history and culture. In the fourth year, emphasis is placed on written and oral self-expression and literature. Original compositions are expected and college-level reading material is introduced. The advanced level is intended for students who performed well in the early years and who are especially interested in speaking and writing correct French.\*

Prerequisite(s): French 2

"C" average or higher in second semester in French 1

French 3

"C" average or higher in second semester in French 2

Honors French 4

"C" average or higher in second semester in French 3

**AND** 

World Language faculty recommendation approval and/or approval

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### COURSE OFFERINGS **WORLD LANGUAGES - continued**

#### APPLIED SPANISH 1 and 2

Applied Spanish 1 and 2 are designed for students whose primary purpose in electing the course is fulfillment of a 2 year language requirement for college entrance. This is the less difficult course option and is intended for students who may need extra help in improving their English and spelling skills. This is a sequence of only 2 years. Students are introduced to the same course content as in the academic option, but the pace is slower and the testing is less comprehensive. It is important that students choosing this option understand that Academic Spanish 3 and 4 are **not** open to them upon successful completion of Applied Spanish 1 and 2. Since the applied courses are less rigorous, they do not prepare the students adequately for the 2 advanced levels. This option is ideal for students who are planning a 2 year study only.

**Prerequisite:** Applied Spanish 2 "C" average or higher in 2<sup>nd</sup> semester in Applied Spanish 1

Unit of Credit: 1 Semesters: 2 Periods per week: 5

#### ACADEMIC SPANISH 1, 2, 3 and HONORS SPANISH 4

These courses are designed for students who have a **genuine** interest in language study, **and** are serious students with a willingness to study, memorize, and learn vocabulary, grammar rules, and cultural concepts. This is the more difficult course option and is intended for higher level students who are college bound and are also enrolled in similarly difficult courses such as Academic English and any of the academic sciences. Good spelling and English skills, an attention to details, and a

long-term memory are essential for success.

Four years are offered. Additional years beyond the first are elective only to those who complete the year with a "C" or better in the second semester. In the first year students are introduced to the sounds of the language through the development of pronunciation skills and are also encouraged to develop a listening and speaking mastery of a basic vocabulary of people, places and things around them. The students work within fundamental grammatical principles of Spanish, and are asked to combine elements of vocabulary, idioms and structure to demonstrate an elementary command of the language through controlled listening, speaking, reading and writing situations. The student's cultural awareness is heightened by exploring various facets of Hispanic life.

In the second and third years, the skills of listening, speaking, reading and writing become the

focus of a proficiency-oriented approach where students greatly expand their vocabulary and learn to apply old vocabulary in new situations. More emphasis is placed on structural content, and students are afforded the opportunity to be more creative and expressive with the language. Cultural themes form an integral part of all units of study.

In the fourth year, emphasis is placed on reviewing and expanding grammatical concepts, and new vocabulary is gleaned from short stories, articles and other readings. Conversational skills are practiced and more original compositions are expected. The advanced level of study is intended for students who perform well at the previous levels and who are especially interested in refining their communicative skills.

#### **COURSE OFFERINGS** WORLD LANGUAGES - continued

#### ACADEMIC SPANISH 1, 2, 3 and HONORS SPANISH 4

Prerequisite: Spanish 2

"C" average or higher in 2<sup>nd</sup> semester in Spanish 1

Spanish 3 "C" average or higher in 2<sup>nd</sup> semester in Spanish 2

Honors Spanish 4

"C" average or higher in 2<sup>nd</sup> semester in Spanish 3

World Language faculty recommendation and/or approval

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### ACADEMIC LATIN 1, 2, 3 and HONORS LATIN 4

There is only one option for Latin courses. All are academic, rigorous, and require dedicated students who are serious about studying on a daily basis, <u>and</u> have a genuine interest in learning a classical language. A great deal of memorization is required because of the inflected nature of Latin. Latin is the most difficult of the 3 languages offered.

Four years are offered. Additional years beyond the first are elective only to those who complete the year with a "C" or better in the second semester. In the first year, students are given a basic orientation to the Latin language and some aspects of Roman life. Emphasis is placed on vocabulary, derivatives, grammar and translation. A solid background of English grammar is essential. In the second year, the examination of the Latin language continues with additional reading at the end of the year. The third year is a continuation of language study completing the basic Latin vocabulary and grammar with an emphasis on the subjunctive forms and an introduction of more in-depth readings. These include mythological tales and some Latin translations of modern classics. The fourth year is a survey of Roman history and an introduction to Latin literature. Excerpts of prose and poetry works are studied from Plautus, Caesar, Cicero, Vergil, Ovid, Petronius, Pliny, and some medieval authors. The Latin courses offer many opportunities for competition for Pliny, and some medieval authors. highly motivated students. The classes prepare during the year for the National Latin Exam each March and the PA Junior Classical League State Convention each May. Students are awarded in numerous categories for their academic performances. Latin is ideal for students in the gifted program.\*

Prerequisite(s): Latin 2 "C" average or higher in second semester in Latin 1

"C" average or higher in second semester in Latin 2

Honors Latin 4

"C" average or higher in second semester in Latin 3,

#### AND

World Language faculty recommendation and/or approval

Periods per week: 5 Unit of Credit: 1 Semesters: 2

## COURSE OFFERINGS WORLD LANGUAGES - continued

\*Admission to a fourth year world language course is based on previous demonstration of qualifications leading to faculty recommendation and/or approval.

Students have the option of expanding their knowledge of the area as far as advanced grammatical concepts, reading comprehension, vocabulary building and written expression. Students will be required to engage in independent study and will be expected to present their work orally. Most conversation will be in the target language and more extensive reading and analysis in the language is required.

# FAMILY AND CONSUMER SCIENCE

Family and Consumer Sciences has its focus on preparing individuals to become independent, to assume family roles, to contribute to the good of the community and society, to balance work and family, and to transfer personal skills to the workplace.

FAMILY AND CONSUMER SCIENCE COURSE OFFERINGS

#### COURSE OFFERINGS FAMILY AND CONSUMER SCIENCE

#### INTRODUCTION TO FAMILY AND CONSUMER SCIENCE

It=s not just cooking and sewing! This is a course for 9th graders only. It is designed to introduce the student to semester courses offered in their 10th, 11th, or 12th grade year. Learning to make healthy choices in lifestyle and nutrition, to be a contributing member of family and community, to make smarter consumer decisions, and child care are the major areas covered. Hands on projects are part of the course. The student must supply all materials for the projects.

Prerequisite: 9<sup>th</sup> graders only

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### FABRIC, FASHION AND DESIGN LEVEL I

This is a one semester course that is offered to students in their 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> year. This course is designed for the beginner sewer. Basic seam finishes and beginning textiles will be covered. The student will be provided with the opportunity to apply principles of art and design to fashion, while learning the basic techniques of clothing construction. The student must complete three projects. All materials and supplies are to be provided by the student.

Prerequisite: For grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### FABRIC, FASHION AND DESIGN LEVELS II & III

This course is offered to students in 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade who have successfully completed Fabric Fashion and Design Level I. The student will learn and apply more difficult construction and design skills, how to use the serger, work with more difficult fabrics, and other more advanced sewing technology. A student may take this course once on Level II and once on Level III. Level III will complete projects that are more advanced than those on Level II. Each time the student must complete three projects based on his/her skill level. All materials and supplies are to be provided by the student.

