EXPERIMENT IN FREE-FORM EDUCATION

March 24 - 28

Final Catalogue of Courses

Walt Whitman High School
Whittier Boulevard
Bethesda, Maryland 20034

EXPERIMENT IN FREE FORM EDUCATION

Final Catalogue of Courses

This week you will plan your schedule for EFFE, March 24 - 28. Your individual schedule can be planned from three different programs:

1. Work Experience which you obtained on your own or through EFFE

2. Your own independent study project

3. Courses listed in this final catalogue

Work Experience: If you have applied for and received a job, obtain two copies of the Work Experience contract from the main office counter. Complete and turn in the two copies. (One will be returned to you and the other kept on file in the school.) On the course contract form write 060 for work obtained on your own or 070 for work obtained through EFFE. Also indicate the place where you will be employed.
Note: If you have applied for work experience through EFFE and have not yet received notice as to your acceptance, see Guy Webster or Stockton Williams in F-17.

Independent Study: For up to 10 hours of independent study, fill out the contract forms as for regular courses. Independent study has the code 050. Indicate the topic of your study.

For more than 10 hours of independent study, obtain three Independent Study contract forms from the main office counter. Complete the three forms. (One will be returned to you, one sent to your sponsor, and one kept on file.) On the course contract form write 050 and indicate the topic of your project.

Courses: If you are spending all or part of your time taking courses, you will have to plan your schedule carefully. When making your schedule, please bear in mind that it is not necessary to come to every meeting of a course unless a commitment requirement is indicated in this catalogue. It is acceptable, for instance, to skip one meeting of a five day course to take one all day course. Some courses are listed as having several groups; such a course will be repeated because of the demand indicated by preregistration. Do not sign up for both groups of one course. Some courses are indicated as having sessions A, B, C, etc.; such course will be composed of several independent units of which you may attend one or all. Please indicate on your contract what group and what sessions you will attend.

Denote your lunch period and any unplanned time as 000. The cafeteria will be open from 11 to 12:30 and you may eat any time during that interval. Unplanned time may be spent in activity rooms where there will be films, discussions or other activities.

(over)

Instructions for Filling out Contract Forms

There are four kinds of contract forms to cover the four kinds of EFFE programs: work experience, independent study, college visits, and courses. The first three are available on the counter in the main office. Three copies of the course contract form are inserted in this catalogue. (One of these is for you to use as a rough copy. Two copies must be filled out neatly and accurately, and signed by you and your parents.)

These contracts are between you, your parents, and the school. They must be signed by all three parties.

Contracts may be turned in at the cafeteria before or after school and in the main hall during lunch.

If there are no problems with your schedule, one copy of your schedule will be returned to you with approval on it. Since courses will be filled on a first-come, first-served basis, it is advisable to submit your contracts as soon as possible after the opening date for registration, March 5th. All schedules received during the same day will be treated equally.

On the graphed section of the course contract indicate your schedule by outlining the time block or blocks corresponding to each activity you will participate in. Within each block write the number of the course or activity. Indicate lunch as 000. Please use INK.

000 GENERAL

001 English for the Foreign-Born: Special Activities (Mrs. Martins)
Workshops, trips and activities. Travel by adult driver, private car.
Full week.

002 Lecture Series on Marijuana, Hallucinogens, and Narcotics. (Miss Meyer)
May be taken with or without the following seminars.
8 - 9 every day.

003 Seminars on Marijuana, Hallucinogens, and Narcotics (Miss Meyer)
Small group discussions to follow the lectures. Students joining the seminars must go to the lectures. Tues. a field trip by school bus to Drug Addiction Treatment Center.
9 - 11 MWThF.
9 - 12 Tu.

004 Hazards of Night Driving (Mr. Fern) Prerequisite: satisfactory completion of Driver Ed course by March 1 or driver's license. Required lecture, film and discussion. Sign up with Mr. Fern for the evening driving.
12 - 3 M + 1 hr of driving between 6 - 11 pm any day.

006 For Girls Only (Miss Bergman)
Speakers, demonstrations and workshops on grooming, poise, style and etiquette.
9 - 11:30 every day.

007 Yearbook Production (Mrs. Walz)
Planning session for '70 editors, new staffers, and interested students.
Fri. a field trip by private car to the plant in Cambridge, Md.
12:30 - 2:20 MTuWTh + F all day.

008 PRAS - Potomac River Accident Study (Mr. Kohut)
The causes of accidents and deaths on the Potomac River. Transport by private car.
9 - 2:20 every day.

009 Guidance - What's Wrong with It? (Mr. G. Nelson)
Discussion directed toward the improvement of the counseling system in the County.
8 - 9 WThF.

010 What's It Like To Be a College Professor? (Mr. G. Hilton)
Discussion of the advantages, stresses and strains of being a college professor.
8 - 11 F.

012 EFFE Service: Audio-Visual Aides (Mrs. Connor)
Only for students who have training in use of projectors, etc. Elect during any time block you have open. Also, please sign up with Mrs. Connor.

013 EFFE Service: Library Aides (Mrs. Mater)
Only for students who have served in libraries here or elsewhere. Elect during any time block you have open. Also, please sign up with Mrs. Mater.

014 EFFE Service: Reception and Administration (Mrs. Willens)
Receiving visitors, escorting reporters, handling problems, etc. Sign up with Deborah Hirsch, 11-9, in the EFFE office.

015 Careers in Government and Business Management (Mr. E. Crawford)
Preparation, stresses, strains, satisfactions. Some discussion on racial discrimination from the employee's viewpoint.
11:30 - 12:30 Tu.

050 Independent Study (The Faculty)
It is the student's responsibility to design his own program and get a faculty sponsor. (Less than 10 hours of independent study should be indicated on the contract form by code 050 and the topic of your study.) For a program of 10 or more hours, complete and submit 3 copies of the Independent Study Contract as well as the regular course contract form.
Hours by arrangement.

060 Work Experience Obtained Independently
On your schedule form indicate 060. Complete and submit 2 copies of the Work Experience Contract as well as the regular course contract form.

