VALLEY R-VI

OUR MISSION

“Preparing our students today for the challenges of tomorrow”

 STATEMENT OF PURPOSE

The Valley R-VI School District affirms that the perpetuation of democracy is dependent upon an educated citizenry, that the pubic schools contribute to opportunity among our people and that education is the greatest constructive force at the disposal of democratic people for the solution of their problems. The Valley R-VI School District affirms that the purpose of education is the development of each individual for the fullest participation in the American democratic society and the recognition of social, civil, economic and vocational competencies as factors beyond academic literacy.

EDUCATIONAL OBJECTIVES

It is the obligation of the Valley R-VI School District to provide the best possible educational opportunities for its children within the limits of financial ability. These educational opportunities should be broad enough whereby each person in school may:

1. Become aware of his/her interests, abilities, and potential.
2. Evolve a plan whereby his/her growth in terms of interests, abilities, and potential can be assured.
3. Develop and maintain good health, proper health habits, and physical fitness. Develop dress and grooming habits that will not detract from the normal educational process.
4. Become proficient in the areas of communication arts, science, social studies, and math.
5. Become equipped for happy and successful living in a vocation for which he/she is well adapted.
6. Be prepared for enjoyable living through the development of an appreciation of art, music, and literature and through the development of skills in hobbies and recreational activities.
7. Be prepared to participate in the social, economic, political, and ethical responsibilities as an active American and world citizen.
8. Be trained in our democratic way of life so that the student will have an appreciation for the development of America and its heritage/traditions/culture.
9. Develop critical thinking skills that will help students adapt and cope in an ever-changing society.

GENERAL INFORMATION

GRADUATION REQUIREMENTS

Listed below are the minimum graduation requirements for Valley R-VI High School. All students should become familiar with these requirements. The MO Department of Elementary and Secondary Education increased the requirement of 22 units that has been in place for 20 years to 24. The new standards put more emphasis on the core academic areas by requiring 4 units of English and 3 units each in math, science, and social studies. The requirements are as follows:

4 units of Communication Arts (1, 2, 3, and other)

3 units of Math

3 units of Social Studies

3 units of Science

1 unit of Fine Arts

1 unit of Practical Arts

1 unit of Physical Education

.5 unit of Health

.5 unit of Personal Finance

7 electives

24 total units

CONSTITUTION TESTS

All students are required by law to pass State and Federal Constitution Tests before diplomas can be awarded.

ADVANCED PLACEMENT CLASSES

AP classes are another way to offer college credit to the students. At the end of the class if a student wishes to earn college credit she/he will pay to take an exit test and must make a high enough score to qualify for college credit. Cost may be paid through high test scores on the MAP or low income.

COLLEGE PREPARATORY STUDIES CERTIFICATE

To be eligible for this certificate, a senior must meet the following requirements:

4 units of Communication Arts

4 units of Mathematics

3 units of Science

3 units of Social Studies

1 unit of Fine Arts

1 unit of Practical Arts

1 unit of Physical Education

.5 unit of Personal Finance

.5 unit of Health

7 electives

25 total units

* Earn at least a 3.0 GPA on a 4.0 scale.
* Score above the prior year’s national composite average mean on the ACT or SAT.
* Maintain a 9-12 attendance rate of at least 95%
* Complete a strong academic program (See counselor for more details)

COLLEGE

Students who plan to attend schools in the University of Missouri system are required to take two years of the same foreign language. This would include the University of Missouri at Kansas City, St. Louis, Columbia and Missouri S&T in Rolla.

NCAA

Student/athletes who want to be eligible to play sports in NCAA Division I or II must satisfy certain course requirements, GPA requirements and ACT requirements. See The counselor or coach for more details.

TECH PREP 2+2 PROGRAM

Through the Arcadia Valley Area Career-Tech and Mineral Area College, students have the opportunity to obtain college credit through the following courses. Certain stipulations apply. See brochures for more details.

* Automotive Collision (36 hours)
* Automotive Technology (36 hours)
* Building and Grounds Maintenance (24 hours)
* Business Technology (18 hours)
* Graphic Communications Technology (36 hours)
* Welding (36 hours)

WEIGHTED CLASSES

The following classes are given either a +2 or +3 weight. Which means that it is 2.0 or 3.0 more weight than the standard weight of 1.0. This is to encourage and reward students who take more challenging courses.

