

W. Point

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Cadets of the first, second, and third classes not undergoing examination are allowed short leaves at Christmas, if their conduct during the preceding year has been satisfactory. Excepting these short leaves for good conduct, cadets are allowed but one leave of absence during the four years' course. This leave is granted to those cadets who have successfully completed the third class course of study, and extends from the middle of June to the 28th of August.

PAY OF CADETS.

The pay of a cadet is \$600 per year and one ration per day, or commutation therefor at 30 cents per day. The total is \$709.50, to commence with his admission to the academy. The actual and necessary traveling expenses of candidates from their homes to the Military Academy are credited to their accounts after their admission as cadets.

No cadet is permitted to receive money, or any other supplies, from his parents, or from any person whatsoever, without the sanction of the Superintendent. A most rigid observance of this regulation is urged upon all parents and guardians, as its violations would make distinctions between cadets which it is the especial desire to avoid; the pay of a cadet is sufficient for his support.

Candidates are authorized to bring with them the following articles: Hairbrush, nailbrush, toothbrush, shoebrush, comb, 8 drawers (summer), 12 handkerchiefs (white), 4 nightshirts or pajamas, 8 socks (black cotton), 6 bath towels, 6 face towels, 1 trunk, 8 undershirts (summer), whisk broom, shaving mug, winter underwear, and athletic uniforms, shoes and goods.

Cadets are required to wear the prescribed uniform. All articles of their uniform are of a designated pattern, and are sold to cadets at West Point at regulated prices.

DEPOSIT PRIOR TO ADMISSION.

Immediately after admission candidates must be provided with an outfit of uniform, etc., the cost of which is about \$150. This sum, or at least \$100 thereof, must be deposited with the treasurer of the academy before the candidate is admitted. It is best for the candidate to take with him no more money than he needs for traveling expenses and for his parents to send the required deposit by draft, payable to the Treasurer, United States Military Academy. The deposit is credited at once to the cadet's account. Upon graduation a cadet who has exercised proper economy will have sufficient money to his credit with the treasurer of the academy to purchase his uniform and equipment as an officer.

PROMOTION AFTER GRADUATION.

The attention of applicants and candidates is called to the following provisions of an Act of Congress approved May 17, 1890, to regulate the promotion of graduates of the United States Military Academy.

That when any cadet of the United States Military Academy has gone through all its classes and received a regular diploma from the academic staff, he may be promoted and commissioned as a second lieutenant in any arm or corps of the Army in which there may be a vacancy and the duties of which he may have been judged competent to perform; and in case there shall not at the time be a vacancy in such arm or corps he may, at the discretion of the President, be promoted and commissioned in it as an additional second lieutenant, with the usual pay and allowances of a second lieutenant, until a vacancy shall happen.

ACADEMIC DUTIES.

There are two terms of academic instruction: September 1-December 23, and January 2-June 4. A semiannual examination is held December 23, and an annual examination June 6-12. At the December examination cadets, who are found to be proficient in subjects they have completed during the preceding term are arranged according to merit in each subject. At the June examination there are similarly arranged and they are also assigned general standing in the class as determined by their standings in the various subjects. When a subject of study is completed during a term an examination concluding the work in that subject is sometimes held. Cadets deficient in studies at any examination are discharged from the academy unless for special reasons the academic board recommends otherwise. Cadets exceeding at any time the maximum number of demerits allowed for six months are reported to the academic board as deficient in conduct.

THE ACADEMIC CALENDAR.

First term, September 1-December 23, embraces 95 a. m. and 80 p. m. periods.

Second term, January 2-June 4, embraces 180 a. m. and 109 p. m. periods.

Seminal examination, December 23-31.

Annual examination, June 6-12.

A. m. periods extend from 7:55 a. m. to 12:30 p. m. except Sundays.

P. m. periods extend from 1:45 to 3:45, except Saturdays and Sundays.

HOURS OF ATTENDANCE.

7:55 to 9:20 a. m.; 9:20 to 10:45 a. m.; 10:20 to 11:30 a. m.; 11:30 a. m. to 12:30 p. m.; (dinner assembly 12:40 p. m.); 1:45 to 2:45 p. m.; 2:45 to 3:45 p. m.

In philosophy and chemistry the following arrangement will govern: Philosophy, 7:55 to 9:20; 10:30 to 11:55. Chemistry, 7:55 to 9; 10:30 to 11:55.

For laboratory work second-class sections attending at 7:55 may be held until 9:55, and sections attending at 10:30 may be held to 12:30.

Division into A and B sections will be observed in first, second and third classes.

T semesters

obstacles

Tables in error

our poor system of very tattered and
idiosyncratic notations

Vocational issue

... means the tabulation continues elsewhere.