070 Work Experience Obtained through EFFE
On your schedule form indicate 070. Complete and submit 2 copies of the Work Experience Contract as well as the course contract form.

080 College Visits
Complete and submit 1 copy of the College Visit Contract as well as the course contract form.

000 Lunch and Unplanned Time

100 PHILOSOPHY AND PSYCHOLOGY

PHILOSOPHY

101 Problems of Philosophy (Mr. P. Warburton and D. Gomien)
Relation of Philosophy and Science; historical methods; humanism, materialism; discussions.
8 - 10 every day

102 Meditations (Dr. Barberousse, Mrs. Mate)
Themes: The Nature of Man; Lonliness, Solitude, and Silence: Love and Genuine Encounter; Ecstasy, Joy, and Peak-Experiencing; Identity - "Who am I".
Group I: 8 - 10 every day
Group II: 12 - 2 every day
Group III: 2:30 - 5 M, Tu, Th, F. (Note: Other students welcome to come to the 8 - 9 presentation every day.)

103 Spiritual Marathon (Mr. Hammet)
Man's power of transcendence; the need for Silence; the Eastern Mystics, and ways of developing the contemplative attitude. Thurs. or Fri. will be spent practising silence and contemplation on a farm with camping facilities in Montgomery County. Cost $9.00. Transport by adult-driven private car. Obtain specific details from Mr. Hammet.
Group I: 12:30 - 2:20; M, Tu, W: leave W. 2:30, return Th. 2:00
Group II: 12:30 - 2:20; M, Tu, W; leave Th. 2:30, return F. 2:20

104 Confronting the Real World (Mr. Hammet)
Exposure to groups of men from all walks of life: ex-convicts, ghetto dwellers, Jr. Villagers, etc., with the idea not to help them but to learn from them.
Group I: 8 - 10; M, Tu, W.
Group II: 10 - 12; M, Tu, W.

105 Existentialism (Mr. B. West)
An introduction to the existential philosophy.
Prerequisite: Read Plato "Euthyphro" and Jean Whal, "Short History of Existentialism".
12:30 - 1:30, every day

LOGIC

111 Think! (Mrs. Pinson)
Various methods of thinking, both classical and contemporary, emphasizing empirical, rational, logical, positive, and emotive methods. Examination of some question of each student's own choosing and the application of one method to this problem.
8 - 10, every day

113 Creative Thinking (Miss F. van Straten)
Exercise in looking at things the "wrong way". For science and math students.
Group I: 10-11 every day; Group II: 11-12 every day.

ETHICS

121 Contemporary Values: Decision-making (Mr. J. Curtis)
How we form our values; decision-making; ethics
9 - 11, Tu, W, Th.

124 Sex Education - Coed (Mrs. Detwiler)
The many factors involved in Family Living and Preparations for Marriage: Role of Youth in Society, Toward Sexual Maturity, Sexual Adjustment Problems, The Role of the Family, Selection of a Mate, Necking, Petting, The Engagement, Pre-marital Education, Reproductive Systems, Venereal Disease, Pregnancy and Birth, Parenthood, Later Life Adjustments.
9 - 11, every day

PSYCHOLOGY

131 Marriage and Family Living (Mrs. Treber)
Family life cycles; personality growth, attitudes, values and standards.
12:30 - 2:20, every day

132 Psychology and Human Development (Dr. Rogolsky & U. of Md. Staff)
Lectures and discussions on different aspects of fundamental psychology. Attend all or part.

A (Dr. S. Rogolsky) Psychology; An Overview M.
B (Dr. McDaniel) Some Aspects of Psychology Tu.
C (Dr. Chapin) Physiological Aspects of Psychology W.
D (Dr. L. Dittman) How Are You Going to Raise Your Children? Th.
E (Dr. A. Hatfield) Intensifying Experience F.

Every session from 12:30 to 2:30

133 Freudian and Neo-Freudian Psychology (Mr. G. Glover)
8 - 10, Tu, W, Th.

134 Social Psychology (Mr. Cockrell)
Individual and group behavior, socialization of individuals in various cultures, Theory of behavior, environmental factors.
Group I: 10 - 11, every day
Group II: 1:30 - 2:30, every day

135 Encounter Group (Mrs. K. Tift)
Dynamics of intergroup relationships; how a person's behavior in a group affects others. Commitment required.
Groups I and II: 2 - 4, every day
Group III: 10 - 12, every day

136 Nature of Man (J. Chandler, J. Cohen)
Origins of emotions - biological inheritance or cultural background?
2:30 - 4:30, M.

137 Discussion of Psychology and Life (Dr. Spaner, Community Psychiatric Clinic Staff)
Group Discussion led by psychiatrist.
Group I: Dr. Spaner, 8 - 10, M, W, F.
Group II: Community Psychiatric Clinic Staff, 2:30, every day

138 Existential Psychology (Mr. R. Smith)
I-thou and I-it relations, personal identity.
2:30 - 3:30, every day

139 Impact of Religion (Mrs. E. Shalowitz)
Classification of modern religious ideas and analysis of their influence on behavior and beliefs during secondary school years.
10 - 12, M, W.

200 RELIGION

201 Comparative Religion
Attend all or part.
A. Ethics of Jesus (Mr. D. Hacker) 8 - 9, any day of week; 1 hr. total
B. Christianity in the Modern World (Rev. T. Allen) 9 - 10, every day
C. Judaism in the Modern World (Mr. Green) 12:30 - 1:30, Th, or F; 1 hr.
D. What is Happening to the Catholic Church? (Father R. Cahill)
10 - 11, any day of week; 1 hr. total
E. Islam: A Way of Life (Mr. Vadar) Group I: 11 - 12, M, Tu
Group II: 11 - 12, W, Th, F.

202 The "Honest to God" Debate (Rev. Poynter)
Contemporary religious thought. May attend all or part of course.
11 - 12, every day.

SOCIOLOGY

303 Teenagers and the Law (Mr. Bryson, Mr. Treibley) The pamphlet "Teenagers and the Law" and laws of particular interest to teenagers discussed with experts from Montgomery County Police, Juvenile Court, and the State's Attorney's Office.
8 - 10 W., Th., F.