* Spanish II \*
* Geometry\*
* Advanced Biology\*
* Chemistry I\*
* Economics/Sociology\*
* English III+\*
* Psychology\*
* Anatomy/Physiology\*
* English IV\*\*
* Physics\*\*
* Calculus\*\*
* Trigonometry\*\*
* Chemistry II\*\*
* AP Biology\*\*
* Advanced Childcare\*\*

\* denotes +2 weight

\*\* denotes +3 weight

DUAL CREDIT and DUEAL ENROLLMENT CLASSES WITH MINERAL AREA COLLEGE

Students are responsible for the payment of college credit.

Currently, we offer Advanced Child Care for dual credit which is ECE1000-Intro. To Early Childhood Education through MAC. For Dual Enrollment students can take any online college course offered through MAC. Student must meet all requirements to enroll in these courses.

**CAREER PATHS**

**A WAY TO LOOK AT COURSE SELECTION**

**1. ARTS AND COMMUNICATION 4. HUMAN SERVICES**

**2. BUSINESS, MANANGEMENT, & TECH. 5. INDUSTRIAL & ENGINEERING TECH.**

**3. HEALTH SERVICES 6.NATURAL RESOURCES/AGRICULTURE**

**WHAT ARE CAREER PATHS?**

Career paths are clusters of occupations/careers that are grouped because many of the people in them share similar interests and strengths. All paths include a variety of occupations that require different levels of education and training. Selecting a career path provides you with an area of FOCUS, along with FLEXIBILITY and a VARIETY of ideas to pursue.

**WHAT ARE CAREER CLUSTERS?**

Career Clusters are used as a way to organize careers and occupations, to help educators in advising students, and to revitalize career and technical education by integrating rigorous academics with relevant technical content. The 16 career clusters enable students to explore several career options within a field of interest.

**CAREER PATHS ARE FOR ALL STUDENTS**

By selecting a career path, you can prepare for the future, regardless of your interests, abilities, talents or desired level of education. All paths have equal dignity.

**HOW CAN CAREER PATHS HELP ME?**

Deciding on a career path can help you prepare for your future. The intent is not for you do decide on a specific occupation for the rest of your life, but to select a career path into which you can begin directing your energies. Identifying a career path can help you in selecting school courses, activities, and part-time employment. It can also help guide your participation in workplace readiness programs like school-to-work, internship, or cooperative education.

**WHAT IF I CHANGE MY MIND?**

A career path choice is not a permanent commitment. As you have new experiences, you will learn new things about yourself and may change career paths. If you decide on a new career path, you should discuss it with your counselor and adjust your future course selections in accordance with your new career direction.

**HOW DO I DECIDE WHICH CAREER PATH BEST FITS ME?**

1. Identify your interest, abilities, and talents. Start by thinking about yourself and answering the questions below each career path. Some assessment tools that are available are the EXPLORE, ASVAB, PLAN, ACT (These are all tests). Also available are up-to-date career videos.
2. Consider the possible careers in each pathway in relationship to your interests, abilities, and talents.
3. Decide which career path best fits your interests and strengths. (You do not have to decide on a specific occupation that you want to pursue.)
4. Select courses that are related to your career path. Suggestions for courses for each path are provided in this booklet.

**HOW CAN I HELP AS A PARENT?**

Career paths give you focus upon which to discuss career opportunities with your student. Concentrating on selecting a career path can enable a student to make an initial career decision. The idea of selecting a career for the rest of their life can be overwhelming. If that decision does not turn out to be a good one, they may not know what their other career options are. When they make a career path decision they know that there are many similar choices and if one doesn’t end up being the right one they have a variety of related careers to consider. You can help your student by:

1. Discussing their interests, abilities, and talents.
2. Sharing information with them about careers and your work experiences.
3. Arranging for them to talk with people you know about careers that are of interest to them.

**WHAT ARE THE SIX CAREER PATHS?**

**AND CAREER CLUSTERS AND PATHWAYS?**

**ARTS AND COMMUNICATIONS – THE CREATIVE PATH**

Are you a creative thinker? Are you imaginative, innovative, and original? Do you like to communicate ideas?

