

PAUL LAURENCE DUNBAR
HIGH SCHOOL COURSE
INSTRUCTIONAL DIRECTORY
2009-2010

Paul Laurence Dunbar High School

1600 Man O' War Blvd.

Lexington, Kentucky 40513

(859) 381-3546

www.pld.fcps.net

As we enter the new calendar year this month, the faculty and staff at Paul Laurence Dunbar High School have already been preparing for the new academic year. This course directory is intended to assist you as your family looks toward plans for the upcoming school year as well. PLD has established a state-wide reputation for excellence in academics over a broad offering of courses. We believe the curriculum represented in this directory is a critical part of that success.

As you make selections for your classes, the course descriptions and general information in this directory will help you investigate a range of interests in your early high school years and then use the later years to delve more deeply into the areas you may follow in your post-high school education. In addition to the course descriptions, graduation requirements specific to PLD and the online Individual Learning Plan will be useful for making choices. As always, our staff stands ready to assist you in any way possible as you make decisions for the next year and beyond. Your counselor will often be your first and best resource, but your teachers and principals are equally committed to your overall success at PLD. We look forward to working with you as you take full advantage of all these opportunities.

Best wishes,



Anthony Orr, Principal

ADMINISTRATION OFFICE

Mr. Anthony Orr, Principal
Mr. Tony Blackman, Associate Principal
Ms. Andrea Tinsley, Associate Principal
Mr. Ed Oakley, Freshman Principal
Mrs. Mary Lou Long, Academic Dean

Principal's Office Phone Number- 381-3546

Mrs. Ellen Fore, Secretary
Mrs. Kathy Ginn, Secretary
Mrs. Gloria Tompkins, Secretary

COUNSELING OFFICE

Mrs. Deanna Smith, Head Counselor
Mrs. Melissa Long, Counselor
Mr. Derrick Thomas, Counselor
Mr. Elton Parish, Counselor
Mrs. Mona Bond, Ninth Grade Counselor

Students- A-B, All MSTC students
Students- C-Ha
Students- Hb-Pe
Students- Pf-Z
All incoming 9th grade students except MTSC

Dr. MacKenzie Leachman, School Psychologist
Mr. Steve Duerson, Social Worker

Counseling Office Phone Number- 381-3554
Mrs. Tricia Giles, Secretary
Mrs. Alice Mattingly, Secretary

Registrar's Office Phone Number- 381-3555
Mrs. Carole Humkey, Registrar
Mrs. Judy Drury, Registrar

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PAUL LAURENCE DUNBAR GRADUATION REQUIREMENTS

(Students entering high school in 2006)

<u>SUBJECT</u>	<u>CREDITS</u>
English	4
Mathematics	4
Algebra 1, Part 1 Algebra I	Geometry
Algebra 1, Part 2 <u>OR</u> Geometry <u>OR</u>	Algebra 2
Geometry	Alg 3 or Pre-Cal
Statistics	Statistics
Science	3
Physical Science, Biology, Chemistry or Physics)	
Social Studies.....	3
Citizenship, World Civilization, U. S. History	
Health & Physical Education.....	1
History & Appreciation of Visual & Perf Arts.	1
Elective Credits.	10
MINIMUM CREDITS REQUIRED FOR GRADUATION	26

Seniors must successfully complete all portions of the CATS assessment as well as complete a Senior writing portfolio and an Individual Learning Plan (ILP) each year. All correspondence work must be completed by April 1.

**PRE-COLLEGE CURRICULUM REQUIREMENTS FOR KENTUCKY
UNIVERSITIES AND COMMUNITY COLLEGES**

<u>SUBJECT</u>	<u>CREDITS</u>
English	4
Mathematics	3
Algebra I, Algebra II, Geometry	
Science	3
Physical Science, Biological Science, Chemistry	
Social Studies.....	3
Citizenship (or Poli Sci./Econ), U. S. History, World Civilization	
World Language	2
Health	½
Physical Education	½
History & Appreciation of Visual/Performing Arts	1
Electives	**5

**RECOMMENDED PRE-COLLEGE CURRICULUM - SELECTIVE COLLEGE
(EXAMPLES - DUKE, WAKE FOREST, HARVARD, VANDERBILT, CENTRE, TRANSY)**

- Four years of advanced level English
- Four years of advanced level mathematics including calculus
- Three years of advanced level laboratory science
- Three years of advanced history or social studies
- Three years of the same world language
- One year of course work in the fine arts

PAUL LAURENCE DUNBAR GRADUATION REQUIREMENTS

(Students entering high school in 2007 or later)

<u>SUBJECT</u>	<u>CREDITS</u>
English	4
Mathematics	4
Possible sequences for classes-	
Algebra I Adv Geom/Prob&Stat Adv Alg II/Prob&Stat	
Geom/Prob&Stat Algebra 2 Adv Pre-Cal	
Algebra 2 Alg 3 or PreCal Adv or AP Cal	
Algebra 3 Adv or AP Cal Math Elective	
Science	3
Physical Science, Biology, Chemistry or Physics	
Social Studies.....	3
Citizenship, World Civilization, U. S. History	
Health & Physical Education.....	1
History and Appreciation of Visual and Performing Arts.....	1
Elective Credits.....	10
MINIMUM CREDITS REQUIRED FOR GRADUATION.....	26

All students must successfully complete all portions of the CATS assessment and an Individual Learning Plan (ILP) each year. Seniors must also complete a writing portfolio. All correspondence work must be completed by April 1.

**PRE-COLLEGE CURRICULUM REQUIREMENTS FOR KENTUCKY
UNIVERSITIES AND COMMUNITY COLLEGES**

<u>SUBJECT</u>	<u>CREDITS</u>
English.....	4
Mathematics.....	3
Algebra I, Algebra II, Geometry	
Science.....	3
Physical Science, Biology, Chemistry	
Social Studies.....	3
Citizenship (or Poli Sci./Econ), U. S. History, World Civilization	
World Language.....	2
Health.....	½
Physical Education.....	½
History & Appreciation of Visual/Performing Arts.....	1
Electives.....	**5

**RECOMMENDED PRE-COLLEGE CURRICULUM- SELECTIVE COLLEGE
(EXAMPLES - DUKE, WAKE FOREST, HARVARD, VANDERBILT, CENTRE, TRANSY)**

- Four years of advanced level English
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- Three years of advanced history or social studies
- Three years of the same world language
- One year of course work in the fine arts

PREPARATION FOR COLLEGE ADMISSION

9th-10th Grade

- 1) Follow the recommended Pre-College Curriculum course selections.
- 2) Use the Career Cruising tool in the ILP to identify interests and investigate careers.
- 3) Maintain a high Grade Point Average.
- 4) Investigate summer programs for underclassmen.
- 5) Become involved in community service projects and volunteer opportunities or have a summer job.

11th Grade

- 1) In October, take PSAT/NMSQT.
- 2) Continue to investigate careers using the ILP tools.
- 3) Begin checking for scholarships and summer programs for juniors.
- 4) Begin a college search:
 - a) Visit the college fair in October
 - b) Use college search engines on the internet (visit the PLD website under guidance for links)
 - c) Visit college representatives when they visit the counseling office
- 5) During the school year:
 - a) Create a list of colleges interested in attending
 - b) Visit the college websites to learn admission requirements and procedures
 - c) Write for admission packets or determine if online applications are available
 - d) Determine cost
- 6) In January/spring, see your counselor for more information about:
 - a) High school courses to take during your senior year
 - b) Summer Enrichment/College Credit Programs for juniors
 - c) Early decision vs. early action vs. regular admissions
- 7) In the spring, take the ACT/SAT for the first time. The ACT will be administered by the state to Juniors free of charge as part of CATS in March.
- 8) In the summer:
 - a) Take the ACT/SAT again if desired (all college admissions testing should be completed by October of your senior year!)
 - b) Be involved in summer programs, volunteer opportunities, community service projects, or have a job.
 - c) Make initial college visits if the opportunity arises.
 - d) Begin to narrow college choices.

12th Grade

- 1) **Carry a full academic load throughout the entire year.** Final admission to some colleges is dependent on maintaining a strong academic standing and full course schedule throughout the 12th grade. KEES money is also dependent upon the number of credits earned during the senior year.
- 2) **October-December**
 - a) Anyone who did not take the ACT/SAT in the spring of the junior year should take the first available test given in the fall. Retakes should also be considered.
 - b) Finalize college applications by January 1 (check deadlines). Admission requirements to colleges and universities vary, but typical criteria include cumulative GPA, rigor of courses, extracurricular activities, community service, and recommendations. Some schools require an interview and/or a response to essay questions on the application.
 - c) Search and apply for scholarships.
 - d) Attend sessions with college representatives.
- 3) **December-April**
 - a) Obtain information regarding the FAF (Financial Aid Form) from counseling office.
 - b) Attend the Financial Aid Workshop
 - c) Apply for FAF before March 15
 - d) Continue to apply for scholarships
 - e) Make final college visits, if needed, to assist determining final admissions choice.

BLOCK ROTATION

Paul Laurence Dunbar operates on a 4 x 4 alternating day rotating class schedule.

DEFINITION OF TERMS

Prerequisites - Courses that must be successfully completed before the student is eligible to take a desired subject are called prerequisites. Prerequisites are listed at the end of each course description and should be considered carefully to determine eligibility to take the course.

Advanced Placement Courses - An Advanced Placement (AP) Course is a course using guidelines approved by The College Board with the expectation that students taking the Advanced Placement Test will earn possible college credit. Four AP courses in specific areas are required for a student to be eligible for the Commonwealth Diploma. (See Commonwealth Diploma requirements.)

Advanced Courses - Some course sections are taught at an advanced level and are weighted when calculating rank in class. (See information below regarding quality points.)

Required Courses - Required courses are those specific courses required for graduation by the State Board of Education.

Elective Courses - Courses in which the student's choice can be exercised but which may count toward graduation are called "electives."

Credit - One unit of credit is awarded for the satisfactory completion of one year of work in a regular course.

Quality Points - The following points are awarded and used in determining Grade Point Average (G.P.A.): A = 4 • B = 3 • C = 2 • D = 1 • F = 0

In courses judged above average in difficulty (Adv., AP, MSTC), a different value is used in awarding quality points for determining rank-in-class: A = 5 • B = 4 • C = 3 • D = 2 • F = 0

High School Advanced and Advanced Placement

Advanced and Advanced Placement Classes (AP) are intended for students who have exceptional abilities that require differentiated services from those offered in other classes. Honors classes are designed for students who need additional challenge and accept active involvement in their own learning. Students should be willing to demonstrate the necessary task commitment to maintain satisfactory progress.

Identification and Placement

Placement of students in Advanced or Advanced Placement (AP) courses is based on student/parent choice and counselor/teacher recommendations. Recommendations are based on test scores and past academic performance, which help predict students' success in advanced courses. AP courses require a one-year commitment and phase level changes are not available once a student has requested placement into these courses. Summer assignments are required of most Advanced and AP courses.

Differentiated Services for Students with Disabilities

For students with educational disabilities, an Admission and Release Committee (ARC) will determine the placement in which a student will receive content instruction. Schools extend and modify curricula to enable students with disabilities to participate and progress in the general curriculum. Further information is available through the counseling office or the special education facilitator.

GRADING/REPORTING

High schools are on a semester system (18) weeks and will receive interim reports based on individual high school policy. Final reports, which include G.P.A. (Grade Point Average), are given at the end of the semester or 18 weeks. Each teacher is required to state clearly in each class the evaluation criteria and procedure for determining student grades.

High School Grading Standards

A	92-100%	Superior
B	83-91%	Above Average
C	74-82%	Average
D	65-73%	Below Average
F	0-64%	Failure

The following marks will be used to record conduct grades:

S - Satisfactory N - Needs Improvement U - Unacceptable Conduct - Unacceptable Behavior

Requirements for promotion to next grade

To be Promoted to:	Required completion of:
Freshman	8 th grade (or equivalent as determined by middle school)
Sophomore	6 credits
Junior	12 credits
Senior	18 credits
Graduation	26 credits

Make-Up Credit

One semester credit (1/2 credit) is awarded to students in grades 9-12 upon successful completion of the one-semester course. Students who fail a semester course and wish to remove the damage of the "F" from their record may do so by:

- 1) Repeating the course during the regular term
- 2) Taking the course by correspondence from an accredited institution
- 3) Taking the course through e-School

Students may also make up credit without removing the "F" from their record by repeating some courses in credit recovery (limited availability). Credit recovery courses will not be reflected in the calculation of the student's GPA; the "F" will continue to be calculated in the GPA. Board policy regarding correspondence, e-School, and credit recovery courses must be followed.

Calculating Grade Point Average and Rank in Class

Students will have their G.P.A. calculated and reported separately from their rank in class. Initial ranks are calculated at the end of the junior year and final ranks are established after the first semester of the senior year.

- ❖ All students will have their G.P.A. calculated on a 4.0 system.
- ❖ The following system is used to determine GPA and rank.
 - Add the total quality points on the transcript for the grades received
 - (A = 4; B = 3; C = 2, D = 1, F = 0)
 - Add one (1) quality point for successful completion of each phase level 04, 45, and 05 course.
 - Points are neither added nor deducted for non-phased courses.
 - Divide by the total credits attempted.

Virtual/Online Courses

High school students (and middle school students per paragraph one below) may also earn, a maximum of three (3) units of academic credit to be applied toward graduation requirements by completing online courses offered through agencies approved by the Board, such as the Kentucky Virtual High School (KVHS). Credit from an online or virtual course may be earned only in the following circumstances:

- The course is not offered at the high school, and the Principal, with agreement from the student's teachers and parents/guardians, determines the student requires a differentiated or accelerated learning environment. This may include middle school students.