305 World Protest (Mr. R. Cross)
Student riots around the world: What brought them on, what effects they had, what their future may be.
8 - 9 everyday.

306 Television: Its Effect on American Society (Mr. L. Laurent)
Talk by "Washington Post" TV critic. Transport by private car.
Group I: 11 - 12 W.
Group II: 11 - 12 Th.

307 White Racism (Dr. C. Williams)
How it came about; what to do about it; discussion and sensitivity-training techniques.
10 - 12 Tu., W., Thu.

308 Confronting the Urban Experience (Mrs. Gadbois)
Discussions led by coordinators of inner city legal and urban projects and by residents of urban renewal areas. Attend all or part.
9 - 11 M., Tu., W.

309 American Indian Culture (Dr. S. Stanley)
American Indian culture through systematic examinations of the objects and their evolving forms employed in daily and ceremonial life. At Smithsonian. Transport by school bus. Fee $2.50.
10 - 12 everyday.

POLITICAL SCIENCE

310 The Legislative Process (Mr. Higgins)
Learning through use of a simulation game.
8 - 10 M., Tu., W., Th.

311 Governing the City of Washington (Mrs. H. Baldwin)
Interviews with Congressmen, City Council, City officials. Close study of one project such as Pride, Inc. Transport by private car.
Full week.

312 Urban Studies (Mrs. M. Rivkin)
Introduction to methods and problems encountered in urban planning and zoning.
9 - 10 everyday.

313 Solving Urban Transportation Problems Using Physical Principles (Mr. Geiger) Imaginative approaches to research; new and different ways to solve the urban transportation problems. 2 hr. day independent research and reading.
8 - 9 M., Tu., W., Th.

314 The Prince by Machiavelli (Mr. Simmons)
Power politics, theory of nature of man, moral codes, situational ethics. 1 hr. / day reading.
Group I: 10 - 11 everyday
Group II: 11 - 12 everyday

315 American Foreign Policy (Mr. Higgins)
Brief look at the objectives and accomplishments of American Foreign policy since 1900. Trip by school bus to State Department to attend briefing session. Student must purchase and read "American Diplomacy Since 1900", Kennan. 60¢. Lunch break when convenient.
11 - 2:20 M., Tu., W., Th. 9 - 2:20 F.

316 Biafra: An American Dilemma (Miss Hoon)

Lectures by Nigerians, Biafrans, neutral eyewitnesses and U. S. State Dept. The proper role of the U. S. government and private charities. Attend whole or part.
8 - 9 everyday.

317 Diplomatic Techniques - (W. Kominers)
The Game "Diplomacy" and the wheeling and dealing of politics applied to Europe prior to World War I.
8 - 2:20 F.

318 Youth and Politics (G. Cahn, L. Dublin)
Politics of confrontation; politics of revolution; the Yippy party; appeal of established parties to youth; the role of youth in politics. Guest discussion leaders. Attend all or part.
Group I: 11 - 12 everyday
Group II: 1:30 - 2:20 everyday.

319 The Draft (Mr. Abell, Mr. Hester)
The Selective Service System, legal requirements and obligations, conscientious objection, and the moral and ethical principles. Guest speaker from the Selective Service, local draft boards, Washington Peace Center, Pacifist leaders, and religious leaders.
10 - 12 everyday.

320 Contemporary Legal Problems (Mr. W. Leibovick)
Civil Rights, Supreme Court, Gun Control, Integration of Schools, Organized Crime, Consumer and Business Activities.
11 - 12 [illegible] every day

ECONOMICS

321 Urban Study - City I - A Simulation Game (Mr. Abell)
Use of a computerized instructional model of an imaginary "City I" with economic and political inputs at Washington Center for Metropolitan Studies. Private transportation.
Full Week.

322 The American Economy (Dr. Danhof)
Free enterprise: landmark economic treatises, basic laws, the "New Economics, Production, Distribution, Consumption, the Market system. Federal government's role in the U.S. economy.
8 - 9 every day.

323 The Communist Manifesto (Mr. Simmons)
Communism, socialism and capitalism with disussion of the doctrines of Marx and Engels.
Group I: 8 - 9 everyday
Group II: 11 - 12 everyday

324 The Stock Market (Mr. Cockrell)
N. Y. Stock Market terminology, buying and selling. 1 hr./day reading.
Group I:- 8 - 9 everyday
Group II:- 12:30 - 1:30 everyday.

325 Conning the Consumer (Mrs. E. Angevine)
How ads influence us.
8 - 9 everyday.

326 The News Media: How much of the Truth do we get? (Mr. J. Herbers, Mr. B. Monroe)
Attend all or part.
9 - 10 M. , 11 - 12 Tu. W., Th., F.

327 Contemporary Economics (Mr. S. Gorlitz)
Practising economists discussing real estate, business, international economics, foreign aid, taxation, transportation, foreign trade.
Attend all or part.
12:30 - 2:20 everyday.

ANTHROPOLOGY AND ARCHAEOLOGY

331 Archaeology Field Trip (Mr. Abell)
Archaeological methods through lecture, discussion and excavation of a site in the D. C. area under direction of a professional archaeologist. Transport by private car.
Full week.

332 - Archaeology (Dr. R. Muzzrole)
Tour and lecture in archaeological laboratory, Smithsonian.
Transport by private car.
Group A: 1:30 - 5 Tu.
Group P: 1:30 - 5 Th.

333 Restoration Work (Dr. G. Dentry)
Restoration of museum display items. Smithsonian. Transport. by private car.
1 - 3 F.

334 U.S. Exhibit in Smithsonian (Dr. A. Serio)
Restoration of museum display items. Smithsonian. Transport by private car. 9:30 - 11:30 Tu.

335 Museum Techniques I (Mrs. B. Walters)
Follow an object from reception at museum through catalogue until it goes on display. Smithsonian. Transport by private car.
9 - 11 M., Tu., W.