**The Career Cluster within this path and their pathways:**

* **Arts, A/V Technology and Communications**

**Audio and Video Technology and Film**

**Printing Technology**

**Visual Arts**

**Performing Arts**

**Journalism and Broadcasting**

**Telecommunications**

**BUSINESS, MANAGEMENT, AND TECHNOLOGY – THE BUSINESS PATH**

Do you enjoy being a leader, organizing people, planning activities for others, and talking with people? Do you like to work with numbers or ideas? Do you enjoy carrying through with an idea and seeing the end product? Do you like to know what is expected of you and like things around you to be neat and orderly?

**The Career Cluster within this path and their pathways:**

* **Information Technology**

**Network Systems**

**Information Support and Services**

**Interactive Media**

**Programming and Software Development**

* **Marketing, Sales and Service**

**Management and Entrepreneurship**

**Professional Sales and Marketing**

**Buying and Merchandising**

**Marketing Communications and Promotion**

**Marketing Information Management and Research**

**Distribution and Logistics**

**E-Marketing**

* **Business, Management and Administration**

**Management**

**Business Financial Management and Accounting**

**Human Resources**

**Business Analysis**

**Marketing and Communications**

**Administrative and Information Support**

* **Finance**

**Financial and Investment Planning**

**Business Financial Management**

**Banking and Related Services**

**Insurance Services**

**HEALTH SERVICES – THE HEALTH PLAN**

Do you like to care for people or animals who are sick or help them stay well? Are you interested in new diseases and in how the body works? Do you enjoy observing patients and looking for changes in how they are doing?

**The Career Clusters within this path and their pathways:**

* **Health Science**

**Biotechnology Research and Development**

**Therapeutic Services**

**Diagnostics Services**

**Health Informatics**

**Support Services**

**HUMAN SERVICES – THE HELPING PATH**

Are you friendly, open, outgoing, understanding, and cooperative? Do you like to work with people to help solve problems? Is it important to you to do something that makes things better for other people?

**The Career Clusters within this path and their pathways:**

* **Human Services**

**Early Childhood Development and Services**

**Counseling and Mental Health Services**

**Family and Community Services**

**Personal Care Services**

**Consumer Services**

* **Hospitality and Tourism**

**Restaurants and Food and Beverage Services**

**Recreation, Amusement and Attractions**

**Travel and Tourism**

**Lodging**

* **Government and Public Administration**

**Public Management and Administration**

**Governance**

**National Security**

**Foreign Service**

**Planning**

**Revenue and Taxation**

**Regulation**

* **Law, Public Safety, Corrections and Security**

**Correction Services**

**Emergency and Fire Management Services**

**Legal Services**

* **Education and Training**

**Administration and Administrative Support**

**Professional Support Services**

**Teaching and Training**

**INDUSTRIAL AND ENGINEERING TECHNOLOGY – THE BUILDING AND FIXING PATH**

Are you mechanically inclined and practical? Do you like to use your hands and build things? Are you curious about how things work?

**The Career Clusters within this path and their pathways:**

* **Manufacturing**

**Production**

**Manufacturing Production Process Development**

**Maintenance, Installation and Repair**

**Quality Assurance**

**Logistics and Inventory Control**

**Health, Safety and Environmental Assurance**

* **Transportation, Distribution and Logistics**

**Transportation Operations**

**Logistics, Planning and Management Services**

**Warehousing and Distribution Center Operations**

**Facility and Mobile Equipment Maintenance**

**Transportation Systems and Infrastructure**

**Planning, Management and Regulation**

**Health, Safety and Environmental Management**

**Sales and Services**

* **Science, Technology, Engineering and Mathematics**

**Engineering and Technology**

**Science and Math**

* **Architecture and Construction**

**Design and Pre-Construction**

**Construction**

**Maintenance and Operations**

**NATURAL RESOURCES – THE NATURE PATH**

Are you a nature lover? Are you practical, curious about the physical world, and interested in plants and animals? Do you like to be physically active? Do you like to observe, learn, investigate, or solve problems?