Prerequisite: For grades 10, 11, 12 who have passed Level I and/or II with at least a "B" average

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **FOODS AND NUTRITION**

It=s not just a cooking and eating course!! This course begins with the study of nutrition and diet analysis, allowing the student to make decisions to improve and maintain a healthy lifestyle. Food purchasing, label reading, and setting up a kitchen are included. This is followed by planning and preparing foods in a group. Throughout the semester, wise use of time, energy, money and equipment is emphasized while learning to apply healthy eating styles.

**Prerequisite:** Must be in grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

FAMILY AND CONSUMER SCIENCE COURSE OFFERINGS

## COURSE OFFERINGS FAMILY AND CONSUMER SCIENCE - continued

#### INTERIOR DESIGN

The Interior Design course emphasizes the use of art principles in decorating a home. Students learn housing styles, floor plans, and furniture style and arrangement. These principles are applied to a major project. Creativity through Adecorating for less@ projects finishes out the course. Students must supply all of their own materials.

**Prerequisite:** Must be in grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### CHILD DEVELOPMENT

This is the last semester, fall of 2008, in which this course will be offered in this format. Students interested in taking a child development class after this semester will first have to take and pass the Child Development I course. The magic world of the developing child from conception to the age of four is covered in this course. Theories of development are covered in the first six weeks. Setting up and learning how to run a preschool is also studied during this time. For a 12 week period, children ages two to four, will come to the high school three days a week. The student will plan, prepare, implement and assess activities for them. This course is good for anyone interested in working with children as a career.

Note: The first semester of the 2008-2009 school year will be the last offering of Child Development

in this format.

**Prerequisite:** Must be in grade 11 or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: First semester only

#### CHILD DEVELOPMENT I

This course is required for students who are interested in taking Child Development II. Students are provided with an understanding of the aspects of human growth and development. Parenting skills are developed as positive guidance techniques and child related issues are studied. To prepare the student for Child Development II, instruction is given regarding standards involved with childcare, employment skills needed to work with young children, how to maintain a healthy environment for children, developmentally appropriate practices, learning activities and observation techniques in working with groups of young children are included. Child Development II will be a course offering in the 2009 – 2010 school year.

**NOTE:** Child Development I will only be offered in the second semester for the 2008-2009 school year.

Prerequisite: For grades 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: Second semester

#### **ADULT LIVING**

This course prepares students to understand the nature, function, and significance of human relationships involving individuals and families. Topics include: values, decision making skills, goals, self-awareness, communication skills, families, and the individual's roles and responsibilities within the family and community, crisis management, dating, marriage, money management, and parenting skills. Emphasis will be placed on the uniqueness, needs, and interests of the individual and families.

**Prerequisite:** Must be in grade 11 or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

## FINE ARTS

Thomas Jefferson High School intends to make the values of the fine arts visible to our students. The fine arts, involving music and the visual arts, helps prepare students for further education in careers involving creativity, and it brings exhilaration to the whole learning process. Students become interested in learning, adding new dimensions to what they already know, enhancing knowledge through creative interpretation. Through active participation in various forms of self-expression, the student is continuously challenged to develop intelligent behavior and social skills that affect their overall lives in society and culture. Students learn to adapt and respect others' ways of thinking, working, and expression. Significant opportunities are provided for students to progressively broaden views of the world. Fine arts education enables students to develop the self-esteem, individuality and motivation necessary for success in all facets of life. The pleasure and meaning of learning becomes real, tangible and powerful through the fine arts.

FINE ARTS COURSE OFFERINGS

#### COURSE OFFERINGS FINE ARTS ARTS AND CRAFTS

All arts and crafts courses meet (5) five days per week for one semester. One-half (1/2) credit is awarded for each course. Since a variety of experiences in arts and crafts is encouraged, no student will be permitted to repeat a course. The policy of the Art Department is that a student select a maximum of **two** art courses per semester unless departmental approval is obtained for a student to take additional courses. Students with no previous art or crafts classes in the high school should select mixed media arts and general art. Students with exceptional ability demonstrated through a portfolio may progress to a higher sequence without the preliminary requirements. However, students may not regress and acquire credits for lower sequence courses. The sequential AD@ application is justified in these situations. Please refer to page 33 for information on sequential subjects.

#### **MIXED MEDIA ARTS**

This course is open to the student who wishes to challenge himself/herself with a variety of mixed media that incorporate a creative individual approach. Basic techniques will be discussed and taught, but the end product and time span will be determined by the student's imagination and enthusiasm. Although the class is structured with fundamental projects to provide a variety of both 2-D and 3-D concepts, the student is expected to challenge him/herself beyond basic requirements. A variety of subject matter and media is presented to provide meaningful experiences for the student. The craft experiences will serve as a foundation for the student who elects more advanced classes in the future.

**Prerequisites:** Offered to grades 10, 11, 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **BASIC GRAPHIC DESIGN**

The course will cover a whirlwind of basic design techniques providing proficiency in both hand and computer generated imagery. Elements of line, type, shape and texture will embrace principles of balance, contrast, unity, color, and value. Throughout the course, students will learn to use the Adobe Photoshop program for PC formatted computers. This course is a definitive college/career option for many students and utilizes the school=s classroom technology resources. Class is not open to freshmen.

**Prerequisites:** "B" average or higher in General Art

AND

Must be in grade 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **SCULPTURE STUDIO**

This class is primarily intended to help the <u>advanced student</u> in the development of 3-dimensional thinking (length, breadth and depth). Through the work process and through an understanding of the materials used, a sense for making 3-dimensional art work will be acquired by the student. Modern and traditional (abstract and realistic) sculpture techniques will be used as a means of direction.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

FINE ARTS COURSE OFFERINGS

#### **COURSE OFFERINGS FINE ARTS ARTS AND CRAFTS - continued**

#### **METALS/JEWELRY**

The course is designed for the <u>advanced student</u> who has the patience that is required for the many detailed and intricate steps of metal working and jewelry making. Several basic projects will be assigned to familiarize the student with the proper use of tools, variety of media, techniques and safety procedures of the jewelry making process. A variety of media is offered to satisfy the creative expréssions and aesthetic designs of the individuals.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **CERAMICS STUDIO**

The Ceramics course is for the 10th, 11th and 12th grade student who has an interest in working with clay. Hand-forming techniques such as pinch pots, coil pots and slab construction will be explored initially, after which the student will attempt to acquire some proficiency on the potter=s wheel. Clay modeling and sculpture will also be explored along with glazing and decorating techniques.

**Prerequisite:** Must be in grade 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **GENERAL ART**

Basic drawing instruction is offered in two dimensional media to provide the student with a fundamental understanding of shapes, space, values, media, composition and subject matter. Where applicable, an exposure to art history and interdisciplinary learning is incorporated with the studio experience. The course provides a basis of art understanding that stimulates functional studio experiences in itself and is applicable to a greater appreciation to any of the other sequential course offerings in the art department. General Art must be taken before Drawing, Painting and Graphic Design. It is suggested General Art be taken before classes designated as advanced.

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **DRAWING**

Exploration of a variety of drawing media is encouraged to provide a substantial background that

the student may apply to selected subject matter.

Media should be explored and visualized as to its limitations and potentialities. Mastery of each medium is a goal that is achieved through a conscious study of subject matter, aesthetics and personal style. Studio projects are designed through a sensitive relationship with the environment while focusing on one's original concepts and interpretations.