336 Museum Techniques II (Mr. B. Henson)
Restoration, installation and maintenance of machines, steam engines, and cars on display at Smithsonian. Transport by private car.
1 - 3 F.

337 Physical Anthropology (Dr. L. Angel)
Physical evolution of man. Smithsonian. Transport by private car.
9 - 11:30 Tu., W., Th., F.

EDUCATION

341 Raise High the Roofbeam, Teacher! Part One (Miss Hoon)
An exploration of new ideas in education through lecturer, films, and discussions. "Ecstasy in Education" one focus.
9 - 11 M., Tu., F.

342 Raise High the Roofbeam, Teacher! Part Two (Miss Hoon)
Visits to innovative secondary schools such as JFK and Hawthorne. Transport by private car.
All day W., Thu.

344 Student Rights, If Any (Mr. W. Offutt)
A look at current problems and protests and administrative reaction. To develop materials and a position paper to use in workshops for MCPS administrators.
11 - 12 everyday.

351 Trip To U.N. (Miss Pezolano)
Get detailed information from Miss Pezolano before signing up.
Cost $35.50, exclusive of food.
Full week.

400 LANGUAGE

LINGUISTICS

401 Linguistics: Its Philosophy and History (Mr. Sylto)
Experts from area universities. Commitment required.
8 - 11 Th

404 Sign Language (Mr. Woofter)
12:30 - 1:30 every day

LANGUAGE

410 Breakthrough French (Language Dept)
Attention to individual students' problems and strengthening basic sentence patterns.
8-9 every day

414 History of French Art (Mrs. Trotter)
French Art from the Middle Ages to the present; conducted in French. Prerequisite: French IV. Transport by private car F.
9 - 10 M,Tu,W,Th
All day Fri

416 French for Travellers (Miss Burton)
Film strips of France. French conversation
10 - 11 every day

417 Various Trips through France (Mr. Motroni)
Illustrated talk.
Group I - 12:30 - 1:30 Tu (French)
Group II - 12:30 - 1:30 W (English)

* 421 Intensive German (Mr. Sylto)
12:30 - 2:30 M,Tu,W,Th

423 Visits to German, Austrian, and Swiss Embassies (Mr. Sylto)
Transport by school bus. Small fee.
9 - 2:20 F

431 Review of Latin Grammar (Mr. Beveridge)
Latin students only; review of declensions, conjugations, syntax, etc.
9 - 11 every day

432 Readings from Selected Latin Authors (Mr. Beveridge)
Prerequisite: Latin 2 Plautus, Catullus, etc.
12:30 - 1:30 every day

* 418 Fun and Games in French (Mrs. Loftness)
Monopoly, Scrabble, bridge, etc., in French. Attend 1 or more sessions.
12:30 - 2:20 every day
12:30 - 2:30 every day

441 Breakthrough Spanish (Language Dept)
Attention to individual students' problems and strengthening basic sentence patterns.
Group I: 9 - 11 M,Tu,W,Th (Spanish I and II)
Group II: 1 - 2:20 M,Tu,W,Th (Spanish III and IV)

442 Spanish Painting at the National Gallery (Spanish Dept.)
Transport by school bus or private car dependent on size of group.
9 - 12 M

443 Trip to Spanish Cultural Office (Mr. Hassan)
Speaker, film, discussion. Transport dependent on size of group.
9 - 12 Tu

444 An Afternoon with Latin American Students (Spanish Dept.)
12:30 - 2:20 W

445 Spanish Cooking and Eating (Spanish Dept.)
Preparation of Paella. Cost $1
9 - 12:30 Th including lunch

446 Hispanic Civilization and Cultural Activities (Mrs. Campa)
1 - 2:20 M,Tu,W,Th

451 Introduction to Greek and/or Bulgarian (Mrs. Stone)
Alphabet, pronunciation, elementary vocabulary, structure. Relationship of ancient Greek to modern Greek, Bulgarian, and Russian. Prerequisite: 4th year language.
12:30 - 2:20 M,Tu,W,Th

452 Introduction to Russian (Mrs. Segal, Mrs. Shinn)
Alphabet, pronunciation, elementary vocabulary and structures.
8 - 11 every day

500 MATHEMATICS AND SCIENCE

MATHEMATICS

501 Backgrounds for Computer Science and Technology (Mr. Frank, Miss Elfant) Historical development -- Boole to IBM
8 - 10 every day

502 The "Tin Head" Computer (Mr. Henry, Mrs. Pinson)
The "Tin Head" and its uses in the industry. An introduction to one computer language, and the complete analysis of one problem to be tested on a computer.
12:30 - 2:20 every day

503 Game Theory (J. MacGillivray)
Mathematics applied to simple games: two person zero-sum game; uses, theory and principles
12:30 - 2:20 every day

504 Logic for Beginners (Mrs. McLaughlin)
8 - 9 every day

505 Mathematical Fun and Games (Mrs. McLaughlin)
Math and logic puzzles, teasers,and games
Hours by arrangement.

507 What are the Chances? (Mrs. McLaughlin)
Probability for beginners.
10 - 11 every day

508 Cryptanalysis (J. MacGillivray)
Code breaking.
8 - 10 every day

509 Applications of Trigonometry to Small Boat Sailing (Mr. Nisewaner)
1:30 - 2:20 every day

510 Basic Uses of the Slide Rule (Mr. Hayes)
Mathematical operations of multiplication, division, and extracting roots. Uses in trigonometry. Must have own slide rule.
Group I: 8 - 9 every day
Group II: 12:30 - 1:30 every day

511 Breakthrough Algebra 2 (Mr. Nisewaner)
Attention to individual student's problems in Algebra and strengthening basic skills.
9 - 10 every day

512 Breakthrough Algebra/Trig (Mr. Nisewaner)
Attention to student's individual problems and strengthening basic skills.
10-11 every day

513 College Board Review Math (Mr. Nisewaner)
12:30 - 1:30 every day

514 Mathematics as a Cultural Heritage (Mr. Frank)
Physiological and psychological aspects of mathematics. Mathematics as a consequence of social, economic, intellectual forces.
1:30 - 2:20 every day

515 Number Mysticism (Mr. Hayes)
Superstition surrounding the early role of numbers and their use in astrology today.
1:30 - 2:20 Th

516 Mathematics and Art (Mr. Hayes)
Mathematical basis of art from the Renaissance through the Modrian use of the Golden Rectangle.
1:30 - 2:20 F

518 Computer Programming (Control Data Staff)
Introduction to Computers. FORTRAN Programming instruction at Control Data Institute, Arlington.
Full week. Travel by private car.