**The Career Clusters within this path and their pathways:**

* **Agriculture, Food and Natural Resources**

**Agribusiness Systems**

**Animal Systems**

**Food Products and Processing Systems**

**Natural Resources and Environmental Service Systems**

**Power, Structural and Technical Systems**

**Plant Systems**

**ARTS AND COMMUNICATIONS CAREER PATH**

**ARTISTIC**

*Occupations related to the humanities and the performing, visual, literary, and media arts. These may include architecture, creative writing, film, fine arts, graphic design and production, journalism, languages, radio, television, advertising, and public relations.*

**COMMUNICATIONS OCCUPATIONS**

Broadcast Technicians

Compositor/Typesetters

Interpreter and Translator

Public Relations Specialists

Radio and Television Announcers and Newscasters

Reporters and Correspondents

Technical Writers

Writers and Editors

**PERFORMING ARTS OCCUPATIONS**

Actors, Directors and Producers

Dancers and Choreographers

Models

Musicians

**VISAL ARTS OCCUPATIONS**

Architects

Commercial Artists

Designers

Florists

Industrial Designers

Merchandise Display Workers

Motion Picture Projectionists

Photographers and Camera Operators

Photographic Process Workers

Sign Painters

Visual Artists

**ARTS AND COMMUNICATIONS**

**MODEL SCHEDULE**(\*Required)

9TH GRADE

\*English I

\*American Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*Health (.5 credits)

\*Keyboarding (.5 credit)

Spanish I

Choose from:

Practical Art or Fine Art

11th GRADE

\*English III

\*American History

\*Algebra II or Calculus

\*Chemistry I, Anatomy/Physiology, Zoology/Botany

Spanish II

Choose from:

Psychology, Economics/Sociology

Fine Art

Graphic Communications (VOTECH)

10th GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

Spanish I or II

Choose from:

Practical Art or Fine Art

\*Physical Education

Other elective

12th GRADE

\*English IV or Creative Writing, English Lit, ACT Reading/Speech, Novels and Short Stories

Choose from:

Any elective

Fine Art/Practical Art

Graphic Communications (VOTECH)

POST SECONDARY

Community College:

Associates of Arts (Transfer Degree):

Art\*, English\*, Foreign Language\*, Mass Communications, Music\*, Speech\*, Speech and Drama, Pre-Architecture, Pre-Journalism, (A \*denotes Pre-Teaching, Secondary Program)

Associate of Applied Science: Graphic Design

Certificates: Graphic Arts/Printing Technology

Baccalaureate Degree (4 year): Follow College Preparatory Curriculum. Consult entrance requirements for specific college. See your counselor for colleges with appropriate majors.

**BUSINESS AND MANAGEMENT CAREER PATHS**

**(Enterprising-Conventional)**

*Occupations related to the business environment. These may include entrepreneurship, sales, marketing, computer/information systems, finance, accounting, personnel economics, and management.*

**EXECUTIVE, ADMINISTRATIVE AND MANAGERIAL OCCUPATIONS**

Accountants & Auditors

Administrative Services Managers

Budget Analysts

City Managers

Constr4uction & Building Inspectors

Construction Contractors & Managers

Cost Estimators

Credit Managers

Education Administrators

Employment Interviewers

Engineering, Science, & Data Processing Managers

Financial Managers

General Managers & Top Executives

Government Chief Executives & Legislators

Health Services Managers

Hotel Managers& Assistants

Industrial Production Managers

Inspectors & Compliance Officers, Except Construction

Management Analysts & Consultants

Marketing, Advertising, & Public Relations Managers

Personnel, Training, & Labor Relations Spec.

Postmaster & Mail Superintendents

Property & Real Estate Managers

Purchasing Agents & Managers

Retail Sales Manager

Underwriters

Wholesale & Retail Byers & Merchandise Managers

**MARKETING & SALES OCCUPATIONS**

Cashiers

Counter& Rental Clerks

Insurance Agents & Brokers

Manufacturers’ Representatives

Real Estate Agents/Brokers/Appraisers

Retail Sales Workers

Securities & Financial Service Sales Representatives

Service Sales Representatives

Stock Brokers

Travel Agents

**COMPUTER, MATHEMATICAL, & OPERATIONS RESEARCH OCCUPATIONS**

Actuaries

Computer Systems Analysts

Computer Programmers

Economists & Marketing Research Analysts

Mathematicians

Statisticians

**ADMINISTRATIVE SUPPORT OCCUPATIONS INCLUDING CLERICAL**

Adjusters, Investigators, & Collectors

Bank Tellers

Billing Clerks

Bookkeeping/Accounting Clerks

Clerical Supervisors & Managers

Computer Operators

Court Clerks

Court Reporter

Credit Clerks & Authorizers

Dispatchers

File Clerks

General Office Clerks

Hotel Clerks

Mail Clerks

Paralegal/Legal Assistants

Postal Clerks

Receptionists

Records Clerks

Secretaries

Stenographers & Court Clerk/Reporters

Telephone, Telegraph, & Teletype Operators

Typists, Word Processors, & Data Entry Advertising Agents

**BUSINESS AND MANAGEMENT**

**MODEL SCHEDULE** (\*Required)

9TH GRADE

\*English I

\*American Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*Health (.5 credits)