Prerequisite: "B" average or higher in General Art

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

FINE ARTS COURSE OFFERINGS

## COURSE OFFERINGS FINE ARTS ARTS AND CRAFTS - continued

#### **PAINTING**

The general Painting course is designed for the interested and advanced student to provide a wide range of experiences in all painting media. Instruction will be concerned with the basic principles of painting involving media, techniques, composition, color theory, materials and historical development. The course is directed at individual personalities and styles of painting that will develop as more experiences and mastery of media are explored. Various media include activities in tempera, watercolor, acrylic and mixed media. The course will include assignments of painting of traditional and modern subjects. It is highly suggested that Drawing be taken before or simultaneously with this course.

Prerequisite: "B" average or higher in General Art

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### PHOTOGRAPHY/VIDEO PRODUCTION

This course is intended to be a basic guide to photography and video production. Photography starts at the beginning and assumes the student has no prior understanding of the subject.

Photography follows all the necessary steps from the beginning of picture-taking through

developing film and making prints, to the understanding of 35mm cameras and lenses.

We will start with film and continue through the camera, lights, flash, composition and finally darkroom procedures. Students will also learn basic video production, editing and titling.

**Prerequisite:** Must be in grade 10, 11, or 12

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### ADVANCED PLACEMENT STUDIO ART

AP Studio Art is an advanced course designed for students who are seriously interested in the practical experience of art. The students will prepare a portfolio for evaluation by the College Board at the end of the school year with a variety of wet and dry drawing media. The three areas of development that will be addressed throughout the course are (1) a sense of quality in the student=s work, (2) the student=s concentration on a particular visual problem, and (3) the student=s need for breadth of experience. Admission is based on previous demonstration of qualifications leading to faculty recommendation and approval. Quality points are awarded according to the advanced placement scale. As a prerequisite, students must have taken General Art PRIOR to enrolling in this course. Also as prerequisites – Drawing and Painting must be taken prior or while enrolled in AP course.

Period per week: 5 Unit of Credit: 1 Semesters: 2

## FINE ARTS MUSIC

#### **MUSIC THEORY AND HISTORY**

This course is offered as an elective for one semester for students in grades 10, 11, and 12. The purpose of the course is to develop an understanding of the fundamentals of music theory and history. Ear training, part writing, analysis, form, and musical time periods are all covered. This class is intended to prepare a student for study in the field of music, and a fundamental knowledge of the elements of music is a prerequisite for the course. Students applying for this course must meet with the music staff to determine whether their background is adequate for successful completion of the course.

**Prerequisites:** Must be in grade 10, 11, or 12,

AND

Authorization from Music department staff

Periods per week: 5 Unit of Credit: 1/2 Semesters: 1

#### **INSTRUMENTAL MUSIC PROGRAM**

The Instrumental Music Program is a one (1) year course. Students scheduling for Band are to register for Marching Band for the first semester, then either Concert Band 9-10 or Concert Band 11-12 for the second semester. Students must participate in both semesters to be part of the Thomas Jefferson Instrumental Music Program. Junior High Band students must fulfill all the requirements of the Pleasant Hills Middle School Instrumental Program to be eligible to participate in the Thomas Jefferson High Instrumental Music Program. Students not participating in the West Jefferson Hills School District Instrumental Music Program must successfully pass the audition requirements to be eligible to enter or re-enter the Thomas Jefferson High School Instrumental Music Program. Students will also be eligible to participate in the Pennsylvania Music Educator Association (PMEA) sanctioned events (Honors Band, District Band, Regional Band, All-State Band, District Jazz Bands All State Jazz Band, and Band Adjudication Festivals). All criteria and standards are given below for each performing group.

Students not enrolled in the Thomas Jefferson Instrumental Music program will not be eligible to

participate in a PMEA sanction event.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### MARCHING BAND

The Thomas Jefferson High School Marching Band consists of woodwind, brass, percussion, color guard, and majorette members in grades 9-12. Registration for Marching Band begins in the spring. Recruitment activities include a student presentation at Pleasant Hills Middle School, a director's presentation at the middle school, and an informational parent meeting in April.

Each student will receive a handbook that contains all the rules and regulations for marching band, including attendance requirements and a schedule of rehearsals and performances. The Marching Band performs at all varsity football games, community events, and at parades and

festivals throughout the region.

The Thomas Jefferson High School Marching Band is an educational arts program dedicated to providing the youth of our high school and community with the means to develop life skills, musical skills, performance skills, build character and foster teamwork while cultivating the talents of tomorrow's leaders.

# FINE ARTS MUSIC - continued

#### **CONCERT BAND 11-12**

The Concert Band 11-12 is closed only to those students in grades eleventh and twelfth enrolled in the Thomas Jefferson Music Program. The objective of this Band is to strive for the highest possible musical achievement through the performance of intermediate to advanced band literature. The band will reinforce and master it's musical knowledge through a wide range of musical styles and composers by way of studying a variety of classical band works, orchestral transcriptions, marches, and popular music. The Concert Band 11-12 typically performs two concerts a year and at Graduation and Commencement ceremonies. Other festivals and community performances may be added from year to year at the discretion of the director. The Concert Band 11-12 begins to rehearse at the conclusion of Marching Band season.

#### **CONCERT BAND 9-10**

The Concert Band 9-10 is closed only to those students in grades ninth and tenth enrolled in the Thomas Jefferson Music Program having completed instrumental band through the eighth grade or its equivalent. The objective of this Band is to strive for the highest possible musical achievement through the performance of intermediate to advance band literature. The band will be introduced to and develop new musical techniques through a wide range of musical styles and composers by way of studying a variety of classical band works, orchestral transcriptions, marches, and popular music. The Concert Band 9-10 typically performs two concerts a year and at Graduation and commencement ceremonies. Other festivals and community performances may be added from year to year at the discretion of the director. The Concert Band 9-10 begins to rehearse at the conclusion of Marching Band season.

#### **VARSITY CHOIR**

The Thomas Jefferson High School Varsity Choir is open to any student, grades 9-12, who expresses a sincere desire to sing. Students will learn to read music and will learn good singing techniques. Also, vocal technique and sight-reading skills are a part of each rehearsal.

They will prepare and present two major concerts a year. 'Attendance to these concerts is mandatory. In addition, other performances are held in the community throughout the school year. Students demonstrating exceptional abilities in Varsity Choir may audition for PMEA District Chorus in the fall.

Periods per week: 5 Unit of Credit: 1 Semesters: 2

#### **CONCERT CHOIR**

The Thomas Jefferson High School Concert Choir is an auditioned-entry Choir. Students who are very serious about singing have the opportunity to prepare and audition for this advanced Choir. The Concert Choir is open to all students in grades 9-12. Vocal technique and sight-reading skills are a part of each rehearsal. Students in Concert Choir are expected to be able to sing their part independently and with good vocal technique and musicianship. They will prepare and present two major concerts a year. Attendance to these concerts is mandatory. In addition, other performances are held in the community throughout the school year. Students in Concert Choir are encouraged to audition for PMEA District Chorus in the fall.