BIOLOGY

520 OIKOS (Mr. Putiri)
Overnight trip to Mar-lu Ridge, Jefferson, Md. Study of ecology of area: evolution of plants, interaction of plants and animals. Cost $8. Get details from Mr. Putiri.
W,Th,F all day

521 Marine Biology -- Study of Chesapeake Bay Ecology (Mr.Nichols)
Tour Chesapeake Bay Laboratories and facilities. Exploration of bay ecology and special problems. Beach area study of aquatic flora and fauna. Travel by school bus. Fee approx. $2. Wear old casual clothes and sneakers. Bring bag lunch.
M all day

523 Biological Research into Frog Physiology (Mr. Nichols)
Live frogs used to study circulation, heartbeat, and muscle stimulation. Study of frog parasites and the endocrine glands.
8-11 Tu

524 Physiology of the Human Blood (Mr. Nichols)
Lecture and daily labs on function, composition, and properties of blood.
8 - 11 W

525 Biology of the Skin (Dr. Rothberg)
9 - 10 M

526 Research on Genetic Code (Dr. [illegible]. Ruffner)
How DNA and RNA make proteins. The future of this field; suggested preparation of students interested in it.
9 - 11 Tu.

527 DNA Lecture-Lab (Mr. Zienick and Mrs. Boyd)
8 - 11 F.

528 Natural Resources/Conservation (Dr. M. Brewer)
8:30 - 11:30 Tu.

529 Recent Advances in Research in Inherited Human Diseases (Dr. M. Greene)
Seminar led by NIH scientist.
10 - 11 Th.

530 Visit Lab Working in Inherited Human Diseases (Dr. M. Greene)
Visit to Dr. Greene's lab. Explanation of research in inherited human diseases. By private car.
Group I: 9-11 F.
Group II: 12:30 - 2:20 F.

531 Protein Chemistry (Mr. D. McKean)
Seminar led by NIH scientist on the molecules of life.
11:30 - 12:30 Th.

532 Visit Lab Working in Immunology (Mr. D. McKean)
Studying antibodies on a molecular level at NIH lab. Transport by private car. Prerequisite 531 - Protein Chemistry.
Group I: 12:30 - 3:30 Th.
Group II: 9 - 11 F.

CHEMISTRY AND PHYSICS

541 Recent Chemical Research (Mr. Chareeb - sponsor)
Lectures, demonstrations, discussions, X-ray crystallography, mass spectroscopy, etc, by Georgetown University professors. Trip to Georgetown U. computer center, F. Transport by school bus or private car dependent on size of group.
1:30 - 2:20 MTuWTh. + 12 - 2:20 F.

543 Elementary Experiments in Organic Chemistry (Mr. George)
A series of experiments involving preparations of plastic, soap, alcohol, etc. Cost $5. Aimed towards students who have taken or are now taking chemistry. Lunch break when convenient.
11 - 2:20 every day.

544 Polymers and Plastics, Today and Tomorrow (Dr. Wall)
State of research in this field and projections into future.
1 - 3 Th.

551 Modern Viewpoints on Relativity (Dr. N. Smith)
Advanced discussion for students interested in physics and math.
1 - 4 Th

552 Demonstrations in Physics (Mr. Geiger)
Course would demonstrate major topics covered in a year of physics.
12:30 - 2:30 every day

553 The Laser (Scientists at National Bureau of Standards)
Demonstration and explanation of holography, the ruby laser, helium-neon laser, injection laser. Transport by school bus.
Fee $.50
9 - 1:30 Tu

554 Nuclear Reactor Technology (Dr. R. Loftness)
Coolants: gas, organic, sodium, water
8 - 9 W

555 Nuclear Power Plants (Dr. R. Loftness)
Plan,use, practical application, economic feasibility.
8 - 9 Th

556 Astronomy Attend all or part. Transport by private car.

A - Basics of Astronomy (Mr. A. Breitler)
Movement of stars, planets, moon.
11 - 12 M.

B - Is There Life on Other Planets? (Dr. D. Wentzell)
10 - 11 Tu.

C.- Telescope Optics (Mr. J. Schnall)
Refracter and reflecter telescope optical systems; art of mirror and lens grinding.
10 - 11 W.

D. Tour of Naval Observatory
12:30 - on W.

E - What's up On the Moon? (Dr. T. Matthews)
1:30 - 2:30 Th.

F.- Planetarium Visit (Mr. Breitler)
M.C.J.C. Planetarium. Discussion and demonstration.
10 - 12 F.

G - The Quasar Mystery (Dr. T. Matthews)
1:30 - 2:20 F.

557 Modern Physics (Miss Elfant)
12:30 - 1:30 every day.

558 Breakthrough Physics (Miss Elfant)
10 - 11 every day.

600 TECHNOLOGY AND SCIENCE

TECHNOLOGY

601 Deep Sea Diving (Lt. Naquin)
Diving medicine, physics of diving, safety, equipment. Discussion observation, participation. Transport by private car.
8 - 2:20, M.

602 Aerodynamic and Wind Tunnel Research (Mr. Nichols and ARS)
Lecture, study, individual projects. Use of school's wind tunnel.
8 - 11, every day.

603 Space Travel (Mr. D. Wyatt)
Discussion, slides, trip to Goddard. By private car.
8 - 10, every day.

604 Amateur Radio SSB Communications and Code Practice (Mr. Hartman)
Demonstration and student activity. Full course in code work.
Hours by arrangement.

