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January 2010

Dear Parents:

You will have the opportunity to meet with the guidance department at William Byrd High School to plan a program of study for your son or daughter for the next four years. During this conference you and your child will choose an area of special interest, and you will select several electives based on this interest.

Please review carefully the information that has been enclosed. As a next step in the registration process, you will receive a call from a representative of the guidance department to set an appointment for you and your son or daughter to meet with a counselor. The dates for these appointments will be on January 24<sup>th</sup> and 29<sup>th</sup> from 2-7 pm in WBHS cafeteria. Counselors will be able to schedule your appointment at a time that is convenient for you. This will include mornings and evenings.

When you and your son or daughter meets with the counselor, you will decide on a career emphasis for the next four years. You will be reassured that changes in the program can be made in any future registration process. *The most important part of the program is the time that you and your child will invest in planning for the next four years.*

If you have any questions, a member of the high school guidance staff will be pleased to talk with you.

Sincerely,

A handwritten signature in blue ink that reads "Lorraine S. Lange". The signature is written in a cursive style.

Lorraine S. Lange  
Superintendent



## WILLIAM BYRD HIGH SCHOOL

As a student entering the 9th grade next year, you will have an opportunity to participate in a very special program. Your counselor, you and your parent or guardian will meet as a team to plan the next four years. You will select from one of five programs of study based upon your interests.

Carefully review the five areas of study. Each program of study has a basic path with specific course selections geared toward your career choice.

### ***Consider:***

- \* What subjects do I like?
- \* What areas of study are easiest for me?
- \* Do I like working with people, with data, etc.?
- \* What level of further education will I pursue?
- \* What future jobs might I be interested in?

### ***Do Your Homework:***

Virginia VIEW (Vital Information for Education and Work) and Career **CHOICES** are available to you through the Career Center. Ask your counselor to assist you as you explore various occupations and the education or personality traits that each career requires.

You might choose to take the Career Interest Checklist which is part of the **CHOICES** program. A computer printed report shows interest by 12 Career Areas and lists hundreds of related occupations.

Can you change your mind? **Of Course!!!** But the key is to start thinking now about your future. Your high school years will be a pivotal point in your life. Make the most of these four years. Choose your courses wisely to prepare

# GRADUATION REQUIREMENTS

*The requirements for a student to earn a diploma from a Virginia high school shall be those in effect when that student enters the ninth grade for the first time.*

## RISING 6TH - 9TH GRADE

### GRADUATING CLASSES OF 2012 - 2015

STANDARD DIPLOMA 22 credits		ADVANCED STUDIES DIPLOMA 24 credits	
ENGLISH	4	ENGLISH	4
MATH	3	MATH	4
Courses shall be at or above the level of Algebra and shall include three course selections from among: Algebra I Part 1, Algebra I Part 2, Algebra I, Computer Mathematics, Geometry, Algebra II, or other math courses above the level of Algebra and Geometry.		Courses shall be at or above the level of Algebra and shall include four different course selections from among: Algebra I Part 1, Algebra I Part 2, Algebra I, Computer Mathematics, Geometry, Algebra II, or other math courses above the level of Algebra II. Algebra II is a requirement for an Advanced Studies Diploma.	
LABORATORY SCIENCE	3	LABORATORY SCIENCE	4
Courses shall include three selections from two different science disciplines: Earth Science, Biology, Ecology (classified under Biology), Chemistry, and Physics.		Courses shall include four selections from three different science disciplines: Earth Science, Biology, Ecology (classified under Biology), Chemistry, and Physics.	
HISTORY/SOCIAL SCIENCE	3	HISTORY/SOCIAL SCIENCE	4
US and VA History (required)	1	US and VA History (required)	1
US and VA Government (required)	1	US and VA Government (required)	1
Students may choose one from the following courses: World Geography, World History I, World History II, AP World History.	1	Students may choose two from the following courses: World Geography, World History I, World History II, AP World History.	2
HEALTH AND P.E.	2	HEALTH AND P.E.	2
		WORLD LANGUAGES Three years of one language or two years each of two languages.	3 or 4
FINE ARTS/CAREER AND TECHNICAL EDUCATION See listing in registration guide.	1	FINE ARTS/CAREER AND TECHNICAL EDUCATION See listing in registration guide.	1
ELECTIVES	6	ELECTIVES	1 or 2
Students graduating with a Standard Diploma must include at least two sequential electives which may include courses from a variety of options.		Students in Advanced Studies Program may or may not be enrolled in advanced level courses.	
Satisfactory completion of Keyboarding proficiency or its alternate is required. Explanation in registration guide (pg. vii). Satisfactory completion of Personal Finance course is required. Explanation in registration guide (pg. viii).			
Of the total credits shown above, students must earn a minimum of SIX VERIFIED CREDITS from the following disciplines:		Of the total credits shown above, students must earn a minimum of NINE VERIFIED CREDITS from the following disciplines:	
English 11 Writing & Reading/Literature/Research	2	English 11 Writing & Reading/Literature/Research	2
Mathematics	1	Mathematics	2
Science	1	Science	2
History/Social Science	1	History/Social Science	1
Student's Choice		Student's Choice	
<b>VERIFIED CREDIT</b> means passing the course and the end-of-course SOL test.			
<b>BOARD OF EDUCATION SEAL</b> Students who complete the requirements for a Standard Diploma with an average grade of "A" will receive a Board of Education Seal for the diploma.		<b>GOVERNOR'S SEAL</b> Students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better, and successfully complete at least one advanced placement course (AP) or one college-level course for credit, will receive the Governor's Seal for the diploma.	
<p><b>ADVANCED MATHEMATICS AND TECHNOLOGY SEAL</b> will be awarded to students who earn either a Standard or Advanced Studies Diploma, satisfy all of the mathematics requirements for the Advanced Studies Diploma with a "B" average or better, and either (a) pass an examination in a career and technical education field that confers certification, or (b) acquire a professional license in a career and technical education field, or (c) pass an examination approved by the Board that confers college-level credit in a technology or computer science area.</p> <p><b>CAREER AND TECHNICAL EDUCATION SEAL</b> will be awarded to students who earn either a Standard or Advanced Studies Diploma, complete a prescribed sequence of courses in a career and technical education concentration, and (a) maintain a "B" or better average in those courses, or (b) pass an examination in a career and technical education concentration, or (c) acquire a professional license in a career and technical education field from the Commonwealth of Virginia.</p>			