Periods per week: 5 Unit of Credit: 1 Semester: 2

## FINE ARTS MUSIC - continued

#### **MAJORETTES**

The Majorette Squad is an elective for students in grades 9 through 12. Students are chosen by audition. Marching routines and feature routines are taught so that the Majorettes can perform with the Marching Band at all performances. All performances shall be considered authorized school activities and attendance is required for course completion and credit. Majorettes that play a woodwind, brass, or percussion instrument must sign up for and audition for the Concert Band 11 – 12 or the Concert Band 9 -10. Those members will receive a full credit for Majorettes and Band. Majorettes, who do not participate in band, will receive ½ credit for completion of the fall football season. *The grade earned in Majorettes will not effect quality point average or class rank.* 

Periods per week: 5 Unit of Credit: 1/4 Semesters: First 9 weeks

#### **COLOR GUARD**

The Color Guard Squad is an elective for students in grades 9 through 12. Students are chosen by audition. Marching routines and feature routines are taught so that the Color Guard can perform with the Marching Band at all performances. All performances shall be considered authorized school activities and attendance is required for course completion and credit. Color Guard members that play a woodwind, brass, or percussion instrument must sign up for and audition for the Concert Band 11-12 or the Concert Band 9-10. Those members will receive a full credit for Color Guard and Band. Color Guard members, who do not participate in band, will receive ½ credit for completion of the fall football season. *The grade earned in Color Guard will not effect quality point average or class rank.* 

Periods per week: 5 Unit of Credit: 1/4 Semesters: First 9 weeks

#### **JAZZ ENSEMBLES**

The Jazz Ensembles are groups of approximately 20 instrumentalists who are chosen by audition in the spring of each school year. Students are placed in either Jazz Ensemble I or II based on their performance and knowledge in the jazz idiom. There are two bands (to the extent of student interest) that meet during 4<sup>th</sup> and 6<sup>th</sup> period lunch (Jazz I at 6<sup>th</sup> period lunch and Jazz II at 4<sup>th</sup> period lunch) for 30 minutes and after school at the conclusion of the Marching Band season. Advanced arrangements in the various jazz styles are studied and played. An introduction to improvisation and solo playing is also provided. The bands perform at several festivals, concerts, and community events throughout the area. Students are made aware of the attendance requirements upon auditioning for the ensembles. Students wishing to participate in the Jazz Ensembles must also be enrolled in the Marching Band and Concert Band 11-12 or the Concert Band 9-10 for the academic school year.

Periods per week: 5 per ensemble Semesters: 2

# FINE ARTS MUSIC - continued

#### STRING ENSEMBLE

The String Ensemble is a group made of musicians who play primarily but are not restricted to stringed instruments. (i.e. violin, viola, cello, bass, guitar, etc, etc.). The goal of this course is to enrich the skills and awareness of each student, to offer a venue and ensemble for instrumentalists of string instruments or instruments that don't fit within the conventional repertoire and to offer rewarding musical experiences with in the musical aesthetic. The ensemble meets for rehearsal during 5<sup>th</sup> or 6<sup>th</sup> period lunch for 20 minutes each day and after school on predetermined, coordinated and selected days in the band room. In this course of study the students are exposed to and study an assortment of musical arrangements in many distinct styles from classical, folk, rock, Latin to jazz and bluegrass. Also in this, students are introduced to the musical act of improvisation and its application to modern and historic music. The Ensemble performs several times through out the year including holiday performances and an annual "String Collective" towards the end of the year. Upon inquiring about participation with Mr. Belich, students are made aware of the rehearsal and performance commitments for that given year. Students wishing to be a part of the String Ensemble are not required to be a part of the band or chorus program though we do accept members who are.

# PHYSICAL EDUCATION AND HEALTH

Physical education's primary goal at Thomas Jefferson is to provide students with the necessary skills and knowledge that will allow them to lead healthy, active lifestyles.

To meet this goal, we present students with a primarily cooperative atmosphere, focusing on three areas:

- 1. Developmentally appropriate tasks, such as throwing, catching, and striking, providing the skills foundation for future physical activity.
- 2. The role of physical fitness in a student's life, and what one can do to achieve then maintain a high level of fitness.
- 3. Constant affirmation of affective skills, such as sportsmanship, patience, and concentration, from which everyone can benefit.

The primary goal of health education at Thomas Jefferson is to influence healthy living and healthy choices for a lifetime.

- 1. Have students develop an understanding of the components of health physical, mental, emotional and social.
- 2. Have students understand that physical activity should be part of your daily routine that promotes good health throughout a lifetime.
- 3. Learning the basics of nutrition that can help you become a more healthful eater both now and later in life.
- 4. Learn that nutrition and exercise are important to maintain healthy bones and muscles.
- 5. Learning preventative measures from diseases and disorders.
- 6. Learn how to handle and deal with stress in life.
- 7. Provide students with the knowledge of the systems of the body, including integumentary, skeletal, muscular, and reproductive.
- 8. Have students develop an understanding of the common sexually transmitted infections and how to prevent them.

PHYSICAL EDUCATION AND HEALTH COURSE OFFERINGS

## COURSE OFFERINGS PHYSICAL EDUCATION AND HEALTH

#### PHYSICAL EDUCATION 9, 10, 11 and 12

Physical Education at the high school level offers instruction in team sports, individual sports, lifetime activities, aerobic dance, exercise, weight training, body conditioning, and physical fitness profiling. The physical education course also offers an adaptive physical education program and an intramural program. The adaptive program provides activities for those students who are temporarily or permanently impaired. The intramural program gives the students an opportunity to participate in sporting activities in a more competitive environment. Much emphasis is placed on the learning and refinement of physical skills. Emphasis is also placed on the carry over values of the many activities offered. Participation in the various class activities is on an elective basis with different activities being offered during the school year. Physical Education is a state mandated subject required of every student at all grade levels, and this course counts towards a student=s QPA.

Periods per week: 3 Unit of Credit: 1/4 Semesters: 1

#### **HEALTH 10**

Health is usually scheduled in the student's sophomore year. Those students who do not receive health in their schedules during their sophomore year can take it in summer health or their junior or senior year. The Health program offers the student information to consider when deciding to use or not use Alcohol, Tobacco and Drugs. This information is presented from the physical, mental/emotional and social aspects experienced by students. In other units, major emphasis is placed on Care of the Human Body, Wellness and several major topics including Nutrition, Fad Diets and Eating Disorders, Stress, Stress Management and Coping. A unit is presented on characteristics of, dealing with and prevention of Sexually Transmitted Disease, along with AIDS/HIV prevention and treatment and Human Reproduction. Resource persons are used to supplement instruction whenever possible. Supplemental materials in the form of video films, resource papers and handouts are used in class work along with implementation of technology and labs. Health is offered during the regular school year or student may elect to enroll in the summer health program for 3 hours per day for ten days.

Periods per week: 3 Unit of Credit: 1/4 Semesters: 1

# STEEL CENTER AREA VOCATIONAL TECHNICAL PROGRAMS

#### STEEL CENTER AREA VOCATIONAL TECHNICAL SCHOOL

#### NONDISCRIMINATION STATEMENT

It is the policy of the Steel Center Area Vocational Technical School not to discriminate on the basis of race, sex, religion, color, national origin, age, handicap, limited English proficiency or because a person is a disabled veteran or a veteran of the Vietnam Era in its educational programs, service, facilities, activities or employment policies as required by Title IX of the 1972 Educational Amendments, Title VI and VII of the Civil Rights Act of 1964 as amended, Section 503 and 504 Regulations of the Rehabilitation Act of 1973, the age Discrimination Act of 1975, Section 204 Regulations of the 1984 Carl D. Perkins Act or any applicable Federal statute.