605 Printing (Mr. Fiorell)
Shop open to present or former students for special projects.
Hours by arrangement.

606 Woodworking (Mr. Yates)
Shops open to present or former students for special projects.
Hours by arrangement.

607 Ocean Science (Mr. S. Kaufman)
Deep ocean research and technology; the past and the future of "inner" space; career opportunities.
10 - 11, every day.

608 Elements of Flying (Maj. R. Tiemann, USAF Res.)
Classroom course on manual operation of a small airplane, control panel, and how it flies.
Group I: 8 - 11,M
Group II: 11:30 - 2:30, M.

609 The Small Airplane (Mr. Meyersburg)
How it flies; construction, controls, power plant.
12:30 - 2:20, Th.

610 Airplane Navigation (Mr. Meyersburg)
Basic course.
12:30 - 2:20, F.

611 Flight Experience (Qualified flight instructor)
Half-hour of piloting a small airplane with help of instructor.
Cost, $10, includes insurance. Prerequisite: 608, Elements of Flying.
Transport by private car.
3 hours, anytime between 8 - 5:30, Tu, W, Th, or F.

612 Auto Mechanics (J. Meyersburg)

Convert a VW to a dune buggy. Students with cars can work on them. Will work at private garage. By private car.
Group I: 8 - 11 everyday; Group II: 11:30 - 2:20 everyday.

613 Education 2001 (Mr. W. LeBarron)
Potential and implications of technology on education.
8 - 10 everyday.

614 Life and Exploration in Antarctica (Mr. Doumane)
9 - 10:30 M. (General presentation)

615 Scientific Programs in Antarctica (Mr. Doumane)
10:30 - 12 Mon. (Biology, physics, glaciology of Antarctica)

616 Wang Computer, Its Abilities and Uses (Mr. Geiger)
Group I: 8 - 10 M., 8 - 9 Tu., W., Th., F.
Group II:8 - 10 M., 9 -10 Tu., W., Thu., F.

617 Electronics Workshop (Mr. Hartman)
Individual experimentation for electricity I or II or R and TV students.
Hours by arrangement.

HOME ARTS

620 Beginner's Sewing (Mrs. Treber)
A complete course in one week. Instruction in textiles and fabrics.
9 - 12 every day.

621 Advanced Sewing Class (Mrs. Treber)
Tailoring, design and professional finishes. Prerequisite: Home Economics, Gr. 10 or 11.
9 - 12 every day.

622 Gourmet Cooking, Preparation of Appetizers (Mrs. Loftness)
Professional Training for catering. Fee up to $3.00.
9 - 11 M., Tu., W.

623 Gourmet Cooking, Preparation and Eating of a French Meal (Mrs.Loftness)
Cost approximately $1.00
8 - 12:30 F. including lunch.

BUSINESS

631 Real Estate Theory and Practice (Mr. E. A. Murray)
Real estate, mortgage, and management.
10 - 11 every day.

632 Crash Typing (Mrs. Ayton, Mrs. Camp, Mrs. Racusin, Mrs. Harrison)
To meet the ordinary needs of a high school or college student.
8 - 10 every day. Schedule an additional hour of practice per day, preferably 10 - 11.

633 Typing for Speed and Accuracy (Mr. Karr)
Assigned drills and speed timings.
12:30 - 1:30 every day.

634 Shorthand Speed Building (Mrs. Camp)
Dictation at varying speeds. Attainment of 80 wd/min. stressed.
Prerequisite: Shorthand I, first semester.
1:30 - 2:20 every day.

635 Business Trip to D.C. (Mrs. Racusin)
Trip to Bureau of Printing and Engraving, Post Office, a brokerage firm, and the F.B.I. By school bus. Small fee.
Th. all day.

637 Retailing (Woodward and Lothrop Staff)
Career training. Travel by private car. Observation and discussion of display, warehousing, merchandising, billing, etc. Behind the scenes tour of a downtown store and a suburban store.
9 - 12 M., Tu., W.

700 THE ARTS

ARCHITECTURE AND DESIGN

702 Watts Towers, L. A. (Miss Rusnak)
The fantastic, surrealistic "folk art" towers in a slum area of Watts.
10 - 11 M.

703 Tour through Washington Cathedral - Living Art (Miss Rusnak)
Travel by Private car.
8 - 11 Tu.

704 Landscape Architecture via World Gardens (Mrs. Croft)
Famous Renaissance, English, Japanese, Persian, and Contemporary gardens. The profession of landscape architecture.
9 - 10 every day.

ART

711 Traveling Art (Mr. Kozar)
Explore 3 or 4 of the galleries. Discuss findings, break for lunch, and then spend the afternoon sketching buildings, statues, people, etc.
Travel by private car.
Full week.

712 Hippie Poster Art - S.F. scene (Miss Rusnak)
Discussion of French Art Nouveau, Optical Art, Psychedelic Art.
9 - 10 Th.

714 Graphics Workshop (Miss Rusnak)
Woodcut work.
12:30 - 2;20 everyday.

715 Painting Workshop (Miss Rusnak)
Water color, tempera, oil, or acrylic. Brief demonstrations but mostly independent work. Student bring own materials.
12:30 - 2:20 every day.

716 Psychedelic Sculpture and "Light Show" Experimenting (Miss Rusnak)
Use of scrap to create a structure and cover its surface with vibrating effects and to create a happening using lights and colors together: an environmental happening. Learning by experimentation.
No demonstration.
12:30 - 2:20 everyday.

717 Studio Pottery (K. Park)
Lessons in use of potter's wheels (electric and Kick). At K. Park's home studio. Private transportation. Any 3 Hr. period during day, any day of week, by arrangement.

718 Stained Glass (Alix Scott)
Study, planning, and production of stained glass windows, possibly applying the current concepts of psychedelic color.
8 - 10 everyday.

719 Cartoon Drawing (Mr. H. Chapman)
9 - 10 everyday.

720 Art Workshops (Local Artists)

A. (Mrs. P. Frank) Exploration of self and media including psychedelic art, use of black light and strobe effects. This can be used by those interested in teaching art at summer camp.
B. (Mrs. N. Gressman) Exploration of new uses of sumi and collage. Uses of inks, wax resist. New materials for collage.
C. (Mrs. S. Cohen) The feminine psychological form vs. the masculine psychological form in art (all media).