- Although the course is offered at the high school, the student will not be able to take it due to an unavoidable scheduling conflict that would keep the student from meeting graduation requirements.
- The course will serve as a supplement to extended homebound instruction.

Unless otherwise approved by the principal/designee, students taking such courses must be enrolled in the district and take the courses during the regular school day at the school site. The district, in cases of students who are expelled or homebound, may grant exceptions.

As determined by school/council policy, students applying for permission to take a virtual course shall complete prerequisites and provide teacher/counselor recommendations to confirm the student possesses the maturity level needed to function effectively in an online learning environment. In addition, the express approval of the principal/designee shall be obtained before the student enrolls in a virtual course. The school must receive an official record of the final grade before credit toward graduation will be recognized.

Provided one of the three circumstances apply and KVHS courses are part of the student's regular school day coursework and within the budgetary parameters, the tuition fee, and other costs for approved virtual/online courses shall be borne by the District for students enrolled full-time from funds that have been allocated to the school. The Superintendent shall determine, within the budget adopted by the Board, whether additional funding shall be granted, based on supporting data provided by the principal. If none of the three circumstances applies, the student may still enroll in a course. However, the parent or guardian is responsible for all expenses including the course, textbooks, and any other associated costs or materials. In such cases, the student's counselor still must approve the course in order for the student to receive credit for it.

Kentucky Educational Excellence Scholarship (KEES)

Kentucky high school students have a great opportunity to make their education pay with the Kentucky Educational Excellence Scholarship (KEES). KEES is an exciting program administered by the Kentucky Higher Education Assistance Authority (KHEAA). Students who try to get the most from high school by studying hard and making good grades (C+ and above) can earn scholarships for post-secondary education including college, technical, or trade school. The better students do in high school, the more they will earn toward scholarships. Students who continue to make good grades in college can retain their scholarships. Research shows that students who complete their post-secondary studies have a better opportunity to achieve their career goals and improve their standard of living. ***Education really does pay!*** For additional information and details regarding KEES, please visit the KHEAA website, under Parents and Students, at www.kheaa.com; the PLD website, under Guidance, at www.pld.fcps.net; or visit the counseling office.

Bluegrass Community & Technical College- Opportunity College – Dual Enrollment

Opportunity College is collaboration between area high schools and Bluegrass Community and Technical College to provide juniors and seniors with the opportunity to earn college credit while still in high school. Juniors and seniors may be dually enrolled in both the high school and at Bluegrass Community and Technical College (BCTC). Students are responsible for all costs related to tuition, books, fees and transportation. ***The cost of tuition is one half the cost of regular per hour tuition.*** Students must meet required ACT and/or COMPASS scores, as well as pre-requisites, in order to enroll in these courses. Most course schedules follow the college's academic calendar and may require students to attend class on days when their high school is not in session.

To apply for dual enrollment courses, please complete the following:

- ✚ Application
- ✚ Official High School transcripts
- ✚ Official ACT, SAT or COMPASS results. The COMPASS may be scheduled by contacting any extended campus or the Assessment Center at (859) 246-6226]
- ✚ Letter of recommendation from teacher or counselor

High school students may enroll in 2 courses per semester unless otherwise approved by the Academic Dean.

To view the days and times courses are offered, click on the Schedule of Classes from the web site at www.bluegrass.kctcs.edu. For a complete listing of general education course requirements, see page 33 in the BCTC catalog. Application information should be sent to:

Rebecca Simms

Bluegrass Community & Technical College

164 Opportunity Way

Lexington, KY 40511-2623

(859)246-6761 or Rebecca.simms@kctcs.edu

For more information check our website: www.bluegrass.kctcs.edu/opportunitycollege

ELIGIBILITY POLICY FOR EXTRA-CURRICULAR ACTIVITIES

Philosophy

The Fayette County Public Schools provide a wide variety of stimulating and worthwhile extracurricular activities which are intended to enrich and extend the educational experiences of students. Students are urged to take an active part in as many extracurricular activities as their time, interest and ability will permit. Parents should guide their child (children) in maintaining high standards of scholarship, attendance and conduct which are expected of all students who take part in such activities. Representing one's school in extra-curricular activities is a privilege and with this privilege there are academic requirements.

Policy

Students should be aware of individual school SBDM policies which define eligibility and participation requirements for extra-curricular activities. Each school has the authority to set higher standards for eligibility.

Paul Laurence Dunbar offers a variety of athletic programs and co-curricular activities.

PERFORMANCE ASSESSMENT

The Commonwealth of Kentucky mandates a performance assessment system for high school students that uses multiple measures for determining student proficiency on the state education standards. The Learning Goals for Kentucky Students, the Academic Expectations, the Program of Studies, and the Core Content for Assessment are available in your high school.

The Commonwealth Accountability Testing System (CATS) is the system the state uses to assess and communicate how well each student is achieving and how well the school is doing at educating the entire student population. CATS is comprised of many assessments including the Kentucky Core Content Tests (KCCT), which is made up of multiple choice and open response assessments; writing portfolios; alternate portfolios for students with moderate to severe disabilities; non-academic indicators (dropout, retention, and attendance rates, and successful transition to adult life); and an accountability formula for promoting school improvement. Results are communicated to parents regarding their individual child's achievement and the overall school performance.

TENTH GRADE: Sophomores in high school will take the PLAN test from ACT (a college readiness test) in the fall and the KCCT for Reading, Practical Living, and Vocational Studies in the spring. The KCCT includes both open response questions and multiple-choice questions.

ELEVENTH GRADE: Juniors in high school are assessed with the KCCT for Mathematics, Social Studies, Science, and Arts/Humanities. Each assessment includes a combination of open response and multiple-choice questions. Juniors will also take the ACT in March free of charge as part of CATS. The results for the ACT can be forwarded to colleges as part of the admission process.

TWELFTH GRADE: The senior's KCCT assessments focus on writing. Each student must assemble a Writing Portfolio with four (4) pieces of writing which represent the culmination of the student's best writing efforts. In the fall (November), students will also participate in an On-Demand Writing Assessment in which they will be asked to use the writing process to respond to a prompt on a specific topic.

FRESHMAN ACADEMY

The purpose of the Paul Laurence Dunbar High School Freshman Academy is to insure a smooth and successful transition from middle school to high school. The Freshman Academy was created in the fall of 2005 after much research and is purposely housed in the 400 block of our building. Our students are surrounded with a core group of teachers who are dedicated to helping each child achieve at his/her own level of success. Many instructional and behavioral strategies are in place to ensure that each student reaches his/her full potential.

The mission of the Academy is to create a culture of high standards with individualized supports for our ninth grade students. Our teachers and staff have created an environment that will encourage active learning and positive social interactions in a nurturing atmosphere. Our goal is to provide a journey of exciting educational opportunities in which all children have the opportunity to reach high standards of success.

THE MATH, SCIENCE AND TECHNOLOGY CENTER AT PAUL LAURENCE DUNBAR

The Math, Science and Technology Center (MSTC) is a four year program created especially for those students who have a high level of both interest and ability in mathematics, science or technology. This is a selective program for an extraordinary group of students.

Students within the MSTC are in a particularly nurturing environment. The MSTC Program is filled with peers who have similar interests and abilities, teachers who are well qualified to guide and support students at an advanced level of study, and state of the art facilities, specifically designed to provide the resources a MSTC student might need to pursue a unique interest. In addition to the full range of facilities available at Paul Laurence Dunbar, MSTC students have access to a fully equipped Computer Programming Lab and a fully equipped Science and Technology Lab, each of which was specially designed to accommodate the needs of MSTC students doing advanced work.

The MSTC instructional program blends theory and hands-on technological experiences in a teaching and learning environment that encourages the development of students as leaders, school researchers and practitioners of science and mathematics. A bond between the MSTC and the business, industrial and university communities assures that students have access to the latest resources and materials.

In grades nine and ten, the academic emphasis is on the development of fundamental skills and knowledge. The MSTC Program includes:

Grade 9

MSTC/AP Computer Science A
MSTC Algebra II or higher level math**
MSTC Chemistry I

Grade 10

MSTC Biology 1
MSTC Physics 1
MSTC Pre-Calculus or MSTC/AP Calculus I
AP Statistics

** (If you have not taken Geometry, you must take Advanced Geometry concurrently with Algebra II).

In grades eleven and twelve, the academic emphasis moves toward the development of research skills and is designed to help students pursue a course of study based upon personal interests. The MSTC program is:

Grade 11

MSTC/AP Calculus I or Adv MSTC Math Elective
MSTC Research Seminar/Mentorship
MSTC Earth & Space Science
MSTC Advanced Elective

Grade 12

MSTC Senior Seminar
MSTC Mentorship
MSTC/AP Calculus I or Adv Math Elective
MSTC Advanced Elective
MSTC Advanced Elective

The Advanced Electives will vary from year to year depending upon the interests and needs of the students. Advanced Electives will include, but are not limited to, such topics as:

MSTC Calculus II	MSTC/AP Computer Science AB
MSTC Linear Algebra/Discrete Math	MSTC Organic Chemistry
MSTC/AP Chemistry II	MSTC Engineering Problems
MSTC/AP Physics B	MSTC/AP Biology II
MSTC/AP Physics C	MSTC/AP Biology III

MSTC students develop research, communication, planning and teamwork skills and examine economic, social and ethical aspects of scientific and technological progress. The overall goal of preparing MSTC students to be among the country's technology leaders in the twenty-first century requires that students evaluate and communicate as well as create and implement.

During their four years in the MSTC program, students experience instruction that emphasizes:

- Interdisciplinary development of basic mathematics, science and technology concepts, hands-on research methods, and extensive computer application skills.
- Development of higher level thinking skills of interpretation, analysis, synthesis and evaluation.
- Hands-on use of tools and materials for design, construction, testing, and problem solving.
- An appropriate balance between the theory and the application of mathematics, science and technology.
- Use of community resources to provide mentored experiences that match personal interests and abilities with real research and development opportunities.

The school day for MSTC students begins an hour earlier than the regular school day. Students spend the first portion of each day with the MSTC staff in specialized MSTC courses. The remainder of their day is spent with students in the Paul Laurence Dunbar programs for language arts, social studies, fine arts, music, foreign language, or whatever else they choose to pursue. As students at Paul Laurence Dunbar, they can also choose to participate in a full spectrum of extracurricular activities.

Forty (40) ninth grade students will be admitted to the MSTC program each year. Acceptance in the program is a function of past performance and a series of test assessments. Students must also successfully complete Geometry by the end of the eighth grade or take PLD Advanced Geometry concurrently with MSTC Algebra II. Interested eighth grade students can obtain an MSTC application from the Fayette County website at www.fcps.net between September 1 and October 15. Additional information can be obtained by contacting the Facilitator of the Math, Science and Technology Center.

Facilitator-Beverly Smith
381-3558
bev.smith@fayette.kyschools.us

MSTC website- <http://www.pld.fcps.net/mstc/>

MSTC Math Core Courses

MSTC Algebra II

Freshmen take MSTC Algebra II or a higher MSTC math. This zero hour course is all about functions. Students will study quadratic, exponential, logarithmic, rational, and irrational functions during the first semester. Second semester covers quadratic relations, higher degree polynomial functions, sequences and series, and trigonometric/circular functions. Depending on time, students will research a topic of their choice or study probability and functions of a random variable. At each step, students are encouraged to connect their work to the "real world," and hopefully even to their own lives. Those who earn a 96% for both the fall and spring semesters have the option to skip Pre-Calculus and proceed to MSTC /AP Calculus I.

MSTC Pre-Calculus

In MSTC Pre-Calculus students are taught the standard pre-calculus curriculum and begin calculus. Some of the topics covered are: transformations of graphs, complex numbers(standard and polar form), rational functions, exponential functions, logarithmic functions, trigonometric functions and their graphs, vectors, polar equations, parametric equations, conic sections (standard and polar form), proof by mathematical induction, limits and derivatives.

An emphasis is placed on graphing for most topics. After taking MSTC Pre-Calculus students take MSTC/AP Calculus I.

MSTC/AP Calculus I

This course is designed to prepare students to take the BC Calculus exam in one year. The topics include functions and their graphs, differentiation and its applications, integration and its applications, and sequences and series.

Prerequisites- MSTC Algebra II and/or MSTC Precalculus.

MSTC Computer Science Core Courses

MSTC/AP Computer Science I

This is an introductory programming course. The Java programming language is utilized to demonstrate object-oriented programming concepts and design decisions. Topics include Java syntax, control structures, object orientation, inheritance, and recursion.

MSTC Science Core Courses

MSTC Biology I

The emphasis is to provide students with an honors level biology course with some attributes of the AP Biology curriculum to prepare students with a **significant** range and depth of topics in biology, type of laboratory work required for research, and **time** and **effort** required of students, in order **prepare** the student with the conceptual, factual and analytical skills needed to be successful in the biological sciences. Topics covered across Biology I correlate with Program of Studies for Kentucky and some AP curriculum topics including 5 of the 12 AP Biology laboratories as outlined in AP Course Description. Technology used can include Vernier Probes & Equipment, spreadsheets and/or databases, wikis, blogs, graphic analysis, internet, word processing, etc.

Prerequisite- Students should have completed MSTC Chemistry I with a "B" or better.