Inquiries should be directed to:

Patricia Walker, Title IX Coordinator
Allegheny Intermediate Unit
475 E. Waterfront Drive
Homestead, PA. 15120
(412) 394-5700

For information regarding services, activities, and facilities that are accessible by handicapped persons, contact the Director of Steel Center AVTS at (412) 469-3200, extension 104.

#### **MISSION STATEMENT**

The mission of the Steel Center Area Vocational Technical School is to provide quality vocational-technical training to meet the workforce needs of our region.

#### **VISION STATEMENT**

Steel Center will be recognized as a "state of the art" career and technical school which is on the cutting edge of technology. By continuing to raise standards, Steel Center develops self-sufficient, product citizens to strengthen the infrastructure of our local communities and region. Through collaboration and partnership building with stakeholders, Steel Center will provide quality career and technical education for every secondary student, out-of-school youth, or adult for whom career and technical education is appropriate. Through the renaissance that is occurring in our region, Steel Center will continue to be an integral component in the development and retention of human capital.

#### **BELIEF STATEMENTS**

- Every student at Steel Center is able to learn.
- Students can gain knowledge of skills if they are provided the time to learn.
- High expectations and positive attitudes directly impact the performance of young learners.
- Quality career and technical education can help to narrow the student achievement gap.
- Quality career and technical education can be provided to students through a process of continuing improvement.
- High expectations and positive attitudes directly impact upon the performance of young learners.
- Students make better career decisions when they are exposed to career education at an early age.
- Family involvement is critical to a child's education.

#### **BELIEF STATEMENTS (CONTINUED)**

- Quality schools provide an organized, disciplined environment.
- The educational process requires continued innovation and continual infusion of ideas.
- Fiscal responsibility requires the prudent utilization of all resources.
- A student's academic skills are enhanced by participating in a performance-based career and technical program.
- Career and technical education should be presented as a viable option to every student.

#### CAREER AND TECHNICAL EDUCATION

To increase career and technical education opportunities for all students, Steel Center operates under an Open Entry/Open Exit Three Year Core Program structure. Students can enroll in one of Steel Center's three-year core programs beginning in their sophomore year (Grade 10).

The Open Entry/Open Exit option allows students in a college prep curriculum to attend a technical program. A student may elect to enroll in a program for one year, two years, three years or one semester to receive hands-on experience which will enhance their academic studies in a particular field of interest.

Students who plan to attend Steel Center Area Vo-Tech may be permitted to do so provided that their required academic courses and credits for graduation from Thomas Jefferson High School can be scheduled.

Participating students are scheduled for one-half day at Thomas Jefferson High School and one-half day (3 hours of instruction) at Steel Center AVTS earning four (4) credits per year. On occasion, students may be permitted to attend Steel Center on a semester basis earning 2 credits. Bus transportation is provided by the West Jefferson Hills School District until the 12th grade has been completed.

The admissions policy is based upon open enrollment with student placement conflicts resolved by referring to both the academic competency checklist developed for the individual program and the applicant's competencies.

#### STEEL CENTER PROGRAM OFFERINGS

Automotive Mechanics
Baking
Building Trades Maintenance
Carpentry
Collision Repair & Refinishing
Computer Aided Drafting
Computer Programming and
Information Technology
Cosmetology
Diesel Mechanics

Electrical Construction
Electronics Engineering
Food Service
Graphic Communications
Health/Medical Assistant
Heating, Air Conditioning & Refrigeration
Machinist Technician
Computer Information Services
Retail Food Merchandising and Production
Protective Services

#### Curriculum

Students can complete a one, two, or three-year program. The curriculum at Steel Center is competency-based with an integration of theory to application. This means students progress in the program base on their level of proficiency and knowledge in the content areas. Students are taught skills with stated performance objectives based on an occupational task analysis and approved by the Occupational Advisory Committee. The instructor is responsible for the competency-based instruction, the development of technology specific skills and the reinforcement of appropriate work behaviors. Students must complete identified tasks based on a set criteria, standard, and performance level. Each program includes a core list of required competencies. Work ethics and vocational student organizations are components of all programs.

#### **CAREER AND TECHNICAL EDUCATION (CONTINUED)**

#### **Program Clustering**

In order to provide a broad-based experience during the first year, students in the Automotive, Construction, Food Service, and Technical Clusters (Computer Programming, Computer Information Services, and Graphic Communications) will complete a career exploratory program consisting of core competencies and skill training across program areas.

#### **Cross-Training**

In the second and third years, students will continue advanced skill development and related skills through cross-training in other vocational-technical areas. In the third year, students are encouraged to participate in a supervised work experience (Co-op) or internship during their senior year with approval of the instructor.

#### **Cooperative Education**

Cooperative Education is a school-to-work initiative program for junior and senior students through which the employer and school work cooperatively to provide education and training to eligible students. Co-op is a unique program designed to help students  $\mbox{Abridge}$  the gap@ between school and work. Under the supervision of the Cooperative Education Coordinator, students are placed in approved training sites directly related to their vocational or technical program. Participation in this program is contingent upon the availability of appropriate training stations and demonstrations by the student of a readiness to enter the workforce. Seniors who are in the second year of a vocational-technical program may be considered in the fourth quarter of the year. Seniors in the third year of a vocational-technical program may be considered early in the year. Juniors in the second year of a vocational-technical program may be considered in the fourth quarter of the year if they intend to participate in their senior year. To be eligible, the junior or senior student must maintain a  $\mbox{AC}$ @ or better grade average, arrange and provide personal transportation, attendance must meet or surpass the average daily membership, complete 900 hours in instructional program and the Co-op job must be directly related to the students course of study.

#### **Program Certificates**

There are four certificates students can earn at Steel Center:

- Basic Skills Certificate
- Intermediate Skills Certificate
- Advanced Skills Certificate
- · Advanced Skills Certificate with Distinction

A Steel Center Certificate does not guarantee that a student is employable. Each certificate is based on performance and verifies that the student has met minimum skill standards and criteria set forth for each certificate. The Pennsylvania NOCTI Performance Test is also given in each vocational-technical program. Additional certificates can be earned in each program. They are: Cosmetology License, Certified Nurse Assistant, First Responder, Pennsylvania State Automotive Safety Inspection, Pennsylvania State Emission Inspections, and EPA Refrigerant Handling, I-Car Auto Body Certificate.

#### Safety

The instructor has the right to ensure student safety by refusing to permit a student to work in a shop when dress and safety codes are not met. In some programs, student is required to wear industrial quality eye protection. Therefore, school approved safety glasses are provided students. Students are required to receive safety training prior to the use of shop equipment.

#### Uniforms

Uniforms are required wear in Cosmetology, Food Service, Meat Cutter, Baking, and Health/Medical Assistant programs. Uniforms are paid by the student at an approximate cost of \$40 to \$90. OSHA standards must be followed concerning dress in each program area. Students are responsible to clean and maintain their uniforms. Uniforms may be a requirement for the Automotive Technician, Diesel Technician, Collision & Repair, Machine Technology, HVAC, Carpentry, Building Maintenance, Electrical Construction, and Protective Services Programs. Uniforms are paid for by students. Students are also required to purchase safety shoes.