This program of study includes careers that require students to work well in teams with analytical writing skills. These students should be efficient, neat, and logical thinkers.

They should also possess the dexterity to work well with computers.

For a student to have a "major" in the specific Program of Study, the student must successfully complete a minimum of 3 credits from at least 2 courses from the following program electives:

Advertising	Database Design & Management	Marketing
Accounting & Adv. Accounting	Digital Design & Multimedia	Marketing Management
Advanced Digital Design & Multimedia	Fashions & Interior Design	MS Office & Beyond
Advanced Marketing	Fashion Marketing	Personal Finance
Business Law	Graphic Advertising Design I, II	Personal Finance/ COE
Career Cooperative Education	Internet Programming and Design (COE)	Principles of Business
Computer Graphics Digital Photography	Introduction to Culinary Arts	Psychology I & II
Computer Graphics Web Design	Introduction to Marketing	Service Learning Leadership I, II
Computer Information Technology I, II, III	Keyboarding	Sports Entertainment & Recreation Mktng.
Current Affairs	Make It Your Business	Using Input Digital Technologies

### SAMPLE JOB TITLES

Accountant	E-Commerce Division Manager	Medical Records Technician	Sales, Securities and Financial Services
Auditor	Economist	Medical Secretary	Secretary
Bank Teller	Employment Interviewer	Meeting Planner	Shipping and Receiving Clerk
Bookkeeper	Financial Manager and Merchandiser	Merchandiser	Stockbroker
Buyer	General Office Clerk	Network Technician	System Analyst
Cashier	Image Consultant	Office Manager	Trade Analyst
Computer Programmer	Insurance Agent & Broker	Operation-Research Analyst	Training Specialist
Computer Systems Specialist	Insurance Claims Examiner	Paralegal	Travel & Tourism Executive
Court Reporter	Legal Assistant	Purchasing Agent	Web Master
Data Processing Equip. Repairer	Legal Secretary	Real Estate Agent	Wood Processor
Data Processing Manager	Loan Officer	Receptionist and Information Clerk	
Desktop Publisher	Logistic Manager	Sales Associate	

II.

**COMMUNICATIONS, ARTS and MEDIA**



This program of study includes careers based on an interest and aptitude in artistic, musical and/or creative expression. Students in this area have a creative mind, enjoy spoken communication, reading, writing, visual arts, performing arts and may also be interested in International cultures.