MSTC/ AP Chemistry I

This course is a survey of general chemistry with an emphasis on problem solving. The topics discussed are in part...the classification of matter, atomic structure, periodicity, nuclear chemistry, chemical bonding, chemical reactions, stoichiometry, chemistry of gases, solids, and liquids, thermodynamics, kinetics, equilibrium, acids and bases, and an introduction to organic chemistry. This course includes, but is not restricted to the core concepts required by the state of Kentucky. This course also includes a laboratory component in which experiments are performed and written up in a formal laboratory notebook. It is designed to be a precursor course to MSTC/AP Chemistry II.

MSTC Earth Space

Earth/Space Science integrates an in-depth study of Earth and specific characteristics of the solar system. The study of the Earth will include its history, composition, structure, atmosphere, and place in the universe. The characteristics of the solar system will include the motion and structure of the universe and space exploration. Projects required for each unit of study will range from general class.

MSTC Physics I

This course serves as an introduction to the first half of the AP Physics B curriculum. Topics covered will be motion (horizontal and vertical), energy, gravity, forces, simple harmonic motion, waves (especially sound and light), optics, electrostatics, and electricity. The material will be presented using a variety of techniques including lecture, demonstration, discussion, and laboratory exercises. Problems will be solved using algebra and trigonometry.

MSTC Seminar Core Courses

MSTC Jr. Research/Mentor

The goal of the MSTC Research class is to prepare students to go into a lab setting and be successful. Once students are in the lab second semester they will learn the processes and procedures relating to their research project. Students select their 360 hour project and mentor, complete all Kentucky Young Researchers Program documentation by the end of first semester. They begin their project second semester by leaving the PLD campus and going to their mentor's lab during the MSTC Jr. Research block. It is suggested they log 150 hours with their mentor during the second semester of their junior year, 60 hours over the summer, and then complete their research project by logging the final 150 hours first semester of their Senior year.

MSTC Senior Seminar

This zero hour class focuses on current topics in education, math, science, and technology. Senior MSTC students share ideas with an emphasis on public speaking and writing skills. Students concentrate on college preparedness, complete their resumes, college essays, and the college application process. Second semester continues with the current topics focus and emphasis on writing the MSTC Research paper and development of the research presentation and poster. The Senior Symposium is the second Saturday in April. After the Senior Symposium students work on "give back" activities and prepare for AP tests and graduation.

MSTC Senior Mentor/Independent Study

MSTC seniors finish their 360 hours of research with a mentor during the first semester of their senior year. Second semester they write their research papers, prepare their project presentation for the MSTC Senior Symposium, and prepare the research poster. The MSTC Senior Symposium is the second Saturday in April. After the symposium the seniors may go to other events and present their research presentations, participate in community service projects that "give back" to the Dunbar High School or other Fayette County High Schools, prepare for Advanced Placement Tests, and graduation.

MSTC Electives

MSTC/ AP Biology II

The emphasis is to provide a freshman college biology course with a significant increase in the range and depth of topics covered, type of laboratory work, textbook used and time and effort required of students, in order to prepare the student with the conceptual, factual and analytical skills needed to be prepared and successful in AP biology. Topics covered across Biology 1&2: Molecular and Cellular Biology (25%), Heredity & Evolution (25%), Organisms and Population Biology (50%) and the rest of the 12 required AP Biology laboratories as outlined in AP Course Description. Technology used includes Vernier Probes & Equipment, spreadsheets and/or databases, wikis, blogs, graphic analysis, internet, word processing, etc.

Prerequisite- Students should have completed MSTS Chemistry I & Biology I with a "B" or better.

MSTC /AP Biology III

The emphasis is to provide an advanced college laboratory biology course with a significant increase in type of laboratory work to prepare the student with the technical and analytical skills needed to be successful in the biological sciences laboratory (goes above AP laboratory requirements). Topics/Units covered: Review of Biology 1&2 materials, Genetics & Molecular Biology, Botany, Microbiology, & Anatomy. Other topics may be added as time permits. Technology used can include Vernier Probes & Equipment, spreadsheets and/databases, wikis, blogs, graphic analysis, internet, word processing, etc. *Prerequisite- Students should have completed MSTC Chemistry I & Biology I & II with a "B" or better.*

MSTC/ AP Calculus II

This course covers material that is beyond the AP Calculus exam. The topics include vector-valued functions, multivariable calculus, and differential equations.

Prerequisite – MSTC/ AP Calculus I.

MSTC/ AP Chemistry II

This is an AP College Board sanctioned chemistry course that is designed to fulfill the AP Chemistry curriculum as required by the AP College Board. It is a second year of chemistry, exploring all of the same topics indicated in MSTC Chemistry I, but with a more rigorous emphasis on depth of knowledge, problem solving, and ability to make connections between topics across the curriculum. There is also a significant laboratory component with a heavier emphasis on analysis of results and connections to the theory represented in the experiment. It is an accelerated course that is designed to be the equivalent of the introductory chemistry course taught in a chemistry student's first year of college. It also prepares students to be successful on the AP Chemistry exam, although taking the AP exam is not a requirement of the course.

MSTC/ AP COMPUTER SCIENCE AB

This is a second course in Java. Students explore a variety of data structures including Sets, Maps, Linked Lists, Stacks, Queues, and Priority Queues. Students must complete Computer Science I before enrolling in this course.

MSTC Engineering Problems

Introduction to design and communication principles through an engineering project approach, stressing teamwork, design process, specialties and tools of engineering, creative and analytical thinking, professionalism and ethics, social, economic and political context and open-ended problems. Grading is based on the quality of engineering projects and presentation of design through written, oral, and graphical communication.

MSTC Linear Algebra/Discrete Math

MSTC Linear Algebra covers the basics of linear algebra including matrix algebra, linear independence, vector spaces, and eigenvalues. The Discrete Math portion of the course serves as a survey of mathematical topics including, but not limited to, logic, proof, number theory, and set.

MSTC Organic Chemistry

MSTC Chemistry 3 is an introductory organic chemistry course. Units of study within the course include nomenclature (both Systematic and Classical), stereochemistry, fundamental organic reactions (including: S_N1 , S_N2 , E1, E2, dehydration, and esterification), alcohol chemistry, aldehyde-ketone-carboxyl chemistry, aromatics, and biochemistry (organic view). Lecture, large group discussion, small group discussion, and independent study are the major modes for material coverage. Laboratory experiences are given to accompany the concepts and include aldehyde tests, saponification, esterification/dehydration, aldehyde oxidation, preparation of ethanol, and preparation of biodiesel. To better visualize the structure and reaction potential of compounds the students use ball-and-stick models and computer programs.

MSTC/AP Physics B

This course serves as an introduction to the second half of the AP Physics B curriculum. Topics covered will be motion (circular), center of mass, impulse and momentum, torque, fluid mechanics, temperature and heat, thermodynamics, magnetism, atomic and nuclear physics. The material will be presented using a variety of techniques including lecture, demonstration, discussion, and laboratory exercises. Problems will be solved using algebra and trigonometry.

Prerequisite – MSTC Physics I

MSTC/ AP Physics C

This course will cover the entire AP Physics C curriculum. Topics covered will be motion (horizontal, vertical, and circular), work, power, energy, center of mass, impulse and momentum, torque, simple harmonic motion, electrostatics, electric circuits, magnetostatics, and electromagnetism. The material will be presented using a variety of techniques including lecture, demonstration, discussion, and laboratory exercises. Problems will be solved using Calculus techniques. While many of the topics covered in this course are also taught in MSTC Physics I and B, they are covered at a much higher level in this course. The problems that are solved are challenging. Students must have completed Calculus I or be taking it concurrently.

Prerequisite – MSTC Physics I

COURSE DESCRIPTIONS

ACADEMIC INTERNSHIPS THROUGH EBCE

(Experience Based Career Education)

Sample Intern Opportunities

Banking/Finance/Accounting; Counseling/Psychology; Culinary; Arts/Performing Arts; Education; Engineering/Architecture; Fitness/Sports Administration; Interior Design; Law/Court Administration; Marketing/Advertising/Graphic Arts; Media Relations; Medicine/Pharmacy/Dentistry; Nursing; Social Services/Ministry; Technology; Veterinary Science

EBCE turns the community into a classroom as seniors are provided opportunities to observe, study, and apply academic skills in a variety of businesses and industries, as well as public and private agencies.

By spending two or more hours a day in the Academic Internship Program, a student will earn **advanced** academic credit while shadowing a series of professionals to learn about career opportunities. Students select their own internship experiences from a list of **over 500** established community sites.

Academic Student Interns are ambassadors to the community, representing Paul Laurence Dunbar High School as well as Fayette County Public Schools. In addition to receiving academic credit and documented internship experiences on their transcripts, many students also receive letters of recommendation, networking contacts, scholarships, programs of study, job opportunities, and/or required volunteer hours for admission to selected college programs.

In-House Curriculum

Students will stay on campus one day a week in order to complete other need curriculum.

ART

ART I

This introductory course provides a general overview and introduction to making artworks using 2 and 3 dimensional media. Students will create works of art using various art materials (graphite, colored pencil, chalk, ink, paint, clay, plaster) and techniques (drawing, painting, print-making, assemblage, modeling, and carving). Students will also analyze and evaluate the use of elements and principles of design in various works of art, describe the purposes of works of art, and study related periods in art history.

Prerequisite- None

PAINTING

This upper level course is an exploration of painting media and idea development. Students will create compositions that are abstract, realistic, and non-objective in subject. Projects will focus on compositional and conceptual development, the use of historical and social references, and development of an individual style. For each project students will participate in a critique of their own work and the work of other students.

Prerequisite – Art I and Art II/2 D design or teacher permission

POTTERY I

This introductory course focuses on basic hand-building techniques (pinch, coil and slab) and glazing methods. Students will explore different methods used to create functional, decorative, and expressive works with clay. For each project students will participate in a critique of their own work and the work of other students. Students will also study related art history and create projects that reflect a theme from that time period.

Prerequisite- None

POTTERY II

This upper level class will explore the more conceptual and sculptural aspects of clay. This class allows students the opportunity to focus on specific individual goals involving construction techniques, form development, and glazing techniques. Students will also create works based on historical references, and pieces that inform and persuade.

Prerequisite- Pottery I

POTTERY III

This upper level class is an exploration of idea development through the use of clay as a medium. Students will create compositions that are abstract, realistic, and non-objective in subject. Projects will focus on compositional and conceptual development, the use of historical and social references, and development of an individual style. For each project students will participate in a critique of their own work and the work of other students.

Prerequisite – Beginning Pottery and Pottery II or teacher permission

SCULPTURE

This upper level class provides a more in-depth exploration of 3 dimensional media. Students will use a variety of materials (wire, clay, wood, plaster, stone, metal and glass) to create sculptural forms using the techniques of casting, carving, modeling, assemblage, and mosaic. Students will begin to develop their own style of working with materials through projects that communicate ideas, inform and persuade the viewer, and show historical and cultural influences

Prerequisite- Art I or Pottery I

2-DIMENSIONAL DESIGN

This upper level course provides a more in-depth exploration of 2 dimensional media: drawing, printmaking, and painting. This class will focus on the use of various 2D media (graphite, colored pencil, charcoal, pastels, ink, water color and acrylic paint). Students will begin to develop their own style of working with materials through projects that communicate ideas, inform and persuade the viewer, and show historical and cultural influences.

Prerequisite- Art I

INDEPENDENT STUDY

Students must receive teacher permission and complete an Independent Study Proposal. Proposals must be approved by the teacher and the administration.

Prerequisite – Teacher permission

Note: Students are required to pay a materials fee for ALL Art Courses.

ARTS AND HUMANITIES

GENERAL HISTORY AND APPRECIATION OF VISUAL AND PERFORMING ARTS

Students will study the development of visual art, music, dance, theatre and architecture from the Renaissance to the present, with some review of earlier periods. Students will learn to analyze these art forms using the elements of the arts, and will study the historical and cultural context of the works. This course is designed to broaden student understanding and appreciation of the arts. This course fulfills the graduation requirements for the Arts and Humanities as outlined in the Kentucky High School Program of Studies.

ADV HISTORY AND APPRECIATION OF VISUAL AND PERFORMING ARTS

Students will study on an advanced level the development of visual art, music, dance, theatre and architecture from the Renaissance to the present, with some review of earlier periods. Students will learn to analyze these art forms using the elements of the arts, and will study the historical and cultural context of the works. This course is designed to broaden student understanding and appreciation of the arts. This course fulfills the graduation requirements for the Arts and Humanities as outlined in the Kentucky High School Program of Studies.

BUSINESS

ACCOUNTING I

This course provides an introduction to the basic principles of accounting. First semester, students will learn skills in using T-accounts, journalizing business transactions, posting journals to ledgers, and analyzing financial statements. Second semester focuses on basic payroll and tax duties, purchasing, sales, uncollectible accounts, plant assets and depreciation, inventory valuation, notes and interest.

ACCOUNTING II

First semester includes departmental purchasing, sales, cash journals, payroll data, financial statement analysis, uncollectible accounts receivables, plant assets and depreciation, notes payables, and prepaid and accrued expenses. Second semester studies stock and bond analysis, budget planning, cost and breakeven analysis, cash flows statements, trend & financial strength analysis, financial ratios, cost accounting for merchandising & manufacturing businesses, and non-profit accounting. The second year goes much deeper in analysis of accounting principles.

Prerequisite- Accounting I

BANKING AND FINANCE

This course is designed to develop an understanding of the basic structure of the finance and credit industry. Areas of study will include stock markets, bonds, futures, commodities, the banking and savings industry, interpretation of financial information, and job opportunities in banking and finance. Students will organize and operate a bank within the school for students and faculty.