#### **CAREER AND TECHNICAL EDUCATION (CONTINUED)**

#### **Program Costs**

Students enrolled in Cosmetology are expected to pay for the kit materials and uniforms at an approximate cost of \$350.00\*. Students in the automotive, construction, and mechanical clusters are expected to pay for uniforms and safety shoes. Students are expected to purchase their tool kits in the Automotive Technician program. Approximate cost of the tool kit is \$150. Students in the food service cluster, nursing, and protective services are expected to pay for their uniforms and safety shoes, if needed. Students are also expected to pay for the replacement of any lost, damaged, or stolen safety glasses, tools, materials, or equipment. A student=s nine week or final grade to the sending school will not be forwarded until all debts have been paid. The sending school district will be notified and asked to withhold a student=s diploma until the debt has been paid.

\*Cost is subject to change.

#### **PROGRAM OFFERINGS**

#### **AUTOMOTIVE CLUSTER**

#### **COLLISION REPAIR AND REFINISHING (ASE CERTIFIED PROGRAM)**

The Collision Repair and Refinishing Program is a three-year program for students in grades 10, 11, and 12 designed to prepare students for entry-level employment. The student will be taught skills with clearly stated performance objectives approved by the Occupational Advisory Committee. Collision Repair and Refinishing is an instructional program that provides classroom and laboratory experiences in the repair of damaged vehicles, such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs, remove repair and replace upholstery, trim, accessories, electrical and hydraulic window and seat-operating equipment to gain access to vehicle body and fenders, remove and replace glass, repair dented areas, replace excessively damaged fenders, panels, and grills, straighten bent frames or unibody structures using hydraulic jacks and pulling device, and file, grind, and sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with primer and finish coat.

#### **AUTOMOTIVE MECHANICS**

The Auto Mechanics Program is a comprehensive-based program for students in grades 10, 11 and 12 designed to provide students the knowledge necessary to service and repair automotive equipment and to develop the skills necessary for the use of tools and diagnostic equipment. It is intended to provide the automotive industry with young men and women who are familiar with the construction, design, operation and troubleshooting of the automobile. Students are taught safe working habits, proper attitudes, and to respect and cooperate with fellow workers.

The first year 10th grade students cluster program provides students with broad based skills, work ethics and knowledge to make career decisions. Emphasis is placed on fundamentals and theories of operation. Students receive instruction in the use of hand tools, power tools, precision measuring instruments, torque wrenches and shop safety.

During the second and third years of the program, engines are overhauled; fuel and ignition systems are installed for proper operations. Students receive instruction in areas which include air conditioning, wheel alignment, brakes, steering, suspension systems, transmissions and electrical systems. In the third year, the opportunity to be certified in Pennsylvania State Safety Inspection, Pennsylvania State Emission Inspection and EPA Refrigerant Handling.

It is recommended that students take the following courses at their sending school: Applied Math I, Integrated I, English, Applied Sciences.

#### **DIESEL MECHANICS**

The Diesel Mechanics Program is a comprehensive-based program designed to prepare students in grades 10, 11 and 12 for an entry-level position in the workforce. The program will include the service and repair of all types of diesel engines from automotive to industrial, and single to multi-cylinder engines used to power automobiles, boats, buses, trucks, recreational vehicles, electrical generators, construction machinery and outdoor power equipment.

Instruction is provided in the diagnosis of malfunctions; disassembly of engines and examination of parts; reconditioning of parts; repair and adjustment of cylinder head repair, lower block, lubricating systems, cooling systems, injection systems, oil and water pumps, generators, governors, auxiliary and accompanying power units, controls, and transmissions, hydraulic pumps and control units, as well as pneumatic units. Technical manuals, the state inspection code, testing and diagnostic equipment, and various hand and power tools are used in this program. Students are taught safe working habits, proper attitudes, and to respect and cooperate with fellow workers. Students are given the opportunity to be certified for the Pennsylvania State Safety Inspection License.

## STEEL CENTER AREA VOCATIONAL TECHNICAL SCHOOL PROGRAM OFFERINGS - continued MECHANICAL CLUSTER

#### **MACHINIST TECHNICIAN**

The Machinist Technician Program is a comprehensive-based program for students in grades 10, 11 and 12 designed to provide students with the knowledge needed to enter the workforce in at least an entry-level or apprenticeship program. This is an instructional program that prepares students to apply technical knowledge and skills in all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds and speeds of machining. Emphasis is placed upon bench work and the operation of lathes, power saws, shapers, milling machines, grinders, drills, and computer operated (CNC and CIM). Instruction also includes the use of precision measuring instruments such as layout tools, micrometers and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts.

Students can earn up to 12 college credits through the CALU and CCAC Manufacturing Articulation Agreement. Students can earn a NIMS level 1 Certificate and complete one year of a four-year for the National Association of Manufacturers Apprenticeship (NTMA) Program. It is recommended that students take the following courses at their sending school: Applied Math I, Integrated II, Algebra II, Applied Physics, CAD.

#### CONSTRUCTION CLUSTER

#### **BUILDING TRADES MAINTENANCE**

The Building Trades Maintenance Program is an instructional program for students in grades 10, 11 and 12 that prepares students to apply technical knowledge and skills in the maintenance and repair of residential, apartment buildings and other commercial buildings. Emphasis is placed on Ahands-on training. Instruction and specialized learning experiences. The instruction includes the basics of blueprint reading, carpentry, plumbing, painting, drywall, electricity, welding, masonry, remodeling, small engine repair and general maintenance.

A broad base of skills is provided to students desiring to become employed in the construction industry at the entry-level occupation. In the first-year, students, will complete all career exploration experience in each program in the Construction cluster. Students will complete a series of core competencies within the Construction cluster. In the second and third years, students will receive cross-training in other related vocational-technical programs. Therefore, students will also receive instruction in carpentry, electrical and air conditioning. This program is associated with the Association of Builders and Contractors Apprenticeship Program.

#### **CARPENTRY**

The Carpentry Program prepares students in grades 10, 11 and 12 to apply knowledge and skills to lay out, fabricate, erect, install, and repair structures and fixtures, using hand and power tools. The curriculum includes common systems of framing, construction materials, estimating, blueprint reading, interior and exterior finish carpentry techniques. This program is competency-based. The students progress in the program based on their level of proficiency and knowledge in the content areas. Students are taught skills with stated performance objectives based on an occupational task analysis and approved by the Occupational Advisory Committee. The instructor is responsible for the competency-based instruction, the development of technology specific skills and the reinforcement of appropriate work behaviors. This program is associated with the Association of Builders and Contractors Apprenticeship Program.

Recommended courses at the sending school: Applied Math I, Integrated I, Integrated II.

#### **ELECTRICAL CONSTRUCTION**

The Electrical Construction Program prepares students in grades 10, 11 and 12 to apply technical knowledge and skills which relate to layout, assembly, installation, and testing and maintenance of electrical fixtures, apparatus, and wiring used in electrical systems. Instruction is provided in erection and installation of high voltage lines and electrical distribution systems both overhead and underground. The program includes single and three phases, delta and wye systems, both low (110 v -single phase) and high voltages (220 v and 440v- three phase), cooper cabling, twisted pairs and computer network wiring. This program is associated with the Builders and Contractors Association.

Algebra is a component part of the union trade entrance examination. It is highly recommended students pass and complete Integrated I.