\*Keyboarding (.5 credit)

Spanish I

Choose from:

Practical Art or Fine Art

11th GRADE

\*English III

\*American History

\*Algebra II or Calculus

\*Chemistry I, Anatomy/Physiology, Zoology/Botany

Spanish II

Business Technology

Choose from:

Psychology, Economics/Sociology

Fine Art

Graphic Communications (VOTECH)

10th GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

Spanish I or II

Choose from:

Practical Art or Fine Art

\*Physical Education

Other elective

12th GRADE

\*English IV or Creative Writing, English Lit, ACT Reading/Speech, Novels and Short Stories

Business Law

Choose from:

Any elective

Fine Art/Practical Art

Graphic Communications (VOTECH)

POST SECONDARY

Community College:

**Associates of Arts (Transfer Degree**):

Business, Business Education\*, Computer Science, Information Systems, Pre-Business Administration, ( A \* denotes Pre-Teaching, Secondary Program)

**Associate of Applied Science**: Banking and Finance, Business Management, Accounting, Microcomputers, Health Care Administration, Manufacturing Supervision, Office Systems Technology, Business Computer Programming, Computer Networking, Operations Management and Manufacturing Supervision

**Certificates:** Business Management, Office Systems Technology, Manufacturing Supervision, operations Management and Manufacturing Supervision

**Baccalaureate Degree (4 year**): Follow College Preparatory Curriculum. Consult entrance requirements for specific college. See our counselor for colleges with appropriate majors.

**HEALTH SERVICES CAREER PATHS**

**(Investigative-Social)**

*Occupations related to the promotion of health and the treatment of disease. These may include research, prevention, and treatment.*

**HEALTH ASSESSMENT & TREATING OCCUPATIONS**

Activities Therapists

Ambulance Attendants

Dietitians and Nutritionists

Occupational Therapists

Occupational Therapy Assistants

Pharmacists

Physician Assistants

Recreational Therapists

Registered Nurses

Respiratory Therapists

Optometry Assistants

Speech/Language Pathologists & Audiologists

**HEALTH TECHNOLOGISTS & TECHNICIANS**

Clinical Laboratory Technologists & Technicians

Dental Hygienists

Dialysis Technicians

Dispensing Opticians

EEG Technologists (Electrocardiograph) Emergency Medical Technicians (EMT) Industrial Hygienist

Licensed Practical Nurse

Nuclear Medicine Technician

Ophthalmic Laboratory Technician

Radiology Technologists

Surgical Technicians

**HEALTH DIAGNOSING PRACTITIONERS**

Chiropractors

Dentists

Opticians

Optometrists

Physicians

Podiatrists

Physical Therapists

**HEALTH SERVICES OCCUPATIONS**

Dental Assistants

Home Health Aides

Medical Assistants

Nursing Aides & Psychiatric Aides

**HEALTH SERVICES MODEL SCHEDULE**

(\*Required)

11th GRADE

\*English III or Adv English III

\*American History

\*Algebra II or Calculus

\*Personal Finance

Spanish II or III

\*Chemistry

Any Elective(s)

12th GRADE

\*English IV or English Elective

Calculus or Trigonometry

VOTECH- Health Sciences

Psychology/Sociology

Spanish III

Anatomy & Physiology

Any Elective(s)

10TH GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

 Choose from:

Practical Art or Fine Art

\*Physical Education

Other elective

Spanish I or II

**POST SECONDARY**

9th GRADE

\*English I

\*Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*1/2 credit of Health

\*1/2 credit of Computer Apps

Fine Art

Practical Art Class

Spanish I

Community College:

 Associate of Arts (Transfer Degree)

 Pre-Medicine, Pre-Pharmacy

 Associate in Applied Science:

 Allied Health-Medical Technology, Nursing (R.N.), Respiratory Therapy,

 Occupational Safety, Health & Environmental Technology, Health Care Admin.

 Certificates:

 Practical Nursing, Emergency Medical Technician (EMT)

Baccalaureate Degree-Follow College Preparatory Curriculum. Consult entrance requirements for specific college. See your counselor for colleges with appropriate majors.