A - 9 - 12 M., Tu., Th.
B - 9 - 12 W.
C.- 9 - 12 F.

DANCE

731 Balkan Kolo - Yugoslav and Greek Dancing (Miss Rusnak)

Dances similar in tempo and spirit to those in "Zorba" and "Never on Sunday." Line dancing, no partners. Visiting Balkan teacher.
9 - 10 M., W., F.

732 Israeli Folk-dancing (Mrs. Racusin, Mrs. Kosofsky)
Local folk dancing teacher.
1 - 2 M., Tu.

733 Modern Dance (Mrs. Croft, Mrs. Kennedy)
Choreography, backstage visit to d nce company, demonstrations. Lessons at various studios. Travel by private car.
12:30 - 2:20 everyday.

DRAMA

741 Professional Theater Techniques (Miss McMindes)
Observe rehearsals of professional company. Talks by actors and directors. Transportation to be arranged. Commitment.
12 - 3 everyday.

742 Theater Make-up Workshop (Miss McMindes)
Basic principles of theater make-up. Cost $1.00.
9 - 11 M., Tu., W.

744 Theater for Amateurs (Mrs. H. Jordan)
Informal productions. No auditions!
12:30 - 2:20 everyday.

MUSIC

751 Electronic Music (Mr. Dobberstein)
Lectures, demonstrations, and jam sessions. Trip Monday P.M. to C. U.
M. all day
8 - 11 Tu., W., Th., F.

752 Conducting (Mr. C. Petranek)
Score-reading, conducting and interpretation. Comparison of interpretations by great composers.
10 - 12 MTu W.

753 Ensemble Playing (A. Eisenbach, M. Scheiber, D. Hirsch)
Informal chamber playing. Bring instrument and ensemble music. Students may form their own groups beforehand for serious rehearsal. Recorders included. Attend all or part.
12:30 - 2:20 every day.

754 The Opera "Faust" (Mrs. Loftness)
In French, with libretto. Introduction, comparison with Goethe's "Faust," listening.
8 - 11 Th.

755 Trends in Contemporary Music (K. Albertsen)
Blues, folk, rhythm, soul and others; commercial and progressive music; people in music-making business.
11:30 - 2:20 every day.

756 History and Practice of Blues (Mr. Hammen - T. Fulton)
Early Blues, Classic, Country and City Blues, Modern Blues. At end of each period students will jam with own instruments.
8 - 11 every day.

757 Chorus Trip to New York (Mr. Messick)
Cost $45. Obtain details from Mr. Messick.
MTuW all day.

758 Seminar for Music Majors (Mr. Messick)
What does it take to be a music major or a professional musician? Attend all or part.
11:30 - 2:20 ThF.

PHOTOGRAPHY AND FILM

761 Photography I (Mr. Brown)
Basic principles of photography, color and black and white, exposure factors, light and lighting. Student must have use of adjustable camera.
8 - 10 MWF + 8 - 12 Tu Th.

762 Photography II (Mr. Brown)
Darkroom techniques. Enlarging, printing of negatives. Building own dark room. Prerequisite: Photo I (concurrently) or good background in photography. Student must have use of adjustable camera.
10 - 12 MWF + 12:30 - 2:20 TuTh.

763 Photography III (Mr. Brown)
Photography critique, light and lighting technique, candid, studio, still life, action photography. Student must have use of adjustable camera. Prerequisite: considerable experience in photography.
12:30 - 2:20 MWF + 10 - 12 TuTh

764 The Liveliest Art (Mrs. Bledsoe)
Seeing films and talking about them. Possible: "High Noon", "On the Waterfront", "Raisin in the Sun", "David & Lisa", "The Hustler", "Citizen Kane", "Loneliness of the Long Distance Runner". Discussion led by experts from American Film Institute and local universities. Travel to Baronet Theater by school bus. Cost $5 for five days or $1.50 per session plus small fee for bus. Attend all or part.
12:30 - approx. 4 every day.

765 Film-Making as Individual Expression (Mr. Kasiaras)
No experience necessary. Commitment required.
8 - 11 every day.

766 Documentary Filming (Mr. Weincek)
Filming of short scenes. Some experiments with sound. Prerequisite: experience with movie or still photography. Commitment required.
8 - 11 every day.

800 LITERATURE

LITERATURE

801 The Existential Moment in Literature (Mr. Virden)
Brief analysis of existentialism as shown in literature.
8 - 9, M, W, Th.

802 Lord of the Rings and the New Fantasy (Mrs. Mate)
Prerequisite: Read"Lord of the Rings" by Tolkien. Informal discussion. Attend all or part.
7:30 - 9:30 P.M., Tu, Th.

803 Analysis of Humor (Miss Meyer)
Humor in cartoons, TV shows, humor magazines, standard jokes, political cartoons.
1:30 - 2:20, every day.

804 Children's Literature (Mrs. Mate)
12:30 - 2:20, W.

805 The Utopian Dream Gone Wild (Miss Hoon)
"Erewhon", "Brave New World", "1984", "Walden Two", and other modern utopian literature.
12:30 - 2:20, every day

806 Science-Fiction Literature (E. Vartanoff - Mrs. Croft)
Poe, Verne, Smith, Heinlein, et al.
12:30 - 2:20, every day

807 Shakespearean Seminar (Mr. Hammen)
Reading and discussion of "Othello" or "King Lear". Possibility of attending performance.
1:30 - 2:20, every day

809 Poe Seminar (Mrs. Lechliter)
Emphasis on the tales of Horror. Possible visit to his home in Baltimore by adult-driven private car.
12:30 - 2:20, every day

811 Twain Seminar (Miss Bergman)
"Tom Sawyer", "Roughing It", "Life on the Mississippi", "Pudd'n'head Wilson". May attend one session or more.
12:30 - 2:20, every day

813 Seminar on Joyce's "Portrait of the Artist" (Mr. N. Schneider)
Must read "Portrait" before the first meeting.
9 - 11, every day