Prerequisite- application required.

BUSINESS CO-OP

(Supervised on-the-job training)

This senior only course permits a student to work in a paid office position for a minimum of fifteen hours per week. The work is supervised by a coordinating teacher. In addition, the student is enrolled in a one-period office systems class. Computerized business applications will be utilized.

Prerequisite- Student should have completed a minimum of two (2) courses in the business program.

Application required.

BUSINESS MANAGEMENT

First semester introduces students to basic principles of economics, supply and demand, entrepreneurship, international trade, sole proprietorships and partnerships in business ownership, e-commerce, financial services, credit principles, and insurance concepts. Second semester takes a micro-economic look at individual businesses: marketing, distribution, pricing, promotion, human resources, and leadership and management skills for business leaders.

BUSINESS PRINCIPLES AND APPLICATIONS

This course will provide a basic foundation for further study in business and marketing classes. It will offer experiences in all phases of money management and using the services of financial institutions. Automobile insurance, home insurance, life insurance, social security, and the tax system will be covered.

COMPUTER APPLICATIONS I

The student will utilize computer applications and develop “touch” keyboarding skills, proper techniques, speed and accuracy in keyboarding for business, professional, and personal use. The student will become familiar with the use of the computer as a tool for both work-personal applications, and computer-related careers. Course content will include word processing, spreadsheets, graphing, desktop management and electronic communication. This course also meets the needs of college-bound students by fulfilling a requirement of many selective colleges.

COMPUTER APPLICATIONS II

The student will utilize the computer in advanced word processing, spreadsheet, database, and multimedia equipment. Course content also includes desktop publishing, electronic communications, multimedia applications, and web page development. Desktop publishing will include design and development of published materials.

Prerequisite- Computer Applications I

WEB SITE DESIGN

As the World Wide Web and internet continue to expand rapidly, a strong web presence is essential. Students will learn how to develop and maintain interesting, useful and educational web sites. Many software applications will be used to develop/maintain the sites. Strong communication and presentation skills will be developed as students maintain the school web presence. Students will gain the skills necessary to plan, create and maintain an interactive web site.

Prerequisite- Computer Applications I

COMMUNITY SERVICE**COMMUNITY SERVICE**

Community Service is an opportunity for students to work in the community in a volunteer setting. Students can volunteer at hospitals, government agencies, schools, independent help agencies, churches, etc. Students earn academic credit through their volunteer work. Students are responsible for finding their own volunteer sites which must be approved by the instructor. All students are required to complete additional course work as well as their volunteer service throughout the school year. Interested students should complete an application to take the class.

COMPUTER SCIENCE

AP COMPUTER SCIENCE

This course is intended to prepare students for further work in computer science or related fields at the college level. The emphasis is learning to write structured, readable, well-documented programs in JAVA and prepare the student for the AP Computer Science A exam.

Prerequisite: B average in Adv Algebra II

ENGINEERING AND TECHNOLOGY

ARCHITECTURAL DRAWING AND DESIGN I

This is a year long, comprehensive, laboratory-based course, which includes the fundamentals of architectural design and drawing. Computer applications in design and drawing will be emphasized. Students will design and draw plans for a single-family residential dwelling. Plans will include Plot Plan, Foundation/Basement Plan, First and Second Floor Plans, Front/Rear/Left and Right Side Elevation Plans and a Wall Section Plan. Multi-family and commercial structures will be incorporated into the course as time permits.

ARCHITECTURAL DRAWING AND DESIGN II

This is a year long, comprehensive, laboratory-based course, which includes advanced concepts of architectural design and drawing. Computer applications in design and drawing will be emphasized. Students will design and draw plans for a single-family residential dwelling. Plans will include Plot Plan, Foundation/Basement Plan, First and Second Floor Plans, Front/Rear/Left and Right Side Elevation Plans and a Wall Section Detail Plan. Multi-family and commercial structures will be incorporated into the course as time permits.

Prerequisite- Students enrolled in Architecture II must have successfully completed Architecture I and will work at a more demanding pace and advanced level.

GRAPHIC COMMUNICATIONS I

Courses in this area allow students to use digital cameras, computers (Adobe software), photography, desktop publishing, printing, and other special projects related to the communications field. Topics such as graphic layout and design, offset press operation, screen process printing and other areas involved in graphic communications.

GRAPHIC COMMUNICATIONS II

The course provides students with experiences in the areas of printing/graphic software. The content includes activities and instruction in the following areas:

- 1) Adobe Illustrator CS3
- 2) Adobe Photoshop CS3
- 3) Adobe In Design CS3
- 4) Other Adobe software
- 5) Graphic layout and design
- 6) Photo-offset lithography
- 7) Screen printing
- 8) Digital Photography

INTRODUCTION TO ENGINEERING DESIGN

This is a year long, comprehensive, laboratory-based course, which includes the fundamentals of mechanical drafting and AutoCAD. Computer applications in drafting and design will be emphasized. Students will use design briefs to solve drafting related problems. Opportunities are provided to apply problem solving and critical thinking skills through the development of projects.

PHOTOGRAPHY

The course takes a look at the different photographic techniques through lighting and composition that separates photographs from pictures. The class will learn how to use the camera, develop film, and make prints using a variety of different styles of picture taking including the studio, outdoor photography, digital photography, night/low light photography, and slide transparency films, etc. Students will complete different projects throughout the year to showcase their photos. Also important to the course content is a study of how current technological advances affect photography and how the photographic industry functions in today's society.

Prerequisite- The course requires a 35mm SLR camera. Application required.

PHOTOGRAPHY II

The course takes an in depth look at the different photographic techniques through lighting and composition. Students will photograph their best work and complete 15 – 8x10 prints to be photographed, processed, printed, and matted. Students will work with professional photographers and will photograph different events such as sports, weddings, funerals, site seeing (hiking, outdoors, downtown, etc.), major events, graduations, vacations, etc. A compilation of these events will be put together in a video portfolio to be presented to the Photo 1 classes. Also important to the course content is a study of how current technological advances affect photography and how the photographic industry functions in today's society.

Prerequisite- the course requires a 35 mm SLR camera, digital SLR preferred. Application required.

FAMILY AND CONSUMER SCIENCE

CHILD DEVELOPMENT

This year long course allows the student to explore and investigate the rewards and responsibilities of being an informed parent and caregiver. They will have the opportunity to study the social, emotional, physical and mental development of the newborn –school age child. A playschool setting provides extended experiences in planning and implementing creative activities, practicing positive guidance techniques and observing children's behavior. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA).

Prerequisite- TB skin test required.

CHILD DEVELOPMENT CO-OP EDUCATION

(Supervised On-The-Job Training)

This full-year senior only course permits students to work in a paid child development position for a minimum of fifteen hours per week. The field site work is supervised by a coordinating teacher. In addition, the student is enrolled in a one-period child development course. Leadership development will be provided through the Family, Career, and Community Leaders of America (FCCLA).

Prerequisite- Application required, TB skin test required.

FOODS

This one year course is designed to assist students in making critical decisions about food which contributes to health and well-being. Practical problems addressed relate to attitudes toward food, nutrition, health concerns, management, preparation skills and careers in nutrition and food service. Laboratory instruction is included as an application process. Students must pay a \$10 lab fee and maintain a C average to participate in food labs.

LIFE SKILLS

This comprehensive year long course provides an opportunity for acquiring basic life skills and allows students to select specific areas for concentrated study in preparation for FSC career major. Emphasis is on work and family, adolescent development, consumer clothing and housing decisions, money management, challenges of child rearing, and guidance in establishing relationships. Career and Leadership skills development will be provided through the Family, Career, and Community Leaders of America (FCCLA).

MONEY SKILLS

Learn ways to become financially secure, informed and how to make your money work for you. This course is designed to teach students sound financial management skills and practices that will contribute to greater financial stability and improve their quality of life. Decision-making, problem solving, goal setting and computer technology are integrated in a fun interactive way throughout the content of the course. Leadership development will be promoted through the Family, Career and Community Leaders of America.

RELATIONSHIPS

This one year course is designed to assist students to develop a better understanding of self and others, improve interpersonal skills, consider other person's needs, and maintain mental and emotional wellness. An emphasis will be placed on developing dating, family, marriage, school, workplace, and friendship relationships. Career and leadership development skills will be provided.

FAST TRACK

FAST TRACK

Students accepted into Fast Track will earn elective credit by going in to the community for placement in job sites that feature technical careers. Students will receive up close and personal views of these careers by exposure to mentoring adults, the equipment that they use, and the environment in which they work. Fast Track is suited to students who intend to go to a community college, a technical/trade school, or who intend to enter the work force upon graduation and receive on-the-job training.

Students must interview with the Fast Track coordinator, who will attempt to match student career interests to the available job sites. Some help with student transportation issues will be offered. Students must exhibit willingness to work, dependability, and excellent attendance at their work site. Scheduled time will be spent on campus with the Fast Track coordinator who will teach business literacy skills and track student accountability.

It is anticipated that in several cases, students who are successful in the Fast Track program will be employed by the same business which served as their high school placement.

GENERAL ELECTIVES

PEER TUTOR FOR LITERACY STRATEGIES

Juniors or seniors who possess strong communication skills and the characteristics to be a good role model may apply to be peer mentors for Literacy Strategies. These mentors are more than teacher aides; they will be expected to work with freshmen individually and in small groups to work on improving reading skills in all content areas as well as various aspects of the writing process. The primary goal is to mentor freshmen as they develop the reading and writing skills for academic success throughout high school. Additionally, student mentors may be asked to do whole group presentations upon occasion and check Time Trackers on a regular basis. Applications may be obtained in Office 117 from Ms. Travis, the reading/writing resource teacher. Applicants' grades will be checked and former teachers will be asked to evaluate the applicants in such areas as dependability, punctuality, communication skills and positive attitude. Student mentors receive an elective community service credit for this class.

PEER TUTOR FOR MATHEMATICS

This class is an elective class for students who will be juniors or seniors and would like the chance to work in an Algebra 1 classroom as an assistant to a teacher. Mentors will be expected to help students during independent work time, as well as work one on one with struggling students. Mentors may also be asked to help teach small groups on a variety of algebra 1 concepts.

Prerequisite: Advanced Algebra II or higher and a teacher recommendation from their current math teacher.

HEALTH/PHYSICAL EDUCATION

HEALTH EDUCATION I

The required high school health education course emphasizes decision-making skills as related to the following essential health content areas: physical wellness, nutrition, safety and first aid, exercise, fitness, and human growth and development. Other essential components of the course include stress management, conflict resolution, substance abuse and goal setting. Not to be excluded are mental and emotional illnesses, community resources and services, and health-related consumer choices.

PHYSICAL EDUCATION I

The required high school physical education course emphasizes student participation in meaningful physical activities on a regular basis. The relationship of physical activity to a healthy way of life is stressed. This course provides students with opportunities to develop and refine necessary psychomotor skills, to improve and maintain physical wellness, and to participate in lifetime physical activities.

PHYSICAL EDUCATION II

This elective course, Physical Education II, is designed for students who desire to develop advanced skills in selected games and sports including physical fitness, sports appreciation, weight lifting, and individual and team sports. Advanced competition will also be required.

Prerequisite- earned "B" or better in Physical Education I and approval of PE teacher

LANGUAGE ARTS

GENERAL ENGLISH I

The course integrates composition, literature and language studies, and incorporates abstract thinking, creative problem solving, and other higher-level reasoning skills. Literary analysis is introduced. Students who take General English I also take Literacy Strategies.

LITERACY STRATEGIES

This companion class to General English I applies reading and writing strategies to assignments in the General English I class in addition to complimentary reading selections. Students will be selected for this class based on PAS scores.

ADVANCED ENGLISH I

The course covers the same concepts as General English I but at an accelerated pace and with more independent reading. Students must complete Summer Reading: Select one play: **Raisin in the Sun** by Lorraine Hansberry or **Lost in Yonkers** by Neil Simon AND one novel: **Ender's Game** by Orson Scott Card, or **The Bean Trees** by Barbara Kingsolver or **Hunger Games** by Suzanne Collins.

GENERAL ENGLISH II

An integrated study of literature, composition, and language will also incorporate effective oral and written communication studies. The class emphasizes non-fiction literature and composition with an emphasis on persuasion. Narrative, descriptive, and expository writing will be prepared and vocabulary expanded. Discussion and problem solving will also be included.

GENERAL ENGLISH II – LIT/COMP

This course covers the same concepts as General English II with adaptations designed to meet the needs of developing readers. Students are recommended for this course based on MAP reading scores and teacher recommendation.

ADVANCED ENGLISH II

The course covers the same concepts as General English II but at an accelerated pace and with more independent reading. Students must complete Summer Reading: **PLAY REQUIRED FOR ALL: The Glass Menagerie by Tennessee Williams AND YOU MUST READ ONE NOVEL: The Curious Incident of the Dog in the Night Time by Marc Haddon, or Abarat by Clive Barker or Life of Pi by Yann Martel or Wish You Well by David Baldacci.**

GENERAL ENGLISH III

American literature, composition, and language will be studied in an integrated process to develop better comprehension and application skills. Oral and written activities will be emphasized as a means of learning. Critical and analytical perspectives will be examined in relation to the material studied and students will complete a major research paper.

GENERAL ENGLISH II – LIT/COMP

This course covers the same concepts as General English III with adaptations designed to meet the needs of developing readers. Students are recommended for this course based on MAP reading scores and teacher recommendation.