**HUMAN SERVICES CAREER PATH**

**(Social)**

Occupations related to economic, political, and social systems. These may include education, government, law and law enforcement, leisure and recreation, military, religion and social services.

**LEGAL**

Court Administrators

Lawyers & Judges

Paralegals

**PROTECTIVE SERVICE OCCUPATIONS**

Correction Officers

Firefighters

Guards

Police, Detectives, & Special Agents

**SOCIAL SCIENTISTS & URBAN PLANNERS**

Economists & Marketing Research Analysts

Psychologists

Sociologists

Urban & Regional Planners

**RELIGIOUS WORKERS**

Clergy

Ministers, Rabbis, Priests

Religious Workers

**TEACHERS, LIBRARIANS, COUNSELORS**

Adult Education Teachers

Archivists & Curators

College Faculty

Counselors

Elementary Teachers

Librarians

Library Technicians

Secondary School Teachers

Special Education Teachers

Teacher Aides

**SOCIAL SERVICES**

Human Services Workers

Marriage Counselors

Social Workers

Social Service Aides

Substance Abuse Counselors

Vocational Rehabilitation Counselors

**PERSONAL SERVICES**

Animal Caretakers

Barbers & Cosmetologists

Equipment & Vehicle Cleaners

Flight Attendants

Funeral Directors

Housekeepers

Janitors & Custodians

Pest Control

Preschool Workers

Refuse Collectors

Service Station Attendants

Upholsters

**TRANSPORTATION**

Aircraft Pilots

Air Traffic Controllers

Bus Drivers

Rail Transportation

Truck Drivers

**RECREATION**

Recreation Attendants

Recreation Workers

**HOSPITALITY, FOOD PREPARATION SERVICES**

Chefs & Cooks

Food Beverage Services

Meat Cutters/Butchers

**HUMAN SERVICES**

**MODEL SCHEDULE**(\*Required)

11th GRADE

\*English III or Adv. English III

\*American History

\*Algebra II or Calculus

\*Personal Finance

Spanish II or III

Psychology/Sociology

Child Development/Parent Ed.

Nutrition and Wellness

Any Elective

10th GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

\* PE

Spanish I or II

Fine Art or Practical Art

12th GRADE

\*English IV or English Elective

Math Elective

Science Elective

Spanish III

Any elective

**POST SECONDARY**

9TH GRADE

\*English I

\*Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*1/2 Credit of Health

\*1/2 Credit of Computer Apps.

Spanish I

Fine Art or Practical Art

Community College:

 Associate of Arts (Transfer Degree):

 Agriculture\*, Art\*, Biology\*, Business Education\*, Chemistry\*, Child Development, English\*,

 Foreign Language\*, Government, History, Home Economics\*, Human Services, Math\*,

 Music\*, Physical Education\*, Psychology, Social Studies\*, Speech, Pre-Law, Pre-Social

 Community Serviced, Pre-Teaching Elementary Psychology, Pre=Professional Teacher

 Education (A\* denotes Pre-teaching, Secondary)

Associate in Applied Science: Criminal Justice, Fire Science Technology

Certificate: Child Development (Director’s Certificate), Fire Science, Culinary Arts

Baccalaureate Degree:

 Follow College Preparatory Curriculum. Consult entrance requirements for specific colleges. See your

counselor for colleges with appropriate majors.

**INDUSTRIAL & ENGINEERING TECHNOLOGY CAREER PATHS**

**(Realistic)**

*Occupations related to the technologies necessary to design, develop, install or maintain physical systems. These may include engineering, manufacturing, construction, service, and related technologies.*