#### HEATING, AIR CONDITIONING AND REFRIGERATION

An instructional program that prepares students in grades 10, 11, and 12 to apply technical knowledge and skills to install, repair, and maintain commercial and domestic heating, air conditioning, and refrigeration systems. Emphasis is placed on Ahands-on training. Instruction and specialized learning experiences. The instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating), filtering, and controlling humidity, operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of

malfunctions; overhaul, repair, and adjustment of units and parts such as pumps, compressors, valves, springs, and STEEL CENTER AREA VOCATIONAL TECHNICAL EDUCATION

### STEEL CENTER AREA VOCATIONAL TECHNICAL SCHOOL PROGRAM OFFERINGS – continued

#### **HEATING, AIR CONDITIONING AND REFRIGERATION (continued)**

connections; and repair of electric/electronic and pneumatic control systems.

Students will also receive instruction in carpentry, electrical, and building trades. A broad base of skills is provided to students desiring to become employed in the construction industry at the entry-level occupation. In the first-year, students will complete all career exploration experience in each program in the Construction cluster. Students will complete a series of core competencies within the Construction cluster.

#### COSMETOLOGY, HEALTH AND PROTECTIVE SERVICES CLUSTER

#### **COSMETOLOGY**

The Cosmetology Program is a three-year program for students in grades 10, 11 and 12. Students are prepared for the State Board examination required for entry-level employment as a Cosmetologist. The first year provides sufficient skills for a Manicurist and/or a Cosmetician license. The second and third years provide the skills for a complete Cosmetologist license, with an emphasis on refining all skills. Students receive both classroom and laboratory experiences. Instruction consists of core courses with clinical practices as an integral part of the curriculum.

The course is divided into basic competencies and tasks for each competency which have been approved and validated by an Occupational Advisory Committee of representatives from all areas of Cosmetology. The curriculum prepares students to apply technical knowledge and skills related to experiences in a variety of services including the care and beautification of hair, skin and nails. Instruction includes: training in giving shampoos, rinses, and scalp treatments, hair styling, hair cutting and hair coloring, permanent waves, facials and manicuring. Emphasis is placed on theoretical concepts such as bacteriology, anatomy, hygiene, sanitation, salon management and customer relations. In order to meet certification and licensing requirements, hours in attendance are critical. Students are also offered an opportunity to participate in a supervised work experience their senior year with approval of the instructor and completion of an application to take the State Board Examination.

#### **HEALTH/MEDICAL ASSISTANT**

The Health and Medical Assistant Program is a three-year program for students in grades 10, 11 and 12 designed to prepare students for entry-level employment or post secondary education. Students are prepared to take the State Certified Nursing Assistant Examination. This program enables students to continue training in the Tech Prep Pre-Nursing/Allied Health Program at the Community College of Allegheny County (CCAC) or in hospital based nursing schools. The Health Assistant program is a cluster program with a combination of subject matter and experiences designed to prepare a person for employment in a minimum of three related health occupations under supervision of a licensed health care professional. Students receive both classroom and laboratory experiences. Instruction consists of core courses with clinical experiences as an integral part of the curriculum. Students are also offered an opportunity to participate in a supervised work experience their senior year with approval of the instructor.

The curriculum will consist of planned courses for: introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care, cognitive behavioral and social care, infection control, safety/emergency procedures, CPR, OSHA regulations, personal care, basic restorative services, communications, common diseases, conditions of the body systems, job-seeking skills, and at least three planned courses for the knowledge and skills for the occupational area, such as medical assisting, ward clerk or nursing assisting. Advanced nursing skills are taught to second and third year students to prepare them for Associate Degree programs.

It is recommended that students take the following courses at their sending school: Applied Math I, Integrated I, Algebra II, Applied Biology, Applied Chemistry and Anatomy and Physiology.

#### PROTECTIVE SERVICES

The Protective Services Program is a three-year program for students in grades 10, 11 and 12. This is an instructional program that prepares students to apply technical knowledge and skills required to perform entry-level duties as an Emergency Medical Technician, Firefighter, Police Officer and other safety services. The student can receive a CPR card through the American Heart Association or first aid certification as a First Responder. The student will be certified with the State and receive a state certification number. Students are also prepared to take Emergency Medical Technician courses. As Firefighters, the students will be prepared to pass Essentials of Firefighting and Firefighter I courses offered through the State Fire Academy.

The program stresses the techniques, methods and procedures common to the public safety fields of the ambulance services, fire departments and police departments. Physical development, teamwork and self-confidence skills are emphasized due to the nature of the specific occupations. In addition to the application of mathematics, communications, science and physics, students receive training in social and psychological skills, map reading, vehicle and equipment operations, the judicial system, pre-hospital emergency care, first aid, CPR, patient assessment, treatment and

communication.

#### STEEL CENTER AREA VOCATIONAL TECHNICAL EDUCATION

## STEEL CENTER AREA VOCATIONAL TECHNICAL SCHOOL PROGRAM OFFERINGS-continued FOOD SERVICE CLUSTER

#### **FOOD SERVICE**

The Food Service Program is a three-year program for students in grades 10, 11 and 12 designed to prepare students for entry-level employment. Food Service is an instructional program that prepares students in all kinds of employment in institutional, commercial or self-owned food establishments or other food industry occupations. Skills are provided to students desiring to become employed in all areas of the food service industry at the entry level occupation. Emphasis is placed on Ahands-on training. Instruction and specialized learning experiences include: theory, laboratory and work experiences related to planning, selecting, preparing, and serving quantity food and food products, nutrition, use and care of commercial equipment, safety and sanitation. Meat cutting and baking skills, pricing the menu and supervisory skills are included in the program. The first year 10th grade students will remain in the Food Service Program for the first grading period and rotate into Baking/Pastry and Meat Cutter Programs in the second and third grading periods. In the fourth grading period the students will return to their original course of study or change to another program, if space is available.

#### RETAIL MERCHANDISING AND PRODUCTION

The Meat Cutting Program is a three-year program for students in grades 10, 11 and 12 designed to prepare students for entry-level employment. Meat Cutters are employed in wholesale, retail, institutional, commercial or self-owned food-service establishments. Meat Cutters can also work as inspectors at the state and federal levels in the Department of Agriculture. This is an instructional program that prepares students to apply technical knowledge and skills to cut, trim and prepare meat. Students receive instructions in the use of hand and power meat cutting tools, identification of and cutting techniques for different cuts of meat, dressing poultry, processing fish, count display, marketing, pricing, refrigeration and sanitation. Students are offered an opportunity to participate in a supervised work experience with area businesses during their senior year with approval of the instructor. A broad-base of skills is provided to students desiring to become employed in the food service industry at the entry level. In the first year, students will complete a career exploration experience. In the second and third years, students will receive cross-training in other related vocational technical programs. Therefore, students will also receive instruction in the preparation and cooking of meats, poultry, and fish, as well as, baking. The first year 10th grade students will remain in the Meat Cutting Program for the first grading period and rotate into Baking and Food Service programs in the second and third grading periods. In the fourth grading period the students will return to their original course of study or change to another program, if space is available.

#### <u>BAKING</u>

The Baking Program is a three-year program for students in grades 10, 11 and 12 designed to prepare students for entry-level employment in a variety of occupations in the baking industry or post secondary training in the culinary arts. Students receive specialized classroom and practical work experience associated with the preparation of breads, cakes, pies, pastries, and other bakery products for retail distribution, for consumption in a commercial food service establishment, or for special functions. The student receives instruction in: making, freezing and handling of baked products, decorating, counter display and packaging of merchandise.