ADVANCED ENGLISH III

The course covers the same concepts as General English III but at an accelerated pace and with more independent reading. Students must complete Summer Reading: **PLAY REQUIRED FOR ALL: The Crucible by Arthur Miller AND YOU MUST READ ONE NOVEL: Boy's Life by Robert McCammon, or Poisonwood Bible by Barbara Kingsolver or The Things They Carried by Tim O'Brien, or A Lesson Before Dying by Ernest Gaines**

ADVANCED PLACEMENT (AP) LANGUAGE & COMPOSITION

(May be taken as English III)

Comparable to a college composition class, the course provides training for the skilled reading of prose written in a variety of periods, disciplines, and rhetorical contexts. It provides the practice necessary to become flexible writers who can compose in a variety of modes and for a variety of purposes. The course is a preparation for the Advanced Placement Language and Composition Examination. Summer reading and assignment required; please see link at www.pld.fcps.net for detailed instructions.

GENERAL ENGLISH IV

English and world literature, composition, and language will be studied in an integrated process. Writing to learn and flexibility in writing will be emphasized as students respond to literature, adjust purposes, and consider varied audiences. Abstract thinking and creative problem solving as well as analytical and critical perspectives will be incorporated into the course studies. Students will complete a writing portfolio to fulfill state assessment and Fayette County graduation requirements.

ADVANCED ENGLISH IV

The course covers the same concepts as General English IV but at an accelerated pace and with more independent reading. Students must complete Summer Reading: **PLAY REQUIRED FOR ALL: The Importance of Being Earnest by Oscar Wilde AND YOU MUST READ ONE NOVEL: 100 Secret Senses by Amy Tan or In the Time of the Butterflies by Julia Alvarez, or Clemente: The Passion and Grace of Baseball's Last Hero by David Maraniss**

ADVANCED PLACEMENT LITERATURE AND COMPOSITION

(May be taken as English IV)

This course provides for a careful reading of literary works for the purposes of developing critical standards for the independent sensitivity to literature as shared experience. The individual work, its

structure, meaning, and value are studied. The study and practice of writing will be included and factual, critical, and interpretive responses to literature will be required. Students will complete the writing portfolio and a major scholarly research project as requirements for this course. The course is a preparation for the Advanced Placement Literature and Composition Examination. Summer reading and assignment required; please see link at www.pld.fcps.net for detailed instructions.

LANGUAGE ARTS ELECTIVES

CREATIVE WRITING I

This course is designed for students who enjoy creative writing. Students are given prompts to stimulate idea development but are encouraged to follow their own interests in a workshop environment. Students are required to maintain a writer's notebook, edit and polish original pieces, and share their work with others through publishing. Emphasis is placed on poetry, short stories, and personal narratives, although other forms may be explored.

CREATIVE WRITING II

Creativity through the written word in a welcoming, encouraging environment is the goal of this course. Students explore writing techniques to further develop original poetry, short stories, plays and much more, while reading contemporary writing as models. Publishing opportunities through the internet, periodicals and producing a class literary magazine will be explored.

Prerequisite- Creative Writing I

DRAMA (INTRODUCTION))

Introduction to Drama is a course designed to familiarize you with the various elements of theatre and to acquaint you with the skills necessary for actors. We will also study the history and styles of drama throughout the world, and we will take a close look at the wide variety of technical elements that are necessary in theatre production.

DRAMA 2

This second year course offers serious drama students an opportunity to refine their acting skills and broaden performance repertoires. It is designed for active participation.

Prerequisite- Drama Activities or audition

DRAMA 3

This course offers serious drama students an opportunity to refine their acting skills and broaden performance repertoires. It is designed for active participation.

Prerequisite- Drama II

JOURNALISM I

What is the responsibility of the media? Beginning with an examination of the rights included under the First Amendment, students will discuss current events and issues involving the media. Throughout the course, students will study advertising, photography, graphic design, layout and copy editing. Students will also learn how to produce the school newspaper, and will gain experience writing a variety of articles. This class serves as a prerequisite for the Newspaper Practicum.

NEWSPAPER I, II, III

This series of courses offers extended, in-depth, and exploratory experiences in journalism. Language arts skills are used to explore both print and online journalistic writing and production, copyediting, headline and outline writing, ad sales, graphic design, and layout and photography. Students enrolled in Newspaper for more than one year may count two of the elective credits toward graduation.

Prerequisite-credit in either Journalism I or Sports Writing and an application.

READING IMPROVEMENT

Reading Improvement serves as companion course to freshman English for students who need extra support and literacy instruction in reading for their language arts and other content courses. Lessons are geared to students' specific needs with the ultimate goal of helping students achieve reading proficiency. Students are selected for the course based on their reading comprehension skills as measured by PAS scores.

SCIENCE FICTION AND FANTASY

This is an in-depth course on the science fiction and fantasy genres of literature. Students will find out what makes these two genres tick, and will read a variety of short stories and novels.

SPEECH I

This course focuses on developing poise and self-confidence in public speaking situations on a variety of topics. Students will write and present speeches to inform, demonstrate, persuade as well as practice making announcements, introductions and nominations. Group discussion, radio and television broadcasting and drama activities are included.

SPEECH II

This performance-based course focuses on polishing oral communication skills via public speaking and drama activities.

Prerequisite- Speech I or any drama class

SPORTS WRITING

This English elective focuses on the role of sports in our culture and the purpose and value of sports writing. Students will examine sports journalism in newspapers, magazines, and on TV. Students will study topics in journalism, such as interviewing and editing in addition to writing sports stories. The emphasis in this course is on writing, and students will produce several pieces of sports-related writing throughout the year. This class serves as a prerequisite for the Newspaper Practicum.

TELEVISION TECHNOLOGY AND PROGRAM PRODUCTION

This course focuses on the production and evaluation of television programming. It will cover the basics of broadcast journalism as well as storyboarding, script writing and editing, oral communication skills, equipment operations, and video editing skills. Students in this course are responsible for creating a daily news program that is broadcast to the student body.

Prerequisite- application required.

WRITING WORKSHOP

This course focuses on developing writing skills for seniors with a focus on college-level and workplace writing. Students will refine writing in various forms through conferencing, peer review, and various independent revision and editing strategies.

YEARBOOK I, II, III

This series of partially sequentialized courses offers extended in-depth experience in yearbook production. General language skills will be refined, photography skills and the computer software required to produce a yearbook will be practiced with the yearbook as the final product. Students must apply to the instructor for admission to the course. Students enrolled in the Yearbook Practicum courses for more than one year may count two of the elective credits toward graduation.

Prerequisite- application required.

MARKETING

FASHION MARKETING I

This course investigates and prepares students for careers in the fashion industry. Topics studied include: fashion trends, sales, merchandising techniques, stocking, advertising, inventory control, textiles, window display and employability skills. Students do projects from couture designers, history of accessories to celebrities in fashion and complete a modeling workshop with a modeling agency. Also students will assist in the performance of the Fashion II fashion show in the spring.

FASHION MARKETING II

This course fully studies the fashion industry from design to marketing and business ownership. Topics studied include: design, supply and demand, textiles in fashion, trends in the industry, advertising, merchandising, and employability skills. Students do projects in business ownership, fashion show production, visual merchandising, advertising, and design. In the spring, students organize and produce a fashion show for the student body.

Prerequisite—Fashion I—or permission from teacher—application required.

RETAIL MANAGEMENT

This course trains students to be workers in an actual business—The Booktique. Students are broken into teams and management where they develop promotions/marketing, and window displays. Students manage inventory control, order merchandise and develop research for new merchandise. They learn every aspect of operating and managing a small business.

Prerequisite—any marketing class or permission from teacher—application required.

RETAIL CO-OP

This senior only course permits a student to work in a paid retailing position for a minimum of 15 hours per week. The work is supervised by a coordinating teacher. In addition, the student is enrolled in a one period retailing class. Topics studied will include improvement in marketing skills, sales promotion buying and store operation.

Prerequisite—application required.

MATHEMATICS

ALGEBRA I

The objective of Algebra I is to develop skills in algebraic manipulation and to give students an understanding of algebra by emphasizing concepts, structure and applications.

MATH STRATEGIES

This companion class to selected Algebra 1 classes teaches students the foundational topics of Algebra and provides support strategies for the current topics taught in Algebra 1. Students will be selected for this class based on 8th grade math teacher recommendations and PASS scores

GEOMETRY

Emphasis is placed on discovery, proof, and realistic applications of geometric relationships and principles. Topics will include inductive and deductive reasoning, points, lines, planes, angles, triangles, planar figures, similarity and congruence, circles, geometric solids, area, volume, coordinate geometry, constructions, and transformations.

Prerequisite- Algebra I

ADVANCED GEOMETRY

This course is designed for accelerated students with a high degree of proficiency in abstract mathematical ideas. This course will include the skills and concepts of General Geometry but will include more emphasis on formal proof.

Prerequisite- Algebra I

PROBABILITY AND STATISTICS

This course is intended for students who must meet a statistics requirement for graduation. The statistics topics for this course include collecting, representing and analyzing data, and inferential statistics; the probability topics are basic probability, counting techniques, binomial and normal distributions.

Prerequisite- Algebra I

AP STATISTICS

The Advanced Placement Statistics course will include the study of distributions, relations in categorical data, random variables, use and abuse of tests and inference for linear regression. Students intending to enroll in this course should have at least a "B" in all prior mathematics courses.

Prerequisite- Advanced Algebra II

ALGEBRA II

In addition to expanding on the mathematical concepts of Algebra I and Geometry, emphasis will be placed on preparation for the study of higher mathematics - abstract thinking skills, the concept of a function, and the algebraic solution of problems in various content areas.

Prerequisites- Algebra I and Geometry

ADVANCED ALGEBRA II

This course is designed for accelerated students with a high degree of proficiency in abstract mathematical ideas. This course includes skills and concepts of Algebra II, but the topics are covered in greater depth and at a faster pace.

Prerequisites- Algebra I and Advanced Geometry

ALGEBRA III/TRIGONOMETRY

This course is intended for students who may be required to take a specialized calculus course in college. Topics may include, but are not limited to, relations and functions (including circular, trigonometric, etc.), complex numbers, matrices, vectors, sequences, series, and probability.

Prerequisites- Geometry or Advanced Geometry; and Algebra II or Advanced Algebra II.

ADVANCED PRE-CALCULUS

This course is intended for students who plan to take a calculus course in high school or college. The course covers topics traditionally taught in trigonometry and analytic geometry plus additional functions, including circular, polynomial, absolute value, and natural numbers (sequences and series).

Prerequisites-Advanced Geometry and Advanced Algebra II; or Algebra III.

ADVANCED CALCULUS

This course is designed for accelerated students who have successfully completed Algebra III/Trigonometry or Advanced Pre-Calculus. This course covers the material usually taught in differential and integral calculus. This course will prepare students for an entry level, college calculus class.

Prerequisite-Algebra III/Trigonometry or Advanced Pre-Calculus

AP CALCULUS I

This is an Advanced Placement course covering the material usually taught in the differential and integral calculus. Students who complete the course may: 1) take the Advanced Placement Exam in calculus to earn college credit, or 2) take the University of Kentucky final exam to earn college credit if they are planning to attend UK.

Prerequisite- Advanced Pre-Calculus

AP CALCULUS II

This is an Advanced Placement course covering the material usually taught in the first and second semesters of college calculus. In addition to differential and integral calculus and their applications, students will learn applications of sequences and series, parametric functions, and polar functions. Passing the AP Calculus II exam can earn students two semesters of college credit.

Prerequisite- AP Calculus I

MUSIC

BAND

CONCERT BAND

This is a performance-based class with emphasis on developing basic fundamentals of sound production on wind instruments. Prerequisite for the class is successful completion of middle school band, or private lessons with the consent of the director. This ensemble class will include concerts, assessments, and preparations for honors band and all-state band tryouts. Auditions are held in the spring for all band classes.

SYMPHONIC BAND

This is a performance-based class with emphasis on developing higher level performance skills. This band will perform standard band literature with difficulty and expectations at a much higher level, and continued emphasis on developing musicianship on all wind instruments. This ensemble class will include concerts, assessments, and preparations for honors band and all-state band tryouts. Auditions are held in the spring for all band classes.

ADVANCED BAND (WIND ENSEMBLE)

This class offers the top wind players opportunities to develop musicianship and skills necessary for success in college level ensembles. Literature will include the most difficult available to the top high school and college bands. This is an advanced class with advanced credit. This ensemble class will include concerts, assessments, and preparations for honors band and all-state band tryouts. Auditions are held in the spring for all band classes.

JAZZ BAND AND THEORY

This course is designed for band and orchestra students, and provides an experience in jazz concepts, and the performance of jazz music.

Prerequisite- audition required. Students must be concurrently enrolled in a regular band class or orchestra class. An exception is made if no band or orchestra students are trained or available to play these instruments (example: piano, guitar, bass guitar).

ADVANCED JAZZ BAND AND THEORY

This course is designed for advanced level band and orchestra students, and provides the opportunity for distinguished level performance of jazz music, as well as improvisation.

Prerequisite- audition required. Students must be concurrently enrolled in a regular band class or orchestra class. An exception is made if no band or orchestra students are trained or available to play these instruments (example: piano, guitar, bass guitar).

PERCUSSION

This course is designed for students who have previous training playing percussion instruments in a school band program.

Prerequisite- audition required. Students must be concurrently enrolled in Marching Band or Concert Band.