**ENGINEERS**

Aerospace Engineers

Chemical Engineers

Civil Engineers

Electrical & Electronics Engineers

Industrial Engineers

Mechanical Engineers

Metallurgical, Ceramic, & Materials Engineers

Mining Engineers

Nuclear Engineers

Petroleum Engineers

**MECHANICS, INSTALLERS, & REPAIRERS**

Aircraft Mechanics

Alarm System Installers

Automotive Body Repairers

Automotive Mechanics

Biomedical Technicians

Diesel Mechanics

Electronic Equipment Repairers

Elevator Installers & Repairers

Heating, Air Conditioning & Refrigeration Techs

Home Appliance & Power Tool Repairers

Industrial Machinery Repairers

Line Installers & Cable Splicers

Mechanics

-Computer & Office Machine Repairers

-Electronic Home Entertainment Equipment

Repairers

-Telephone Installers & Repairers

-TV & Radio Repairers

Millwrights

Mobile Heavy Equipment Mechanics

Motorcycle, Boat, & Small-Engine Mechanics

Musical Equipment Repairers

Robotics Technicians

Small Engine Mechanics

Vending Machine Servicers

**CONSTRUCTION TRADES**

Bricklayers & Stonemasons

Bulldozer Operators

Carpenters

Carpet Installers

Concrete Masons & Terrazzo Workers

Drywall Workers & Lathers

Electricians

Engineering Technicians

Forklift Operators

Glaziers

Highway Maintenance workers

Insulation Workers

Painters & Paperhangers

Plasterers

Plumbers & Pipe fitters

Roofers

Roustabouts

Sheet Metal Workers

Structural & Reinforcing Ironworkers

Tile setters

**PLANT & SYSTEMS OPERATORS**

Electric Power Generating Operators

Stationary Engineers

Water Treatment Plan Operators

**PRODUCTION OCCUPATIONS**

Assemblers

Blue-collar Worker Supervisors

Food Processing Occupations

-Butchers and Meat Cutters

Inspectors, Testers, & Graders

Metalworking & Plastics-Working Occupations

-Boilermakers

-Jewelers

-Machinists

-Metalworking & Plastics-Working Machine Operators

-Numerical-Control Machine-Tool Operators

-Tool & Die Makers

-Welders, & Cutter

Plant & Systems Operators

Printing Occupations

Textile, Apparel, & Furnishings Occupations

Woodworking Occupations

Miscellaneous Production Occupations

-Dental Laboratory Technician

-Ophthalmic Laboratory Technicians

-Painting & Coating Machine Operators

-Photographic Process Workers

Transportation & Material Moving Occupations

Handlers, Equipment Cleaners, Helpers & Laborers

**INDUSTRIAL AND ENGINEERING TECHNOLOGY**

**MODEL SCHEDULE**(\*Required)

9th GRADE

\*English I

\*Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*1/2 Credit Health

\*1/2 Credit Computer Apps.

Fine Art

General Shop

11th GRADE

\*English III or Adv. English III

\*American History

\*Algebra II or Calculus

\*Science

\*1/2 Credit Personal Finance

VOTECH: Building and Grounds Maintenance, Auto Collision Repair, Automotive Technology, Computer Repair and Networking, Graphic Communications, Welding

12th GRADE

\*English IV or English Elective

Any Electives

VOTECH: Building and Grounds Maintenance, Auto Collision Repair, Automotive Technology, Computer Repair and Networking, Graphic Communications, Welding

10th GRADE

\*English II

\*World History

\*Biology

\* PE

\*Geometry or Algebra II

Woods I/II

Any Elective

**POST SECONDARY**

Community College:

Associate of Arts (Transfer Degree): Mathematics, Physics, Pre-Architecture, Pre-Engineering

Associate in Applied Science: Technology, Automotive Collision Technology, Automotive Technology, Civil/Construction Technology, Electrical/Electronics Technology, Heating, Air Conditioning and Refrigeration Technology, Manufacturing Technology, Industrial Maintenance, Operations Management & Manufacturing Supervision, Construction/Building Technology, Occupational Safety, Health & Environmental Technology, Occupational Education, Machine Tool Technology

Certificates: Automotive Collision Technology, Automotive Technology, Construction/Building, Heating, Air Conditioning and Refrigeration Technology, Industrial Maintenance, Machine Tool Technology, Welding Technology

 Baccalaureate Degree:

 Follow College Preparatory Curriculum. Consult entrance requirements for specific colleges. See your

counselor for colleges with appropriate majors.

**NATURAL RESOURCES CAREER PATH**

**(Realistic and Investigative)**

Occupations related to the environment and natural resources. These may include agriculture, earth sciences, environmental sciences, fisheries, forestry, horticulture, and wildlife.