Bakers should know the basic foods they use, understand how they may be used to the best advantage and be familiar with the tools and equipment commonly used in food preparation. Therefore, the first year students will remain in the baking program for the first grading period and rotate into food service and meat cutting in the second and third grading periods. In the fourth grading period the students will return to their original course of study or change into another program, if space is available. In the second and third years, student will continue advanced skill development and related skills through cross-training in other related vocational technical areas. In the third year, students are encouraged to participate in a supervised work experience (Co-op) or internships during their senior year with approval of the instructor.

### STEEL CENTER AREA VOCATIONAL TECHNICAL SCHOOL PROGRAM OFFERINGS - continued

#### **TECHNICAL CLUSTER**

#### **COMPUTER AIDED DRAFTING**

The Computer-Aided Drafting Program (CAD) is an open entry/open exit three-year program for students in grades 10, 11 and 12. This program is designed to prepare students to apply technical knowledge and skills as each related to gathering and translating of data or specifications, including basic aspects of planning, preparing and interpreting mechanical, architectural, structural, civil, pneumatic, marine, electrical/electronic, topographical, and other drawings and sketches used in various engineering fields. The curriculum is designed to provide experiences in drawing and CAD towards a variety of projects using high end computer and peripheral equipment; the use of reproduction, equipment; the preparation of spreadsheets and word processing documents; the development of databases; and models using both solid and visual materials.

This program is competency-based curriculum. Students learn skills that will employ them in an entry-level occupation. In the first year, students will complete a career exploration experience and a series of core competencies in each program in the Construction cluster. In the second and third years, students will receive cross-training in other related vocational technical programs.

The following courses are recommended for students to take at their sending school: Applied Math, Integrated I, Geometry, Algebra II, Pre-Calculus, Creative Writing and Physics.

#### COMPUTER PROGRAMMING AND INFORMATION TECHNOLOGY

Computer Programming and Information Technology is a three-year program directed toward students in grades 10, 11 and 12 interested in computer programming and information science or related technology areas. Students are prepared for entry-level employment or postsecondary education. Windows 2000 is the operating system used to perform technical operations. VISUAL BASIC Programming is the primary computer language. Students will also program HTML (Flash), JAVASCRIPT, and SQL. In grades 11 and 12 students will take CISCO Introduction to networking, LANS, WANS. Students will work toward ORACLE and CISCO certification in networking and operating systems. In their senior year, students are encouraged to participate in a supervised work experience (Co-op) or internship.

At the end of the first nine-week session, the 10<sup>th</sup> grade students will attend the Microcomputer Information Systems and Graphic Communications for the second and third marking periods for instruction in web design covering HTML, Frontpage, and Adobe Photoshop and Illustrator, and worth ethics.

This program is competency-based which means the students progress in the program is based on their level of proficiency and knowledge in the content areas. Students who have passed Algebra I, Geometry, Algebra II, VISUAL BASIC at their sending school can take a proficiency test to determine the appropriate placement level.

#### **ELECTRONICS ENGINEERING**

The Electronics Engineering Technology Program is an open entry/open exit three-year program for students in grades 10, 11, and 12. This program is designed to prepare students for entry-level employment in the ever expanding field of Electronics including computer maintenance. Beginning with a solid background in basic electronics, the student is provided the means of advancing into digital and microcomputer techniques that are highly sought after in the business and industrial communities.

The curriculum includes DC and AC electronics, semiconductor theory and electronic circuit techniques. Instruction is designed to develop knowledge, understanding and skills essential to employment in science, digital communications, industrial electronics, computer-related technologies, as well as other diverse electronic occupations. The basic learning experiences advance to digital electronics, microcomputer technology and computer repairs. Each aspect of this learning process is related to designing, producing, calibrating, estimating, testing, assembling, installing and maintaining solid state electronic equipment such as computers and other digital equipment. Student can earn up to six college credits through CALU in the High School.

#### **GRAPHIC COMMUNICATIONS**

The Graphic Communications Program is a three-year program for students in grades 10, 11 and 12 designed to prepare students to apply technical knowledge and skills to plan, prepare, and execute commercial and industrial visual image and print products using mechanical, electronic, and digital graphic and printing equipment. Students learn Electronic Illustrator, Illustration, Adobe Photo Shop, Typography, Bindery, color and paper theory, airbrush, drawing, digital RISOGRAPH printing, ink and color preparation and screen printing production. Students will be prepared for entry-level employment or advanced training at a postsecondary institution.

At the end of the first nine-week session, the 10<sup>th</sup> grade students will attend the Microcomputer Information Systems and Computer Programming for the second marking period.

#### **COOPERATIVE VOCATIONAL EDUCATION**

Cooperative Vocational Education is a method of training, whereby the student at Steel Center Area Vocational Technical School combines classroom instruction with on-the-job training in a career area of his/her choice. It is a unique plan of education designed to integrate classroom study with a carefully planned and supervised practical work experience. This program permits the student to relate schoolwork to actual Areal world@ employment during his/her senior year.

#### LIST OF BUSINESS AND INDUSTRY CERTIFICATIONS STUDENTS CAN EARN AT STEEL CENTER:

Baking Food Protection Certification (Allegheny County)

Computer Programming CISCO Network Certificate

**ORACLE Certification** 

Cosmetology State Cosmetology License

Diesel Engine Technology EETC Outdoor Power Equipment Certifications

Kubota Power train Certificate

STIHL Two-Cycle Engine Certificate

Electrical Construction C-Tech Copper and Fiber Optic Certifications

Electronics Engineering Technology (ETA) Certified Associate Electronics Technician

(ETA) Student Electronics Technician Certificate

Food Service Food Protection Certificate (Allegheny County)

HVAC Technology EPA 1-111 and Universal Certificates

Health Assisting Certified Nurse Assistant (CAN)

Computer Information System ICLD Certificate, Microsoft Certified Professional

Protective Services CPR/AED, First Responder Certificate

Retail Food Merchandising and Production Food Protection certificate (Allegheny County)

# ACTIVITY AND ATHLETIC GROUPS

#### **ACTIVITY AND ATHLETIC GROUPS**

#### **ACTIVITY AND ATHLETIC GROUPS**

#### **ACTIVITY GROUPS**

#### **ATHLETIC GROUPS\*\*\*\***

\*Academic League

Computer Club

Future Business Leaders of America (FBLA)

Drama Club

French Club

**History Club** 

Interact Club

International Thespian Society

Intramurals

Japanese Club

Jr. Classic League

Kids 4 Wish Kids Club

Latin Club

Mock Trial Club

Monticello

\*\*National Honor Society

**Outdoors Club** 

Prom

Science Club

Scrapbook Club

Spanish Club

Spectrum

Statesman

Student Council

Baseball (9<sup>th</sup> Grade Boys)

Baseball

Basketball (9<sup>th</sup> Grade Boys)

Basketball (Boys/Girls)

Cheerleaders

Color Guard/Winter Guard

Football (9<sup>th</sup> Grade)

Football

Golf

Soccer (Boys/Girls)

Softball

Swimming (Boys/Girls)

Tennis (Boys)

Tennis (Girls)

Track (Cross Country)

Track (Indoor) (Boys/Girls)

Track and Field (Boys/Girls)

Volleyball (Boys)

Volleyball (Girls)

Junior High Wrestling

Wrestling

\*Must complete a test to qualify

\*\*Must qualify academically

\*\*\*\*Completed sport eligibility form required for all athletic groups listed and must meet PIAA academic and attendance requirements.