COLOR GUARD

The class combines performance/competition preparation with equipment and movement instruction at the intermediate to advanced level. Students will be trained in dance in addition to color guard

equipment and work with flags, rifles, and sabers. Students will receive integrated instruction in Drama, Theatre, Music and Dance in a classroom setting. Students will also participate in the marching Band during the fall semester and Winter Guard during the spring semester. Students can receive advanced credit for participation in the class as a result of the co-curricular nature of the course.

Prerequisite- audition/permission of Director

ORCHESTRA

GENERAL ORCHESTRA AND THEORY (ORCHESTRA LEVEL 1)

Even though it is named "beginning orchestra" this is not a class for beginners. Students entering this class must have played a stringed instrument before and must play an audition for the director. Students in this class will work on reading music in advanced keys and advanced positions. Students not comfortable with third and fifth position will learn those skills in this class.

Prerequisite: Minimum of 3 years of instrument experience in a school orchestra or private lessons OR playing skills in first position in keys with up to three sharps and two flats.

ORCHESTRA THEORY (ORCHESTRA LEVEL 2)

Students wishing to perform in this orchestra must be comfortable reading music in third and fifth position. Students should be able to play two octave scales in every major and minor key. Students in this class will advance skill in reading difficult keys and rhythms as well as advance work in upper positions.

Prerequisite: Comfort in reading keys with up to four flats or four sharps, excellent reading skills in third position. Usually 5 or more years playing experience. Playing audition required for entrance into this class.

ADVANCED ORCHESTRA & THEORY (ORCHESTRA LEVEL 3)

Students in this class will learn skills needed to play in college orchestras. Emphasis will be on performing at a collegiate level. Students will read in all keys and in first through 7th position. Students must be completely comfortable reading in advanced positions and willing to practice daily outside of class. Extra performances and rehearsals will be required for this class as will participation in solo and ensemble festival and All-State orchestra auditions.

Prerequisite: Usually six or more years instrument experience. Playing audition is required for this class.

VOCAL MUSIC

BEGINNING SATB CHORUS & THEORY (BEGINNING CHORUS)

This course includes the development of choral techniques through the study and performance of music of varying periods and styles. This course uses supplementary materials related to general music to develop the musicianship of the students. Students may participate in select ensembles, All-State Chorus, UK Bluegrass Music Festival, solo/ensemble, etc. Students will have the opportunity to represent the school at concerts, contests, festivals and community functions. Attendance to all after school rehearsals (if necessary) and all performances is required.

S-A CHORUS AND THEORY (GIRLS CHOIR)

This course includes the development of choral techniques through the study and performance of choral literature of varying periods and styles written for soprano/alto vocal range voices. The course uses supplementary materials related to general music education to develop the musicianship of the student. Students will have several performance opportunities including KMEA Assessment, community functions, contests, etc. Attendance is required at all concerts and after school rehearsals (if necessary)

EXPERIENCED CHOIR AND THEORY (ADVANCED CONCERT CHOIR)

This course includes the development of choral techniques through the study and performance of choral literature of various periods and styles. Instruction emphasizes advanced choral techniques which require accurate intonation, tone production, diction and interpretation. Theory is taught in context of music learned for performance. The Choir will have the opportunity to participate in concerts, contests, festivals, community functions, etc. Students in Concert Choir may audition for All-State Chorus, various honor choirs, and PLD's men's/ women's select ensemble. Attendance is required at all rehearsals and concerts.

Prerequisite- audition or choral teacher recommendation

MUSIC THEORY

ADVANCED PLACEMENT MUSIC THEORY

The AP Music Course will develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The course will include not only music from the standard Western tonal repertoire but also contemporary, jazz, and popular music and the music of nonwestern cultures. The course will include melodic/harmonic dictation, sight-singing, composition, realization of figured bass, analysis of repertoire including melody, harmony, rhythm, texture, and form.

Prerequisite- students must have a basic understanding of clefs and key signatures.

SCIENCE

GENERAL PHYSICAL SCIENCE

Physical science is a study of the relationship between matter and energy. Earth and Space Science is a study of the history of the earth, its life recorded in rocks, and the celestial bodies. This first level course provides a relevant introduction to the physical laws, chemical processes, and components of the universe and is a foundation for further study in science. The course will emphasize reading, math, organization, and study skills using an inquiry-based laboratory approach to assist students in developing and applying concepts in each topic area by emphasizing experimental design, use of technology to collect, analyze, and present data in order to demonstrate understanding of concepts, and use of proper communication skills.

Prerequisite- student earned a C or below in 8th grade science

ADVANCED PHYSICAL SCIENCE

Physical science is a study of the relationship between matter and energy. Earth and space science is a study of the history of the earth, its life recorded in rocks, and the celestial bodies. This first-level course provides a relevant, in-depth study of the physical laws, chemical processes, and components of the universe and is a foundation for further study in science.

The course will emphasize an inquiry-based laboratory approach to assist students in developing and applying concepts in each topic area by emphasizing experimental design, use of technology to collect, analyze, and present data in order to demonstrate understanding of concepts, and use of appropriate communication skills.

Prerequisite- student earned an A or B in 8th grade science

GENERAL BIOLOGY

This course is an introductory study of the living world; topics include unity and diversity, cell structure and function, behavior of organisms, molecular basis of heredity, biological evolution, interdependence of organisms, matter/energy, and organization in living systems. Students will further develop their understanding of the nature of scientific activity by designing investigations, using technology to collect, analyze, and report on data, use relevant library and Internet sources for research, and use appropriate communication skills to present outcomes from their research.

ADVANCED BIOLOGY

Advanced Biology is an introductory study of the living world; topics will include the unity and diversity of life, cell structure and function, behavior of organisms, molecular basis of heredity, biological evolution, interdependence of organisms, matter/energy, and the organization in living systems. Students will further develop their understanding of the nature of scientific activity by designing investigations, using technology to collect, analyze, and report on data, use relevant library and Internet sources for research, and use appropriate communication skills to present outcomes from their research. At the completion of this course, students will be prepared for AP Biology, or any of the high school advanced level biological electives.

ADVANCED PLACEMENT (AP) BIOLOGY

The emphasis is to provide a freshman college biology course with a significant increase in the range and depth of topics covered, type of laboratory work, textbook used and time and effort required of students, in order to prepare the student with the conceptual, factual and analytical skills needed to be successful in the biological sciences. Topics covered: Molecular and Cellular Biology (25%), Heredity & Evolution (25%), Organisms and Population Biology (50%) and 12 required AP Biology laboratories. Technology used can include Vernier Probes & Equipment, the spreadsheets and/or databases, wikis, blogs, graphic analysis, internet, word processing, etc. It is recommended that the student also take Advanced Human Anatomy to prepare for the AP Exam.

Prerequisite- Students must have completed Advanced Biology with a "B" or better and be currently enrolled or have taken Adv Chemistry.

GENERAL CHEMISTRY

Chemistry is the study of the structure, composition and behavior of matter. In this course, students will investigate the properties of matter, its interactions and factors affecting the interactions using a variety of means and technologies- labs, investigations, lectures, readings, discussions and group activities among them. As a first course in chemistry, students will focus on a broad conceptual understanding of chemical principles.

Prerequisite- Students must have passed physical science and biology.

ADVANCED CHEMISTRY

In this first course of chemistry, students will investigate the properties of matter, its interactions and factors affecting the interactions using a variety of means and technologies- labs, investigations, lectures, readings, discussions, and group activities among them. Students will focus on a broad conceptual and analytical (mathematical) understanding of many chemical principles and an in depth view of some chemical principles.

Prerequisite- Students must have passed physical science and biology and will take Algebra II or higher math.

ADVANCED PLACEMENT (AP) CHEMISTRY

Advanced Placement (AP) Chemistry follows a program of study that provides an overview of freshman college general chemistry. Topics include: stoichiometry, acid-base equilibrium, kinetics, thermodynamics, atomic theory, organic chemistry, behavior of gases, descriptive and solution chemistry. Laboratory experiences (actual and virtual) are provided to reinforce the concepts under study.

Prerequisite- Students must have completed Advanced Chemistry with a "B" or better and Algebra II with a "C" or better.

GENERAL PHYSICS

This course will include the following topics: Newtonian Mechanics, Conservation Laws, Electricity and Magnetism, Sound and Light and may integrate Earth/Space Science topics. The focus will be conceptual but students will apply basic mathematics in order to solve physics problems. Students will develop critical thinking skills and problem solving strategies as they progress through the course. Labs, computer simulations, and technology will be used to enhance learning.

Prerequisite- Students must have passed physical science, biology, and geometry.

ADVANCED PHYSICS

This course will include the following topics: motion (horizontal, vertical, and circular), energy, gravity, forces, waves (especially sound and light), optics, electrostatics, electricity, and magnetism. The course will make extensive use of mathematics to understand and explain various natural phenomena. Students will be involved in lectures, demonstrations, discussions, and lots of laboratory exercises. Technology will be used throughout. Students will develop critical thinking skills and problem solving strategies as they progress through the course.

Prerequisite- Students must have passed physical science and biology and have either passed or are taking Advanced Pre-Calculus or higher math.

ADVANCED FORENSIC SCIENCES

Advanced Forensic Science is an introductory course that focuses on practicing forensic science and analyzing physical evidence found at crime scenes. The objective is to learn the basic processes and principles of scientific thinking and apply them to solving problems. This class uses a hands-on, minds-on approach using thought-provoking cases and scenarios that will require you to take what you have learned in class and apply it to new situations. Some of the topics covered are types of evidence, crime scenes, fingerprinting, hair and fiber analysis, toxicology, and DNA analysis.

Prerequisites - 'C' or higher in Biology and Chemistry.

ADVANCED HUMAN ANATOMY AND PHYSIOLOGY

Anatomy and Physiology is an inquiry based, hands on approach to learning the human body systems and how they interrelate with one another and with the body as a whole. Body systems covered include the skeletal, muscular, respiratory, nervous, circulatory, digestive, reproductive, and endocrine systems and includes dissection as a course requirement. This course is designed for the college bound junior or senior who enjoys science and is interested in pursuing a career in a health related field. Students who may suffer from allergies to animals such as cats or rabbits, or have allergic reactions to latex, should consult with the instructor prior to enrolling

Prerequisite- Students must have passed Biology with a C or higher and have passed, or are enrolled in, Chemistry

ADVANCED HUMAN HEREDITY

Students will explore the molecular basis of heredity in humans and the reasoning behind many genetic diseases as well as normal gene expression. The course of study also includes DNA (Structure, Replication, Protein Synthesis, Finger printing), Gene Mutations, Cytogenetics, Population Genetics, Cancer, Genetics of Immunity, Gene Therapy, Genetic Engineering, Human Genome Project, Bio-Ethics, Behavioral Genetics, and new and recent topics in the field of Genetics.

Prerequisite- Students must have passed physical science and biology.

SOCIAL STUDIES

ADVANCED TOPICS IN CITIZENSHIP

This course will emphasize an understanding of the nature of government and the unique characteristics of American democracy. It will include the fundamental principles of the American government structure, and role of citizens.

GENERAL WORLD CIVILIZATION

This is a survey course that focuses primarily on the historical, geographic, economic, governmental and cultural development of major civilizations after 1500, with a focus on the impact of the past on today's world. The first semester covers the period from the Renaissance to the French Revolution, and the second semester covers the period from the French Revolution to the present. Advanced World Civilization also offered at some individual schools.

ADVANCED WORLD CIVILIZATION

Advanced World Civilization is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in World History. The class prepares students for college courses by making demands upon them equivalent to a full year intro college course. Students should learn to access historical materials, weigh evidence, and make interpretations about historical information. The class helps students develop skills necessary to make conclusions based on informed judgments and to help students present reasons and evidence clearly in all assignments.

ADVANCED PLACEMENT (AP) WORLD HISTORY

The purpose of the AP course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. Focused primarily on the past 1000 years of the global experience, the course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage.

GENERAL UNITED STATES HISTORY

This course traces the historical, societal and political development of the United States from Reconstruction to the present. Students will become real-life problem solvers and critical thinkers as they study government at various levels, explore the contributions of various cultures to the development of the American experience, examine the transformation of the US economy, and analyze how geographic features have affected US development. .

ADVANCED UNITED STATES HISTORY

Advanced United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. The class prepares students for college courses by making demands upon them equivalent to a full year intro college course. Students should learn to access historical materials, weigh evidence and make interpretations about historical information. The class helps to develop skills necessary to make conclusion based on informed judgment and present reasons and evidence clearly in all assignments.

ADVANCED PLACEMENT (AP) U.S. HISTORY

The Advanced Placement U.S. History course is offered for the student with well-developed reading and analytical skills as well as maturity in thought and purpose. The focus is on depth, quality, and breadth of work, and on preparing the student for advanced college work in this subject area. Course content ranges from the Colonial Period to the present.

SOCIAL STUDIES ELECTIVES

CRIMINAL JUSTICE

This course will give students an introduction to the people and procedures of the criminal justice system. Particular attention will be given to the needs and interests of today's youth. The topics of study will include the history of the criminal justice system in America, prevention and causes of crime, modern police procedures and personnel, victims' rights and the rights of the accused, correction including prison, parole and probation, a comparison between criminal and civil law procedures, and studies concerning the costs of crime. The Constitution, Bill of Rights, various other historical documents, as well as new laws and current court proceedings will be applied and integrated into the curriculum when appropriate.

ETHNIC MINORITY STUDIES

The objective of this course is to develop, on the part of the student, an appreciation of the Cultural pluralism that exists in America. This will include exposure to the major ethnic groups by exploring the culture and history of African Americans, Asian Americans, Hispanic Americans and Native Americans. Attention will also be given to the development of attitudes of acceptance, tolerance, understanding, and respect for all cultural and ethnic differences.