**LIFE SCIENTISTS**

Agricultural Scientists

Biological Scientists

Foresters & Conservationists

Veterinarian

**PHYSICAL SCIENTISTS**

Chemists

Geologists & Geophysicists

Meteorologists

Physicists & Astronomers

**AGRICULTURE, FORESTRY, FISHING & RELATED**

Agriculture Engineers

Gardener/Groundskeepers

Farm Operators & Managers

Farm Workers

Fish & Game Wardens

Fishers, Hunters, & Trappers

Nursery Workers

Range Managers

Surveyors

Timber Cutting and Logging Workers

Veterinarian Laboratory Technicians

**NATURAL RESOURCES**

**MODEL SCHEDULE**(\*Required)

**POST SECONDARY**

Community College:

12TH GRADE

\*English IV or English Elective

Math Elective

Zoology

Anatomy/Physiology

Spanish 3

VOTECH Building and Grounds

11TH GRADE

\*English III or Adv. English III

\*American History

\*Algebra II or Calculus

\*1/2 Credit Personal Finance

\*Science Elective

VOTECH Building and Grounds

Spanish 2 or 3

10TH GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

\*PE

Woods I

Fine Art

Spanish 1 or 2

9TH GRADE

\*English I

 \*Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*1/2 credit Health

\*1/2 credit Computer Apps.

Fine Art or General Shop

Spanish 1

Associate of Arts (Transfer Degree)

 Agriculture\*, Chemistry\*, Biological Science, Biology\*, Pre-Agriculture, Pre-Forestry, (A \*

denotes Pre-Teaching, Secondary)

 Associate in Applied Science:

 Agribusiness, Horticulture Services Operations Technology

 Certificates:

 Floral Design/Flower Shop Maintenance, Horticulture Services Operations Technology

Baccalaureate Degree:

 Follow College Preparatory Curriculum. Consult entrance requirements for specific colleges. See your

counselor for colleges with appropriate majors.

**COLLEGE PREPARATORY**

**MODEL SCHEDULE** (\*Required)

Academic Elective Recommendations:

12TH GRADE

\*English IV

Calculus or Trigonometry

Zoology

Anatomy/Physiology

Psychology/Sociology

Spanish 3

Business Law

Academic Elective

10TH GRADE

\*English II

\*World History

\*Geometry or Algebra II

\*Biology

\*PE

Practical Art

Fine Art

Spanish 1 or 2

Academic Elective

9TH GRADE

\*English I

 \*Government/Geography

\*Algebra I or Geometry

\*Physical Science

\*1/2 credit Health

\*1/2 credit Computer Apps.

Fine Art or Practical Art

Spanish 1

11TH GRADE

\* Adv. English III

\*American History

\*Algebra II or Calculus

\*1/2 Credit Personal Finance

\*Chemistry

Spanish 2 or 3

Business Technology

Academic Elective

 English, Math, Science, Social Studies, Foreign Language (Some colleges

require 2+ years of the same Foreign Language), Computer Courses

Other Recommendations: See the model schedule related to your specific career path.

SHORT ON CREDITS?

THINKING OF DROPPING OUT OF SCHOOL?

**READ THIS FIRST!!**

**COUNSELOR**

Your counselor is here to help you both personally and educationally. Your counselor may be able to suggest ways to help you such as summer school, tutoring, correspondence courses, independent study, and outside agencies. So don’t quit! Talk to your counselor first!

**CORRESPONDENCE COURSES**

Students interested in UMC correspondence courses should see their counselor. A maximum of 4 – half-unit courses can be counted toward graduation. The counselor/principal must approve all courses intended to be used toward graduation. Strict deadlines for completion of courses are maintained by UMC and must be observed. The student is responsible for knowing and meeting those deadlines. The student is responsible for paying for these courses.

**A+ CREDIT RECOVERY PROGRAM**

These courses can be taken to recover missing credits as long as the courses are not a state tested course (Algebra I, English I, Geometry, Algebra II, English II, American History, Biology, and American Government). Interested students must see their counselor.

**INDEPENDENT STUDY**

Students needing to receive credit in order to graduate with their age appropriate class may take an independent study course. The course of study will be developed by a Valley HS teacher and approved by the principal, and counselor. A student will be allowed to earn only one credit per year from an independent study course. Credit for the course may reflect a pass/fail situation or a letter grade may be assigned. Seethe counselor for information.

**SUMMER SCHOOL**

If Valley HS has summer school it will be in the form of classes or the A+ credit recovery program. Students must show a need for summer school through missing credits.

**TUTORING**

If interested in tutoring see your counselor to see the tutoring schedule or contact your teacher for additional help.