For a student to have a "major" in this specific Program of Study, the student must successfully complete a minimum of 3 credits from at least 2 courses from the following program electives:

Advanced Digital Design/Multimedia	Computer Graphics/Digital Photography	Introduction to World Languages
Advanced Marketing	Computer Graphics/Web Design	Introduction to Marketing
Advertising	Computer Information Technology I, II, III	Make It Your Business
AP English 11: Language & Composition	Computer & Internet Technology I, II, II/COE	Marketing
AP English 12: Literature	Concert Band w/Marching	Marketing Management/Virtual
AP Latin: Vergil	Concert Band w/o Marching	Photography I, II
AP Latin: Literature	Creative Writing	Latin I, II, III, AP Literature
Architectural Drawing	Digital Design/Multimedia	Mixed Chorus
Art Foundations	Digital Photography & 3D Animation	Music Theory I
2-D Art I	Engineering Drawing	Photojournalism I, II, III IV
2-D Art II	Fashion Marketing	Psychology I & II
3-D Art I	Fashions & Interior Design	Spanish I, II, III, IV, AP
3-D Art II	French I, II, III, IV, AP	Sports & Entertainment Marketing
Art V, Portfolio Prep	Geospatial Technology	Stage Band
Chorale	German I, II, III, IV, AP	Symphonic Band w/Marching
Computer Aided Drafting & Technical Drawing	Graphic/Advertising Design I & II	Symphonic Band w/o Marching
Computer Graphics I, II	Instrumental Ensemble	Theater Arts I, II, III, IV

**SAMPLE JOB TITLES**

Actor/Actress	Dancer/Choreographer	Industrial Designer	Publisher
Advertising Executive	Decorator	Landscape Architect	Radio & TV Announcer
Agent	Designer	Makeup Artist	Reporter
Architect	Drafter	Musician	Researcher
Artist	Editor	Newscaster	Teacher
Camera Operator	Fashion Designer	Photographer	Technical Writer
Commercial Artist	Film Developer	Producer	Writer
Costume Designer	Graphic Artist	Production Designer	
Curator	Illustrator	Public Relations Specialist	

(INCLUDES CONSTRUCTION TRADES)



This Program of Study includes careers that deal with structure, construction, manufacturing or maintenance of machinery, computers, etc. On a higher educational level these studies will blend with other areas of study for a specific outcome. (Example: chemical engineering I, bio-medical engineering) Students majoring in this area are mathematically and mechanically inclined. Higher levels of career choices require good analytical skills and a sound basis in mathematics, physics, chemistry and computer literacy.

For a student to have a "major" in this specific Program of Study, the student must successfully complete a minimum of 3 credits from at least 2 courses from the following program electives:

AP Calculus	Computer Mathematics	Information Technology Fund.
AP Chemistry	Computer Programming in BASIC	Intro Calculus
AP Computer Science	Digital Design/Multimedia	Masonry I, II
AP Physics	Ecology	Materials & Processes
AP Statistics	Electricity/Electronics	Motorsports Technology
Architectural Drawing	Engineering I, II	(Oracle) with PL/SQL Database Design and Man.
Auto Service Tech. I, II, III	Engineering Drawing	(Oracle) Database Design and Management
Building Trades I, II	Engineering Internship	Physics
Building Trades (Introduction)	Engineering Methods	Precision Machining/Machine Technology
Computer Aided Drafting & Technical Drawing	Engineering Research	Welding I, II, III
Computer Graphics I & II	Geospatial Technology	Wood Tech I, II
Computer Information Technology I, II	Industrial Cooperative Training I (ICT)	

**SAMPLE JOB TITLES**

Aerospace Engineer	Chemical Engineer	Elevator Installer	Mechanical Engineer
Air Traffic Controller	Chemical Technician	Engineering Technician	Meteorologist
Aircraft Mechanic	Chemist	Farm Equipment Mechanic	Millwright
Auto Industry Employee	Communication Equipment Mechanic	General Maintenance Mechanic	Musical Instrument Repairer & Tuner
Automotive Body Repairer	Computer & Office Machines Repairer	Geologist	Safety Inspector
Automotive Mechanic	Computer Technician	Heating/Cooling Mechanic	Science Technician
Biological Scientist	Computer/Network Engineer	Industrial Machine Repairer	Service Manager
Biological Technician	Construction Supervisor	Line Installer/Cable Splicer	Small Engine Mechanic
Biomedical Engineer	Construction Worker	Locksmith	Software Engineer
Builder	Diagnostic Technician	Machinist	Surveyor
Building Inspector	Drafter	Mathematician	Telephone Installer & Repairer
Carpenter	Electrical Engineer	Mechanic	

**IV.****ENVIRONMENT AND NATURAL RESOURCES**

This program of study includes careers that are based on interest in researching and collecting data about the natural world, how it works and how we can make it a better place to live. Students choosing this area have a natural interest in physical or life sciences and a curiosity and a about the world.