Some of the course goals are to explore the root cultures from which ethnic groups have developed and to examine the history of ethnic groups in America. The course will also discuss the current situation of ethnic groups in America and efforts will be made to try and develop a commitment to build a better nation and a better world.

ADVANCED PLACEMENT (AP) European History

This AP Course is an in-depth look at the historical, geographical, economic, governmental, and cultural developments of major European civilizations. The impact of the past on the present is a recurrent theme of this course. Students will learn the chronology of the major events and trends from approximately 1450 through the present.

WORLD GEOGRAPHY

World Geography provides an opportunity to study the interaction of humans and their environments in a world setting. Students study global patterns of physical (natural) and cultural (human) characteristics, including earth/sun relationships, atmospheric and oceanic circulation, landforms, climate, vegetation, population, economic activity, political structures, culture, cultural diffusion, and international and interregional links. They use maps, graphs, and technology, such as geographic information systems (GIS) to establish spatial relationships: the interaction of two or more physical and cultural characteristics within a designated place, area, or region. Historical trends and events provide a context for understanding cultural change. Countries and regions selected for study include examples from each continent. Students are expected to apply knowledge of geographic concepts to research, inquiry, and participatory processes. Geographic concepts that guide the course follow the Five Themes of Geography and the Six Basic Elements of the National Geography Standards. The Five Themes of Geography are Location, the Characteristics of Place, Human/Environment Interaction, Movement between Places and Regions. The Six Elements of the National Geography Standards are: (1) The World in Spatial Terms, (2) Places and Regions, (3) Physical Systems, (4) Human Systems, (5) Environment and Society, and (6) The Uses of Geography.

ADVANCED GEOGRAPHY

The purpose of this course is to enable students to develop multicultural understanding and use geography concepts and skills to actively seek information and systematically apply decision-making processes to real-life situations. The content should include, but not be limited to, the following concepts of world political regions in terms of location, physical characteristics, population and culture, historical change, economic activity, and land use.

ADVANCED POLITICAL SCIENCE/ECONOMICS

Advanced Political Science, open to juniors and seniors, introduces the student to the foundation of American Government and the nature of American democracy. Major topics to be studied include: the American system with an emphasis on the U.S. Constitution; the institutions of Government- the Congress, the Presidency, the Bureaucracy and the Judiciary; political participation, campaigning, and elections; and major problems facing the U.S. and the world. Advanced Economics, open to juniors and seniors, introduces the student to the major topics in the American economic system. Some of the topics to be covered include the basic questions that must be met by all economic systems – What shall be produced? How will it be produced? And for whom will it be produced? – economic decision making, the market system, supply and demand, the price system, entrepreneurship, business organization, labor markets, the national economy, public policy, money, banking, and the international economy.

ADVANCED PSYCHOLOGY

Advanced Psychology is a two semester Social Studies course that introduces the student to the science of human and animal behavior. This course is open to juniors and seniors. Some of the topics to be explored include research strategies, learning and memory, life-span development, sleep and dreaming, the brain and nervous system, psychological tests and measurements, sensation and perception, emotions and motivation, theories of personality, behavior disorders and treatments, social psychology, ethical issues facing psychologists, and career opportunities.

ADVANCED PLACEMENT (AP) PSYCHOLOGY

The Advanced Placement Psychology course is offered for the student interested in pursuing college work in psychology and as preparation for the Advanced Placement Psychology Examination. The student is introduced to the scientific principles of individual behavior using critical thinking skills, extensive analysis, and research practices. Course content includes psychological research techniques, major schools of thought, brain-behavior relationships, learning theory, sensation and perception, human development, intelligence and creativity, and memory. The second semester facilitates further study of topics including motivation and emotion, personality, mental health, treatment of psychological problems, and social psychology. Course work is fast-paced, in-depth, and extensive in content.

ADVANCED SOCIOLOGY

Sociology is the systematic and scientific study of society, including patterns of social relationships, social action, and culture. As the study of humans in their collective aspect, sociology is concerned with all group activities: economic, social, political, and religious. Sociologists study such areas as bureaucracy, community, deviant behavior, family, public opinion, social change, social mobility, and social stratification. Numerous fields within the discipline concentrate on how and why people are organized in society, either as individuals or as members of associations, groups, and institutions. Sociology provides many distinctive perspectives on the world, generating new ideas and critiquing the old. The field also offers a range of research techniques that can be applied to virtually any aspect of social life. Sociological research provides educators, planners, lawmakers, administrators, developers, business leaders, and people interested in resolving social problems and formulating public policy with rationales for the actions that they take.

STUDY HALL/ CAREER DEVELOPMENT

Study Hall and Career Development provide out of regular class experiences for students.

STUDY HALL

This course provides an opportunity for a student to study in a controlled supervised environment.
No credit.

AP STUDY HALL

AP Study Hall is an intensive study hall targeting, but not limited to, first time AP students. Hosted by an AP teacher, this study hall will offer individualized instruction and support for students as well as an opportunity to complete make-up work due to absence while at school. Students will also have access to computer labs on a regular basis. Beyond the AP subjects, the study hall will also offer help with critical reading, note-taking, MLA citation, and AP level research. The AP Study Hall teacher will also have access to grades and will update students, parents, and teachers on grades at a D or F level.
No credit

CAREER DEVELOPMENT

This course provides an opportunity for a student to work in one of the school offices, work in the library or serve as a teacher's aide.
No credit.

WORLD LANGUAGES

Students enrolling in a World Language should understand that good study skills are an important factor to success in language learning.

FRENCH I

The introductory French course will acquaint students with the reasons for studying French. Students will enhance their global perspective as they gain knowledge of the Francophone world. Additionally, students will develop rudimentary language skills in the areas of reading, writing, listening and speaking. Finally, students will begin to compare and contrast their daily life with that of a Francophone student.

FRENCH II

Students electing to continue their language skills will build on the language skills acquired in level I. Students will begin to use more complex linguistic structures. Students will be asked to construct meaning from more complex readings. Students will extend their ability to respond appropriately to more complex conversational situations. Finally, students will become further acquainted with French culture through a variety of text taken from the textbook as well as outside sources.

Recommendation- Earned at least a "C" in previous level

ADVANCED FRENCH III

Students entering level III will refine their skills from the previous levels while adding a new level of conversational sophistication. New grammatical structures will be added to the students' repertoire to enhance communicative abilities. Additionally, students will be asked to construct meaning from increasingly complex listening and reading exercises. Students will be expected to communicate with the teacher and each other in French.

Recommendation- Earned at least a "C" in previous level

ADVANCED FRENCH IV

Students entering this level will continue to develop communicative proficiency. Students will develop a greater depth of understanding of grammatical structures of the language. These skills will be developed through oral presentations and written essays. Additionally, students will develop a base that will allow for successful entry into a university language class or the advanced placement course.

Recommendation- Earned at least a "C" in previous level

ADVANCED PLACEMENT (AP) FRENCH

Students who enroll in the AP French class will develop the requisite skills for successful completion of the AP French language test.

The objectives of the course are:

1. The development of the ability to comprehend and express ideas orally in both formal and informal French.
2. The acquisition of vocabulary necessary for reading French internet sites, appropriate literary passages, popular magazines and newspapers.
3. The ability to write well-developed themes.
4. The development of an understanding of grammatical structures necessary for conversational and expository expression.

Mastery of the above objectives will better prepare the students for the Advanced Placement test, the SAT Achievement test or university placement tests.

Recommendation- Earned at least a "C" in previous level

GERMAN I

Students will learn basic listening, speaking, reading and writing skills. They will be introduced to the basics of grammar and sentence structure. They will also be introduced to German culture and career opportunities utilizing German language skills.

GERMAN II

After quickly reviewing German I material, students will continue to improve listening, speaking, reading, and writing skills. Units will emphasize practical themes like shopping, eating out and travelling in Germany, as well as the development of grammatical structures and vocabulary.

Recommendation- Earned at least a "C" in previous level

ADVANCED GERMAN III

Students will further develop listening, speaking, reading, and writing skills through a wider range of real German sources. The ability of the students to describe events and express their ideas both orally and in writing will be one of the main goals of this course.

Recommendation- Earned at least a "C" in previous level

ADVANCED GERMAN IV

This course for advanced level students further develops the students' reading, speaking and writing skills. The course focuses on Germany's literature and history from its beginnings up to present day, with each unit covering the major works, figures and events of a period. *Recommendation- Earned at least a "C" in previous level*

ADVANCED PLACEMENT (AP) GERMAN

The Advanced Placement German Language course is the equivalent of an intermediate college course in advanced German composition and conversation. This course has the following objectives:

1. The ability to comprehend and express ideas orally in formal and informal German.
2. The acquisition of vocabulary to allow the easy, accurate reading of newspaper and magazine articles as well as German literature.
3. The ability to compose expository passages.
4. The in-depth review of grammatical structures.

Mastery of the above objectives will better prepare the student opting to take the Advanced Placement test.

Recommendation- Earned at least a "C" in previous level

LATIN I

The study of Latin will begin with immediate emphasis on three skills: speaking, reading, and writing the language. This course, however, also includes classical mythology, culture, vocabulary, and basic grammar. Roman history will blend into extended experiences with the culture and mythology. Latin courses above level one are not available.

SPANISH I

Students will learn basic listening, speaking, reading, and writing skills. They will be encouraged to use Spanish to express simple ideas about themselves, their friends and their family.

SPANISH II

Building of the framework established in level I, students will continue to improve their listening, speaking, reading and writing skills. Emphasis will be placed on grammatical structures and vocabulary development.

Recommendation- Earned at least a "C" in previous level

ADVANCED SPANISH III

The ability of the students to express their ideas accurately and resourcefully both orally and in writing with reasonable fluency will be one of the main goals of this level. The emphasis will be on grammar and vocabulary acquisition. The class will be fast paced. Students should understand that the class requires much more outside study and preparation than in previous levels.

Recommendation- Earned at least a "C" in previous level

ADVANCED SPANISH IV

Spanish IV is an honors course which continues the transition to advanced work begun in level III. Students are accountable for a thorough command of elementary structures and vocabulary. Excellent memory skills and accuracy are recommended attributes. The course develops all four language skills and prepares students for university work or AP Spanish. An outline of the objectives includes:

1. The ability to comprehend and express ideas orally in formal and informal Spanish.
2. The acquisition of vocabulary to allow the easy, accurate reading of newspaper and magazine articles as well as modern Hispanic literature.
3. The ability to compose expository passages.
4. The in-depth review of grammatical structures.

Recommendation- Earned at least a "C" in previous level

ADVANCED PLACEMENT (AP) SPANISH

The Advanced Placement Spanish Language Course promotes the development of skills commensurate with the requirements of the A.P. Spanish Language exam and the university level studies many of our students later pursue. The course is conducted in Spanish. Students are required to use the language actively and continuously during class. Upon successful completion of the course, students should be able to:

1. Listen to native speakers of various regions and backgrounds with a high degree of comprehension in informal conversations, formal discussions, lectures, announcements, etc.
2. Read letters, news articles, editorials, short stories, poems and other non-technical writings.
3. Write formal and informal e-mails and letters, persuasive essays, short creative pieces and analytical papers demonstrating appropriate vocabulary and control of a wide range of structural resources.
4. Use spoken Spanish in appropriate registers to converse, to make inquiries, to describe, to make short presentations and to persuade.
5. Control pronunciation and intonation with a good base of articulation.
6. Be familiar with common social and structural conventions in Spanish.
7. Show an awareness of the increasing Hispanic presence and influence on the national, regional and local levels, along with related social and political issues.

Recommendation- Earned at least a "C" in previous level

FAYETTE COUNTY TECHNICAL CENTERS

The Fayette County Technical Centers offer career and technical occupational training to high school students. All courses offered at Fayette County Technical Centers follow the **Kentucky Department of Education (KDE) Kentucky Tech Curriculum**. Students interested in receiving training in one of the technical programs should have a satisfactory scholastic standing, possess an average mechanical ability, and be able to follow written and verbal instructions. Acceptable standards of conduct, attendance, classroom work, and practical work are required for continuous enrollment. Students may earn three (3) to four (4) credits for the duration of the school year and **may attend a technical center class for a second school year for more advanced training and an additional three (3) to four (4) credits**. Students who have achieved a level of acceptable work in a course may be allowed to participate in a work-based learning program, which allows students an opportunity to spend part of the school day working at a job in the community in a particular field of training. When applicable, students are encouraged to complete their training at Bluegrass Community and Technical College upon completion of your high school program.

MATH AND ENGLISH COURSES AVAILABLE AT FAYETTE TECHNICAL CENTERS:

ALGEBRA I (Offered only at SOUTHSIDE in the morning)

This course is designed for students who are proficient in basic mathematics and have mastered pre-algebra skills. The objective of Algebra I is to develop skills in algebraic manipulation, and to give students an understanding of algebra by emphasizing concepts, structure, and applications. Students

are expected to earn a grade of "C" or better before subsequently enrolling in Geometry. Credit earned in this course will satisfy one of four mathematics credits required for Kentucky pre-college admission.

GEOMETRY (Offered in both morning and afternoon Sessions) – This course is designed for the majority of college-bound students. Emphasis is placed on discovery, proof, and realistic applications of geometric relationships and principles. Topics include constructions, inductive and deductive reasoning, points, lines, planes, angles, triangles, planar figures, similarity and congruence, circles, geometric solids, area, volume, locus, coordinate geometry, and transformation. Credit earned in this course will satisfy one of four mathematics credits required for Kentucky pre-college admission.