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CLASS.	SUBJECTS.	TIME.	Allotment of Periods.			
			Time in minutes	Number in year	Total number	
		6 days. Includes Sat.				
Total time in class for all subjs.						
Math: 417 per x .85 min = 590.75 hrs	Fourth.	Mathematics..... Surveying.....	a. m. daily except alternating whole class last 66 days with surveying. During alternation Tuesday, Thursday and Saturday to mathematics..... a. m. alternating whole class with mathematics last 66 days. During alternation Monday, Wednesday and Friday to surveying..... May 1 to June 4, attendance 7:55 a. m. to 12:00 noon. Theoretical examination immediately after completion of theoretical course.....	85 85 246 60 60 45 45 85	192 ... 38 10 10 144 15 228	192 x 85 320 min = 272 hrs 1st yr
Survey: $245 \times 33 = 134.75$ hrs		Drill regulations...	a. m. Saturdays during September, October, November, March, April and May.....	60	10	199
Drill $60 \times 60 = 60$ hrs		English and history do.....	p. m. daily..... a. m. Saturdays for lectures in December, January and February.....	60 45	26 189	163
Eng + Hist: 199 hrs. + 30 days 21 hrs = 229 hrs		Gymnasium.....	p. m. daily, May 1 to June 4, first hour..... a. m. daily except Saturdays Oct. 1-Apr. 30..... p. m. daily except Saturdays May 1-June 4 (M., W. and F. 12 m. to 12:40 p.m.; T. and T. 2:45 to 3:45).....	60 45 60	10 10 10	199
Gym $252 \times 45 = 189$ hrs	Third..	Mathematics..... French.....	a. m. daily..... a. m. daily except 1/2 class last four Mondays, Wednesdays and Fridays in September.....	60 60	219 219	318.75 hrs
French 219 hrs		Drawing..... Hygiene..... do.....	p. m. 1/2 class daily..... p. m. 1/2 class daily alternating with drawing for 26 days beginning September 1..... a. m. 1/2 class last four Mondays, Wednesdays and Fridays in September alternating with French	120 60 60	94 18 6	192 x 225 417
Drawing 378 hrs		Drill regulations...	p. m. 1/2 class daily alternating with drawing for 24 days after hygiene.....	60	12	216
Hygiene 19 hrs		Riding.....	p. m. 1/2 class alternating with drawing after drill regulations to March 15.....	60	42	189
Riding 181 hrs		Gymnasium.....	p. m. after drawing (after 3:45) Nov. 1-Mar. 15, except Wednesdays.....	45	36	132
Philo 313 hrs	Second.	Philosophy.....	a. m. daily except alternating 1/2 class with drill regulations, Monday to Thursday, inclusive, for two weeks beginning first Monday in April.....	85	221	221
Chem 237.25 hrs		Chemistry.....	a. m. daily except alternating 1/2 class with drill regulations, Monday to Thursday, inclusive, for three weeks beginning third Monday in April.....	65 120	219 94	219 188
Spanish 176 hrs		Drawing..... Drill regulations..... do.....	p. m. 1/2 class daily..... p. m. alternating with drawing for 24 days beginning Sept. 1.....	60 60	12 10	132 60
Engin 313.08		Spanish.....	a. m. 1/2 class alternating with philosophy and chemistry as above.....	60	32	32
Law 112	First..	Riding.....	p. m. 1/2 class alternating with drawing after drill regulations (September).....	60	35	35
Hippol 13		Gymnasium.....	p. m. alternating with gymnasium after 3:45, Nov. 1-Mar. 15, except Wednesday.....	45	25	25
ordnance 104		Engineering.....	p. m. after drawing (after 3:45), Nov. 1-Mar. 15, except Wednesday.....	85	221	221
gunnery $\cancel{2} = 326.855$		Law.....	a. m. daily, except last four of eight Saturdays beginning with the first in April.....			
		Hippology.....	a. m. 1/2 class daily, alternating with hippology or riding, except eight Saturdays beginning with the first in April. Entire Class 7:55 to 10:30 a. m. last four of eight Saturdays beginning with the first in April.....	60 60	112 12	112 12
		Riding..... do.....	a. m. alternating with law 24 days beginning Sept. 1.....			
		Ordnance and gunnery..... do.....	a. m. 1/2 class alternating with law after hippology. Entire class Saturdays after 11:00 a. m. for 8 Saturdays beginning April 1.....	60 60	104 94	181
		Spanish..... Gymnasium.....	p. m. 1/2 class alternating with Spanish..... p. m. 10 periods for shop work 1:45 to 3:45 between Nov. 1 and Mar. 15..... p. m. alternating with ordnance and gunnery..... p. m. 1/2 class after 2:45 Nov. 1-Mar. 15, except when attending ordnance shop work.....	60 60 45	94 94 38	104 176 249

Riding

42×260
 35×260
 104×260
 $\underline{181}$

Math

$17 \times 18 = 16$ min

144 45

10 60

15 45

35 45

35 45

38 45

277

625
192
417

192

417

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Astronomy is studied in the remainder of the second term. The text used are Young's "General Astronomy" and Michie and Harlow's "Practical Astronomy". The principal aim of this course, in addition to its important value in educational development, is to furnish an ample basis for the establishment of stations in explorations and surveys.