For a student to have a "major" in this specific Program of Study, the student must successfully complete a minimum of 3 credits from at least 2 courses from the following program electives:

Advanced Biology	Biology II/Anatomy & Physiology	Geospatial Technology
Advanced Chemistry	Computer Aided Drafting & Technical Drawing	Keyboarding
AP Biology	Digital Photography & 3D Animation	Landscaping/Turf Management I, II
AP Chemistry	Ecology	MS Office & Beyond
Art Foundations	Floral Design/Advanced Floral Design	

**SAMPLE JOB TITLES**

Agronomist	Crop Farmer	Health/Sanitation Inspector	Poultry Farmer
Animal Breeder	Dairy Farmer	Horticulturist	Rancher
Animal Scientist	Dairy Scientist	Landscaper	Range Manager
Apiculturist	Environmental Engineer	Livestock Farmer	Soil Conservationist
Botanist	Extension Service Specialist	Logger	Tree Surgeon
Butcher/Meat Cutter	Farm Management Advisor	Marine Biologist	
Conservation Scientist	Fishing Boat Captain	Nursery Worker	
County Agriculture Agent	Forester	Pest Controller	



**This Program of Study includes careers based on interest in serving others. Students in this area enjoy working with people and are concerned about their welfare.**

For a student to have a "major" in this specific Program of Study, the student must successfully complete a minimum of 3 credits from at least 2 courses from the following program electives:

Advanced Chemistry	Cosmetology I, II, III	JROTC
Aerobics and Dance	Criminal Justice I, II, III	Nutrition and Wellness
AP Biology	Culinary Arts (Introduction)	Psychology I, II
AP Chemistry	Drivers Education	Sociology
AP U.S Government and Politics	Early Childhood Education I, II	Strength Training & Conditioning
AP World History	Health I, II	Teachers for Tomorrow
Biology 2: Anatomy & Physiology	Child Development	Teaching Internship
Chemistry	Individual & Dual Activities	Team Sports

### **SAMPLE JOB TITLES**

Animal Caretaker	Firefighter	Medical Lab Technician	Recreation Worker
Barber	Flight Attendant	Medical Records Technician	Reservation & Transportation Ticket Agent
Biomedical Technician	Food Service Manager	Nuclear Medicine Technologist	Respiratory Therapist
Chef	Gardener & Ground Keeper	Nurse	Restaurant & Food Service Manager
Child-care Provider	Government Worker	Nutritionist	Security Guard
Clinical Lab Technologist	Health & Social Service Worker	Occupational Therapist	Social Worker
Cook	Home Health Aide	Pharmacist	Speech Therapist
Correctional Officer	Human Service Worker	Physical Therapist	Speech-Language Pathologist & Audiologist
Cosmetologist	Hygienist	Physician	Surgeon
Counselor	Interior Designer	Physician's Assistant	Surgical Technologist
Dentist	Landscape Artist	Police Officer	Teacher
Detective and Special Agent	Lawn Service Manager	Probation Officer	Urban Planner
Dietician	Lawyer	Psychiatric Technician	Veterinarian
EEG Technologist	Librarian	Psychologist	Visual Artist
Emergency Medical Technician	Medical & Health Services Manager	Radiologic Technician	
Exercise Physiologist	Medical Assistant	Recreation Specialist	

# Programs of Study

The Programs of Study project is a joint venture between William Byrd Middle School and William Byrd High School designed to encourage rising ninth graders to think about their high school careers as a stepping-stone to the world of work. Each student will have the opportunity to plan a program of study with an emphasis in one of five career tracts:

- I. Business and Marketing**
- II. Communication, Arts and Media**
- III. Engineering, Industrial and Scientific Technology (including Construction)**
- IV. Environment and Natural Resources**
- V. Health, Human and Public Services**

Each student and his or her parent or guardian will also have the opportunity to meet with the student's guidance counselor to plan classes for the ninth grade. In addition you will be able to design a path that will emphasize your career interest for the next four years. The project is flexible and will allow you to change your career path as the need arises.

Again, the main emphasis of the Programs of Study is to encourage students to be aware of career opportunities and to begin designing the courses that will best suit their interests.

## Career Exploration Opportunities

### **Ninth Grade:**

Career opportunities will be available through career exploration field trips, classroom visits by representatives from career areas within each Program of Study and through career exploration activities offered in the Career Center.

### **Tenth Grade:**

Students will research occupation in their individual program of study using both print and Internet resources. They will then type a one page paper on the results of the research. The paper will be credited through their English Classes. Students will participate in career exploration field trips.

### **Eleventh and Twelfth Grades:**

The student will complete a work experience that will provide an opportunity to see what the occupation involves. Students will select from among the following components:

- Job Shadowing
- Mentorship participation
- Apprenticeship program
- Corporate Internship
- Cooperative work experience

A one-page paper will also be submitted about the work experience with a follow-up by the classroom teacher.