PREREQUISITE: Algebra I

ALGEBRA II– (Offered in both morning and afternoon sessions) - This course is designed primarily for college-bound students. In addition to expanding on the mathematical concepts of Algebra I and Geometry, emphasis will be placed on preparation for study of higher mathematics – abstract thinking skills, the function concept, and the algebraic solution of problems in various content areas. Credit earned in this course will satisfy one of the four mathematics credits required for Kentucky’s pre-college admission.

PREREQUISITE: Algebra I or Introduction to Algebra Parts 1 and 2 and Geometry.

ENGLISH III A & B (Junior English Offered in both Morning and Afternoon Sessions) – American literature, composition, and language will be studied in an integrated process to develop better comprehension and application skills. Oral and written activities are emphasized as a means of learning. Critical and analytical perspectives are examined in relation to the material studied.

ENGLISH IV A & B (Senior English Offered in both Morning and Afternoon Sessions) – English and world literature, composition, and language will be studied in an integrated process. Writing to learn and flexibility in writing is emphasized as students respond to literature, adjust purposes, and consider varied audiences. Abstract thinking and creative problem solving as well as analytical and critical perspectives are incorporated into the course of studies.

EASTSIDE CAMPUS INFORMATION TECHNOLOGY PROGRAMS:

COMPUTER PROGRAMMING TECHNOLOGY

Eastside is one of a handful of high schools to offer Gaming/Programming. This course provides the opportunity for students to learn computer programming by studying writing, testing, and maintaining the detailed instructions computers must follow to perform a function. Students will be programming in Java and Basic on alternating years. Students will also learn how to program Artificial Intelligence and to code games. Students will study at both Eastside Technical Center and at work-based learning sites within the community. The goal is for all enrollees to receive *national computer based certifications*. Strong written and communication skills are essential to success in the course.

ADVANCED COMPUTER SYSTEMS & NETWORKING SECURITY

This course affords the opportunity for students to become expert in the operation, repair, design, and security of computer systems and networks. Topics covered will be x86 hardware, software, operating systems, network protocols, and network design and operation. A special emphasis is placed on computer security throughout all topic areas. Students that are successful will have the opportunity to take one or more **CompTIA exams** that if passed, will provide the student industry employment possibly leading to college credits as well as providing the credentials for employment as an Information Technology Professional. This is a challenging course, which requires students to have strong analytical skills, good critical thinking skills, be well spoken, and have the ability to dedicate the time necessary to absorb a large volume of information.

EASTSIDE CAMPUS COMMUNICATION PROGRAM:

TELEVISION TECHNOLOGY

This course serves as an introduction to broadcast technician areas, camera operations, radio & television performance/scripting, sound production, studio directing, and video editing techniques. Students will demonstrate knowledge of translating TV scripts into effective commands; use effective video and audio transitions and proper voice commands, and operate control room production switches. Students participate in activities in front of the camera as well as behind the camera; thereby gaining an understanding of the techniques in audio production on the television and radio and all the work required behind the scenes. The course will produce broadcasts that will air inside and outside of the school building. Some film may be seen on Channel 13 as well as on local media.

EASTSIDE CAMPUS TRANSPORTATION TECHNOLOGY PROGRAMS:

AUTOMOTIVE TECHNOLOGY

Areas of instruction include automotive electronics; major engine service; chassis fundamentals and service; drive train fundamentals and service; suspension systems service; automotive air conditioning principles and service; brake system principles and service; parts procurement procedures; and shop management-safety techniques. Use of professional measuring devices such as micrometers, volt-ohm meters, oscilloscopes, and infrared meters are an integrated part of study within the above units of instruction. Fractional linear and degrees-minutes measurements are integrated into front-end alignment activity. During the instructional program, students will learn the fundamentals of what makes the various components of engine, transmission, rear axle, and chassis operate, thereby becoming able to perform logical diagnoses of mechanical malfunctions of the automobile when they occur. Students learn basic skills of diagnosis, disassembly, inspection, repair, assembly, and adjustment using correct tools and equipment, and repair procedures. Developing acceptable work habits of personal safety, shop cleanliness, tool care, and pride of workmanship are also stressed.

DIESEL TECHNOLOGY

Students in diesel technology learn to repair and maintain heavy trucks and diesel engines. They learn to use power tools, machine tools, welding and flame cutting equipment, testing equipment and common hand tools. Trouble-shooting and overhauling engines are highlighted while students learn to service and maintain heavy trucks/ heavy equipment. Upon completion of the diesel mechanics program, the student will demonstrate the necessary skills to be employed in diesel engine maintenance and heavy truck maintenance.

COLLISION REPAIR TECHNOLOGY

In this course the student is trained to repair, replace, and refinish damaged sections of the automobile body. Students completing this program are qualified for employment as an auto body repairer and refinisher in the shops of automobile dealers and general repair garages, or to enter business for themselves on a limited basis. Developing acceptable work habits of personal safety, shop cleanliness, tool care, and pride of workmanship are also stressed.

EASTSIDE CAMPUS AGRICULTURE PROGRAM:

AGRI/PRE-VET SCIENCE

Agri/Pre-Vet Science introduces the scientific agricultural approach to Animal Science, which includes veterinary science, equine (horse) science, and small animal science. The course also includes the study of Plant and Land Science, including greenhouse production and management, floral design, landscaping, fruit and vegetable production, lawn and turf management and Environmental Science, which covers conservation, recycling, sustainable agriculture, and biotechnology. Agricultural career opportunities are emphasized. Students develop skills that prepare them to work in a variety of businesses or to pursue more specialized training at the college level. Laboratory experiences relating

to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA, which offers many activities to support the curriculum and the development of leadership skills. Students also have the opportunity to attend "*FFA Leadership Training Center in the summer,*" "*State FFA Convention,*" "*Local, Regional, and State Career Development Events,*" and "*National FFA Convention.*" Students may receive up to 6 hours of college credit with UK, EKU, WKU, Morehead State University, and Murray State University.

EASTSIDE CAMPUS PUBLIC SERVICES PROGRAM:

HOMELAND SECURITY

This course is designed for students interested in entry-level positions in law enforcement and emergency and fire management at the municipal, state, and federal levels. Students will study criminal investigation and law, Emergency Medical Treatment (EMT), first responders' law, public safety and security, communications, legal issues, and physical training. Upon completion of this program, students will be prepared to enter the homeland security field or continue to study at the college level. Students have the opportunity to earn the following certificates during their course of study, "**FEMA IS-700, NIMS,**" "**ICS-100, Introduction to the Incident Command System,**" "**ICS-200, Basic Incident Command System,**" "**ICS-300, Intermediate-Incident Command System,**" "**FEMA IS-800, National Response Plan,**" and "**ICS-400, Advanced-Incident Command System.**"

SOUTHSIDE CAMPUS CONSTRUCTION TECHNOLOGY PROGRAMS:

CARPENTRY

The carpentry program teaches students to perform to national construction industry standards. It is aligned with the carpentry program at Bluegrass Community and Technical College District. Matching curriculum allows students to earn dual credit at Southside and Bluegrass Community and Technical College District. Students are provided with hands-on carpentry experiences. Advanced students can participate in paid cooperative experiences and can earn **one year of certification in the Associated Builders and Contractors Carpentry Apprenticeship**. Students in this program are also encouraged to participate in leadership activities promoted through our student organization SkillsUSA.

ELECTRICITY TECHNOLOGY

Students in the program will have the opportunity to study and practice residential wiring, industrial electricity, and programmable logic controllers (PLCs). Students will learn how to install wiring, conduit, service motors, and much more. Numerous fields of specialization are open to highly skilled electricians and the pay is very good. Successful completion of this program will prepare students to apply for an **Electrician's Apprentice License**. Students in this program are also encouraged to participate in leadership activities promoted through our student organization SkillsUSA.

MASONARY

Masonry represents one of the finest aspects of the building professions. Students in this program are taught to lay brick, tile, terra cotta, and similar building blocks in various types of construction work. Training in design, construction of footings, construction of foundation and waterproofing, using beams and lintels, constructing walls and partitions, and chimney and fireplace design and construction. On the job training may be possible as part of the program. Students in this program are also encouraged to participate in leadership activities promoted through our student organization SkillsUSA.

SOUTHSIDE CAMPUS MANUFACTURING TECHNOLOGY PROGRAMS:

ELECTRONICS TECHNOLOGY

If you have an interest in electronics, then this program may be for you. The training provided could make you employable in a variety of business and industrial electronics jobs. Should you desire to specialize in a certain area of electronics, this program can provide you with an excellent background. The program consists of class and lab activities using a modular approach to electronic circuitry. First year students will be focusing on Integrated Electronics with emphasis being placed upon home and industrial engineering and installation of security, theater, audio and surveillance systems. Second year advanced students will study communications electronics and computer systems as a part of the "**Advance Electronics Manufacturing Academy.**" Students in this program are also encouraged to participate in leadership activities promoted through our student organization SkillsUSA.

WELDING TECHNOLOGY

The welding course is designed to develop basic manipulative skills and knowledge in each of the following techniques: Oxygen-acetylene cutting, welding and brazing; shielded metal arc welding, gas metal arc welding, and metal fabrication are taught relevant to the demands of industry. Students will spend much of their time on live work projects to develop fabrication skills. Primary objectives of this course are to teach the attitudes, skills, and knowledge that are necessary to secure and hold a job. Also taught are the social skills necessary to work harmoniously and safely with fellow workers. Pride in work done is emphasized throughout the course with the intent that positive attitude will carry over to the actual job. Students in this program are also encouraged to participate in leadership activities promoted through our student organization SkillsUSA.

SOUTHSIDE CAMPUS HEALTH SCIENCE PROGRAMS:

MEDICAL HEALTH SCIENCES

These programs are oriented toward students with a desire to pursue a career in an allied health care and are geared to allow the student to study the role of the chosen career and to gain experience in that health care setting. The program is open to juniors and seniors who have a sincere interest in health care careers. Recommended GPA is 2.5 or higher in science courses. During the second semester of the Medical Health Sciences Course, the student chooses a discipline to study and enters a clinical experience in that health care setting. Enrollment in these programs requires two full class periods, which means that an academic course offering will not be available at the technical center campus for Medical Studies students. Returning seniors wishing to pursue nurse aide certification are encouraged to return to take the Medicaid Nurse Aide curriculum.

MEDICAID NURSE'S AIDE

The Nurse Aide Training and Competency Evaluation program is designed to provide both classroom instruction and clinical practice that will assist the student in gaining knowledge and skills essential to the provisions of nurse aide services. Students will also earn certifications in First Aid and CPR. Leadership activities are promoted and taught through our student organization HOSA, which is an integral part of the program. This program is open to seniors who have a sincere interest in becoming a Medical Nurse Aid. Students are recommended to have completed a year of study in the Medical Health Sciences program prior to entrance in the Medical Nurse Aid program. Enrollment in this program requires two full class periods, which means that an academic course offering will not be available at the technical center campus for Medical Nurse Aid students.

SOUTHSIDE CAMPUS HUMAN SERVICES PROGRAM:

CULINARY ARTS

Communities throughout our Bluegrass Service Region are saturated with food service industries. Consequently, many career opportunities exist for those who wish to pursue a career in food service. Students who aspire to become a chef should take advantage of this program offering at Southside Technical Center. Training provided in this area will prepare those students for post-secondary opportunities at area universities as they pursue an associate's degree or chef certifications. Credits at Southside Technical Center are aligned with Sullivan University curriculum providing students an opportunity to articulate with this institution of higher learning and earn high school credits at the same time. Students who wish to enroll in Culinary Arts need an evident understanding of Measurement, Conversion and Equivalents. Students are also recommended to be juniors or seniors because of the program requirements. Enrollment in this program requires two full class periods, which means that an academic course offering will not be available at the technical center campus. Leadership activities are promoted and taught in association with the American Culinary Federation and through our student organization SkillsUSA.

School calendar for 2009-2010

August 2009	5	Optional work day for teachers
	6	Optional work day for teachers
	7	Optional work day for teachers
	10	Non-flexible Professional Development (No classes for students)
	11	Non-flexible Staff Development Day (No classes for students)
	12	First Day of Classes for Students
	21	Non-flexible Staff Development Day (No classes for students)
September 2009	7	Labor Day (Schools and offices closed)
	28	Non-flexible Staff Development (No classes for students)
October 2009	15	Flexible Records Day (No classes for students)
	16	No school
November 2009	25	No School
	26	Thanksgiving Holiday (Schools and offices closed)
	27	No school (Schools and offices closed)
December 2009	18	Last day of classes before Winter Break (End 1st Semester)
January 2010	4	Classes resume after Winter Break (Begin 2nd Semester)
	18	Martin Luther King, Jr. Holiday (Schools and offices closed)
February 2010	12	Non-flexible Staff Development (No classes for students) *Weather make-up day (if necessary)
	15	Presidents' Day Holiday (Schools and offices closed)
March 2010	5	Flexible Records Day (No classes for students) *Weather make-up day (if necessary)
	19	Flexible Professional Development Day (No classes for students)
	29-31	Spring Break (Schools and offices closed)
April 2010	1-2	Spring Break (Schools and offices closed)
May 2010	18	Flexible Professional Development Day (No classes for students)
	26	Last day of school for students
	27	Non-flexible Staff Development (No classes for students) *Weather make-up day (if necessary)
	28	Flexible Professional Development Day *Weather make-up day (if necessary)
June 2010	1-4	*Weather make-up days (if necessary)
	7-11	*Weather make-up days (if necessary)