814 The Adventures of a Young Man: A Hemingway Seminar (Miss Hoon)
Concentration on the Nick Adams stories plus "The Sun Also Rises". Prerequisite: reading of "The Old Man and the Sea" and any one of the major novels.
11:30 - 12:30, every day

815 Eugene O'Neill, Arthur Miller, Tennessee Williams, and Edward Albee (Mr. Simmons)
Each playwright considered individually, not as group. Attend all or part.
12:30 - 2:20, every day

816 Four Modern Underground Writers (Mr. W. Teunis)
Lecture on Miller, Burroughs, Southern Mailer.
11 - 12, M.

818 Beyond "Catcher": The Saga of the Glass Family (Mrs. Kosofsky)
J. D. Salinger's stories. Bring all Salinger books you own. Read as much as possible.
9 - 11, every day

819 Contemporary Poetry (Mrs. Johnson, Mrs. Murray)
College poets, new poetry magazines, current poetry written for music such as Leonard Cohen, Simon & Garfunkel, The Doors, etc.
9 - 10, every day

820 The Black Identity: Modern Afro-american Poetry (Mr. Crowley)
12:30 - 2:20, every day

821 Comics as an Outgrowth of American Culture (E. Vartanoff)
History, psychology, art form, comic books/strips.
11:30 - 12:30, every day

822 Kafka Seminar (Mrs. Johnson)
Attend all or part.
12:30 - 1:30, every day

SPEAKING, READING & WRITING

831 Forensics: Extemporaneous Speaking, Poetry Interpretation (Mr. Virden)
Discussion, demonstration, workshop.
11:30 - 2:20, every day

832 Debate for Non-Debaters (Mr. Virden)
Debate theory, strategy, techniques; analysis of argumentation.
9 - 11, M, W, Th.

833 "Breakthrough" English (Mrs. Mushinski and Mr. Crowley)
Workshop in reading comprehension, composition, and study skills.
9 - 11, every day

834 Speed Reading (Mrs. Lechliter)
Taught by Evelyn Wood instructors.
8 - 10, every day

835 Creative Writing Workshop (Adv. Comp. Class - Mrs. Lechliter)
Very Small, student-led groups.
10 - 12, every day

900 HISTORY AND GEOGRAPHY

901 Historical Research (Mrs. von Doenhoff)
Methods, materials, know-how, use for research papers.
9 - 10 MTu + 10 - 2:20 ThF

902 European Archaeology: Prehistory to 500 B.C. (P. Divine)
Archaeological method; emphasis on Neolithic and Bronze Age.
11:30 - 2:20 WThF.

903 Old Testament of the Bible (M. Corbett)
Assigned readings; visits to museums. Travel by privat car.
1:30 - 2:20 every day

905 War Strategy (Kominers)
Strategy, tactics and objectives of warfare.
11 - 12 every day.

906 World War I (Mr. Wrona)
Causes and effects of World War I.
Group I: 8 - 10 every day.
Group II: 12:30 - 2:20 every day.

907 World War II (B. Kominers)
Causes, strategy, tactics, individual campaign histories, effects.
10 - 11 every day.

908 Vietnam Assembly (Mr. K. Dublin)
An objective view of the war and America's involvement. Attend all or part.
1 - 2:20 every day.

909 The Negro in American History (Mr. Treibley)
Trip to Museum of Negro History. Guided tour. Travel by bus.
9 - 12 M

910 The Growth of Black Militancy in the United States (Mr. Treibley, Mr. Bryson)
12:30 - 2:20 WThF.

912 European History--Advanced Placement (Mrs. von Doenhoff)
Voluntary
8-9 every day

913 Spring Tour Prep Course (Mr. Woofter)
History, economy and cultural background of the areas visited on this year's Spring Tour.
8 - 10 every day

914 Nacal History (Dr. Loudeberg)
Walking lecture tour of collection of American ship models at the Smithsonian. Transport by private car.
9:30 - 11:30 MTu

1000 SPORTS

Special Note: All students taking sports must dress and shower according to the requirements for regular physical education classes. Boys volleyball and basketball are restricted to boys taking physical education or a varsity sport this year. All other sports are open to the entire student body.

1001 How to Watch a Football Game (Mr. Karr)
For girls only. Films and explanation.
1:30 - 2:20 every day.

1002 Baseball for Boys (Mr. Stavaski)
12:30 - 2:20 every day, weather permitting.

1003 Basketball for Boys (Boys' PE Dept)
In addition to registering for EFFE sign up in Boys' PE office.
Group I: 8 - 9 every day.
Group II: 9 - 10 every day.
Group III: 10 - 11:15 every day.
Group IV: 12 - 1 every day.
Group V: 1 - 2:20 every day.

1004 Basketball for Girls
Group I (Miss Sneider): 10 - 12 every day.
Group II (Mrs. Detweiler): 12:30 - 2:20 every day.

1005 Fencing - Coed (Mrs. Stone)
Learn and practice the elementary techniques and the rules of the sport.
Group I: 8 - 9 MTuWTh.
GroupII: 9 - 10 MTuWTh.
Group III: 10 - 11 MTuWTh.

1006 Golf for Beginners - Coed (Mr. Kohut, Mr. Marshall)
Group I: 8 - 9 every day.
Group II: 9 - 10 every day.
Group III: 10 - 11 every day.

1007 Gymnastics - Coed (Mrs. Kennedy, Mr. Jackson)
9 - 11 every day.

1008 Hiking and Camping on the Appalachian Trail - Coed (Miss Heckert)
Hiking and camping on the Appalachian trail. Evening seminars. Obtain details from Miss Heckert.
Full week.

1009 Life Saving - Coed (Miss McLaughlin, Mr. Jackson)
Senior lifesaving course certified by the Red Cross. Pool hours 7 - 9 am daily at Bethesda YMCA. Class hours 9 - 12 including dressing and travel time. Transport by private car.
7 am - 12.

1010 Tennis - Coed (Mr. Hammet)
10 - 11 MTuW.