

When students are admitted on condition, the college is hampered by the extra burdens placed on the unfit. The inevitable result is a lowering of the standards of work for the whole college.

Furthermore, extensiv information compiled by Reed College shows that there is a strong, positiv correlation between success in entering college without condition and subsequent scholarship achievement in colleges and in professional schools.

Accordingly, Reed College declares all candidates either prepared or unprepared, does away with entrance conditions, and thus frees all the college work from the unreasonable burdens placed upon those who, judged by our own tests, are least fit to bear them.

NO SPECIAL STUDENTS ADMITTED

As the entrance requirements are sufficiently liberal to admit any student who is *fully* qualified for the work of the College, whether or not his preparation has been of the conventional type, and as the College desires no one who is not fully qualified, there are no openings for special students.

For those unable fully to meet the requirements for admission and for those unable to do full college work, the Reed Extension Courses are provided. Information concerning these Courses is given elsewhere in this catalog. More information can be obtained, at any time, by addressing the Secretary of Reed Extension Courses.

COLLEGE CREDIT FOR EXTRA ENTRANCE SUBJECTS

Credit toward graduation may be given for entrance subjects in excess of the number required for admission, provided such extra entrance subjects are successfully continued in the College, and provided the student's College record is proof of superior scholarship. Application for such College credit must be made within one year after matriculation.

ADMISSION TO ADVANCED STANDING

Students may be admitted to advanced standing either (a) by examination, or (b) from other colleges and scientific schools.

Students who pass satisfactory examinations at Reed College in September, in addition to the requirements for admission, are admitted to advanced standing.

Students who have completed creditably the work of at least one year at other colleges or scientific schools may be admitted without examination to the standing for which their previous train-

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ing seems to qualify them. Every person wishing to enter under this provision must make a complete written statement of the work on which he bases his application. Blank forms of application for admission may be obtained from the Secretary.

Much importance is attacht to the *quality* of the work offered, especially as it is indicated by the student's relativ class standing. The applicant should furnish: (1) official statements of his rank or grade in his various college studies; (2) letters, or other evidence, showing the opinion his instructors have formd of his character and scholarship; (3) a letter of honorable dismissal from the college whence he comes.

REQUIREMENTS FOR GRADUATION

In order to be recommended for a degree, a candidate must have satisfied the requirements of courses of study approved by the member of the Faculty in charge of his major study. The number of courses required depends on the quality of the student's work in each course. About thirty per cent of his elections must be in one department.

Upon the recommendation of the Adviser, the student comes up for a final examination in his major subject before a committee made up in part of the Faculty, and in part of persons not otherwise connected with Reed College. The examination is in the subject and very closely related subjects and not in particular college courses. During the last semester of his residence, the student takes a seminar in his major subject, and prepares a thesis in connection with that seminar. A satisfactory thesis and final examination are required for the Bachelor's degree.

of its development to the close of the Reconstruction period. It emphasizes those features and lines of development which have been influential in the formation of the nation of today and subordinates movements which have not been thus influential. In the discussion of westward expansion, special attention is given to the settlement and early development of the Pacific Northwest. The work consists of texts, class lectures and discussions, extensive collateral readings and the preparation of one or more papers on some special feature or features.

Prerequisite: A preparatory school course covering the period or the summer reading of an equivalent text
Given in 1915-1916

41-42. *History of the Intellectual Class in Western Europe.*

A description of the general range of Greek culture and its transmission to the Romans, Hebrew and Patristic thought, scholasticism and its slow decline, humanism, the rise of modern science and philosophy, rationalism and the novel elements in contemporaneous intellectual life.

Prerequisite: History 22

Given in 1915-1916

* 47-48. *Seminar in History.* France in the Eighteenth Century.

Note: *Education 23, The History of Education*, may count toward a major in history.

ITALIAN

(See Romance Languages)

LATIN

* 15-16. *Introduction to Latin Literature.* Livy, Books XXI and XXII; Horace, *Satires* and *Epistles*; Terence, *Phormio*.

First and second semesters

* 21-22. Horace, *Odes* and *Epodes*; Tacitus, *Agricola* and *Germania*; poems of Catullus.

Prerequisite: Latin 15-16

23. *General View of Latin Comedy.* Texts, lectures and discussions. Selected plays of Plautus are read, and the relation of Roman comedy to the modern drama is studied.

Prerequisite: Latin 15-16

24. *Suetonius and Curtius. Lives of the Caesars; Life of Alexander the Great.* Rapid reading of comparatively easy Latin.

Prerequisite: Latin 21-22

25-26. *The Reading and Writing of Latin.* This course involves a thorough review of forms and syntax, a study of Latin idiom, and practice in writing Ciceronian Latin. The Letters and Second Philippic will be studied as stylistic models.

Prerequisite: Latin 15-16

27-28. *General survey of Latin poetry.* A study of Lucretius, *De rerum natura*, Books I, III and V; *Bucolics* of Vergil; the *Odes* of Horace; the elegiac poets. Recitations, lectures, reports.