The class attends daily throughout the year, except eight days, during which half the class attends daily.

TEXT BOOKS.

Sound and Light. Gordon. General Astronomy. Young.
Mechanics. Gordon. Practical Astronomy. Michie and Harlow.

Numerous standard works on the general subjects covered by the course are available for reference.

DEPARTMENT OF MATHEMATICS.

THIRD AND FOURTH CLASSES.

The course in mathematics begins with the fourth class year and continues through the third class year. In the fourth class year, algebra is completed in alternation; first with geometry, then with trigonometry.

Plane analytical geometry is begun.

In the third class year, plane and solid analytical geometry and descriptive geometry are completed in alternation. The student and the engineer finish the course.

The courses in algebra cover the entire subject as generally taught in colleges, but the student is expected to have already mastered elementary algebra to include the progressions and the solution of the quadratic equation. The course in elementary geometry includes the books that relate to the plane and those that relate to space, but the student is expected to have mastered the former. Plane and spherical trigonometry includes the complete solution of the plane and spherical triangles. The course in analytical geometry includes the discussion of the general equation of the second degree in the plane and the particular forms of the equation of the second degree in space.

Descriptive geometry includes the orthographic projections of the right line, the plane, ruled surfaces and surfaces of revolution, tangent planes and intersections of surfaces. It also takes the subjects of shades and shadows, perspective, isometric projections and spherical projections.

The course in differential and integral calculus covers the ground of the usual college text book, including briefly the subject of ordinary differential equations.

TEXT BOOKS.

Elements of Geometry. Phillips and Fisher. Elements of Analytical Geometry (Solid). Smith and Advanced Course in Algebra. Wells. Gale.
Quadratics and Beyond. Fisher and Schwatt. Descriptive Geometry. Church.
Elements of Plane and Spherical Trigonometry. Linear Perspective. Pillbury.
Crockett. Different and Integral Calculus. Granville.
Logarithmic Tables. Newcomb. Intermediate Calculus. D. A. Murray.
Conic Sections, Coordinate Geometry. C. Smith. Differential Equations. D. A. Murray.
Coordinate Geometry. Fine and Thompson. Method of Least Squares. Johnson.

DEPARTMENT OF CHEMISTRY, MINERALOGY AND GEOLOGY.

SECOND CLASS.

This department embraces two branches of physics not included in its title, namely heat and electricity. The course begins September 1 of the third academic year and extends throughout this year; exercises, recitations, laboratory work or lectures take place on all week days.

Commencing September 1, general chemistry, alternating with lessons in heat, occupy the time until the end of the term in December, recitations and other exercises being had daily.

During this period all cadets who desire to do so, as shown by their recitations, warrants it, are given laboratory practice in chemistry. This practice begins with chemical manipulations and proceeds in the usual general order of elementary laboratory work. The laboratory exercises are one hour and fifty minutes long. It is generally possible to give all parts of the class some laboratory experience; the amount of this work, however, varies with the aptitude of the student from a few hours to forty-five or fifty hours.

This term closes with an examination upon the essential parts of the entire course, which all cadets who have not shown a required proficiency in daily work must take.

In chemistry the course is a descriptive general one, based upon a concise statement of the more essential principles of chemistry, and includes that class of information deemed most important to non-specialists, together with an accurate and thorough knowledge of the elements of the science.

The course in heat is short, but it is a comprehensive elementary course intended to embrace what is most applicable to subsequent work at the Academy and what is most useful in general education.

Beginning January 8 the daily exercises alternate between geology, mineralogy and electricity. This term also closes with an examination, covering the essential parts of the subjects studied during the term, which all cadets who have not shown a required proficiency in daily work must take.

The course in geology is a brief but scientific presentation of the essential elements of this branch of science.

The mineralogy is an eminently practical course consisting of the descriptive study and the practical determination of the important minerals. The lithological and paleontological part of geology is accompanied in study by the continued practical examination of the objects described.

The course in electricity is a brief exposition of the basic elements of electric phenomena and their relations to each other. It includes a study of the principal principles of the subject as of the typical machines, generators, motors and transformers, together with the more important uses of electricity. The laboratory exercises give experience with a number of the machines and in the use of a great variety of apparatus employed in the numerous forms of electric measurements. In this term the laboratory work is a part of the electrical course and all cadets enter the laboratory. All laboratory work is performed under the immediate supervision of an instructor.