Prerequisite: Latin 15-16

Given in 1915-1916

* 31. *Juvenal and Martial.* The principal *Satires* of Juvenal; selected *Epigrams*; the *Cena* of Petronius.

Prerequisite: Latin 21-22 or 27-28

First semester

47-48. *Seminar in Latin.*

MATHEMATICS

The introductory course is designed quite as much for students who desire a general knowledge of the power and uses of modern mathematics, as for those who are expecting to use this science professionally. It gives in one year a bird's-eye view of collegiate mathematics, with constant attention to the practical uses of the various processes. Only those topics are studied in this course whose utility or contact with daily life is obvious at the time. The usual separate courses in trigonometry, college algebra, etc., are not offered; for such an arrangement divorces many topics from their applications, necessitates the inclusion of complicated material in each beginning course, and prevents the student from forming even a general conception of higher mathematics in less than two or three years.

Courses 31, 32 and 45 should prove particularly helpful to prospective teachers of elementary algebra and geometry; and courses 41 and 42 to those who expect to use mathematics as a practical instrument.

* 11-12. *Introduction to Mathematical Analysis.* A unified treatment of the simpler practical topics of college algebra, trigonometry, analytic geometry and calculus, designed to give a clear first view of their principles and a good working knowledge of their processes, in the less complicated cases. Several hundred problems of practical character, making continual contacts with daily life. Considerable use of rough estimates and checks by means of squared

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paper, protractor and approximate formulas. Students are encouraged not only to question all results, but also devise approximate solutions of new problems not covered by familiar analysis.

Open to students credited with three units of Entrance Mathematics; and to others with approval of instructor.

* 21-22. *Mathematical Analysis*. A systematic course in calculus, with extensiv applications, affording a more mature view of many topics treated in Mathematics 11-12, completing the usual theory; designed both to strengthen the grasp of the general principles previously encountered, and to attain a high degree of expertness in the technique of differentiation and integration. Further topics in analytic geometry; and an introduction to complex numbers and differential equations. Much practical problem work.

Prerequisite: Mathematics 11-12

First and second semesters

* 31. *Advanced Algebraic Analysis*. A brief treatment of the theory of equations, with an introduction to the theory of substitution groups, determinants, theory of errors and probability. Problems and digest of collateral reading.

Prerequisite: Mathematics 21-22

First semester

* 32. *Higher Geometry*. A first view of such modern developments as abridged notation, line co-ordinates, vector methods, points at infinity, anharmonic ratios, the principle of duality, projective properties of conics. Problems and digests of collateral reading.

Prerequisite: Mathematics 21-22

Second semester

41. *Definite Integrals*. A treatment of certain practical problems involving the use of Fourier series, elliptic integrals and gamma functions. Certain methods of evaluating definite integrals. Problems and digests of collateral reading.

Prerequisite: Mathematics 21-22

42. *Differential Equations and Calculus of Variations*. A systematic treatment of ordinary differential equations with a sketch of the nature of the problem in the case of partial differential equations, and with some study of certain functions defined by differential equations. Also a brief presentation of the central ideas of the calculus of variations, in its simplest cases, with typical applications. Problems and digests of collateral reading.

Prerequisite: Mathematics 41

* 45. *History and Teaching of Elementary Mathematics*. Critical examination of the foundations of mathematics. Present teaching problems and modern mathematical methods in the light of the historic development of algebra and geometry. Numerous definite pedagogical suggestions. Discussions and opportunities for gaining practical experience under guidance.

Prerequisite: Mathematics 31-32, unless taken simultaneously

First semester

* 48. *Seminar in Mathematics*.

MECHANICAL DRAWING

The course in Descriptive Geometry and Mechanical Drawing is offered: (1) as of general value to those who do not contemplate studies in engineering, and (2) as of special value as a foundation for all branches of engineering. This course, together with certain courses offered in other departments of the College, is the equivalent of two years of work in nearly any four year course offered in any of the best technical schools, and is accepted as such. Students planning to specialize in any branch of engineering after graduation from the College should consult this department as soon as possible with respect to their choice of studies.

21-22. *Descriptive Geometry and Mechanical Drawing*. Descriptive geometry covering the projections of lines, planes and solids bounded by plane surfaces. Applications of descriptive geometry to problems in carpentry and sheet metal work. The principles of isometric and perspective drawing.

The use and care of drawing instruments. Construction of geometrical figures, lettering, dimensioning and simple problems in machine drawing.

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NATURAL SCIENCE

Courses in Botany, Physiology and Zoology are announced under Biology.

* 11-12. *General Science*. This course is intended as an introduction to natural science; its spirit, problems, methods, results. As the simplest approach to this goal, the discussions are concerned chiefly with the simpler facts of every day life, which are examined to discover the principles that govern them. They are also illustrated, as far as possible, by those experiments that have produced marked effects upon the history of scientific thought. It is hoped