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# Lingnan University

Bulletin No. 42

## ANNOUNCEMENTS

FOR THE

ACADEMIC YEAR 1929-30

OF THE

COLLEGE OF ARTS AND SCIENCES

COLLEGE OF AGRICULTURE

SCHOOL OF SILK INDUSTRY

AND

COLLEGE OF BUSINESS ADMINISTRATION

CANTON, CHINA

JUNE, 1929

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0934



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\*Arranged in alphabetical order without reference to rank or length of service

\*On leave, 1929-30.

**L**INGNAN UNIVERSITY (嶺南大學) is a private Christian university, with an international faculty, offering collegiate instruction to both men and women in its four Colleges,—Arts and Sciences, Agriculture, Business Administration and Silk Industry. Within each college provision is made for studying special fields of work. In the College of Agriculture a student can specialize in Agronomy, Animal Husbandry, or Horticulture; in the College of Business Administration he can specialize in Accounting, Banking, or Insurance; in the School of Silk Industry he may specialize in either Raw Silk or Sericulture; in the College of Arts and Sciences a student may specialize in Biology, Chemistry, Chinese Literature, Economics, Education, English Literature, Government, History, Philosophy and Religion, or Physics; or he may take a three year Pre-Medical course. In addition to these fields, courses are also offered in French, German, Household Arts, Mathematics, Psychology, and Sociology. Provision for a student to specialize in any of these six last-named fields may be made after 1930. Detailed programs of the work offered in any of these fields will be found on later pages.

The emphasis is placed throughout on the quality of work done and on the completion of a definite program, rather than on the passing of any stated courses, or the securing of a certain number of "credits" which are merely measures of the amount of work done. In all the colleges the work of the first two years, called the "Lower Division", is quite definitely prescribed, a limited amount of election being permitted only in certain fields in the College of Arts and Sciences. On the satisfactory completion of the Lower Division program the student is admitted to the "Upper Division", which includes the work of the two upper years. Here a student chooses a "major", which will take about half of his time, a related "minor", and other elective courses which are related to the field of his especial interest. This is done that the student may have a thorough acquaintance with that field of human knowledge which most interests him, and not dissipate his energies by taking courses in many unrelated fields. Provision is made for exceptional students, in their senior year, to read for honors in their fields of specialization.

This preliminary announcement, in place of a complete catalog, is prepared both for the information of new students applying for admission in 1929, and to give students who have been in residence the information necessary for the selection of their courses for the year 1929-1930. The list of courses is complete for the Lower Division in all the Colleges, and for the Upper Division in the College of Arts and Sciences and in the School of Silk Industry. Announcements will be made at the opening of each semester concerning courses open to Upper Division students in the Colleges of Agriculture and Business Administration.

The faculties have made changes during the last year in the requirements for the Junior Certificate, for admission to the Upper Division, and for graduation. Students who are candidates for the degree

in June 1930 will not be affected by the new requirements, but all other students in residence last year, or entering in 1929, must meet the new requirements. This bulletin therefore gives the new requirements in detail. Where no changes have been made full information can be obtained from the last catalog.

### Admission

**A**PPPLICATION FOR ADMISSION to any one of the four colleges should be made to the Registrar. Stated briefly the requirements for admission are the following: Candidates for admission should be graduates from a standard middle school, or should have an equivalent training. In any case the student must submit, first, a transcript or detailed statement of work done in the middle school, and second, a letter of recommendation from the Principal or appropriate officer of the school last attended. Students entering from accredited middle schools are required to take examinations in English, Chinese, and the Social Principles of Dr. Sun Yat-sen, and must also take a mental ability test. Students not recommended in specific subjects by the principal of the accredited school, or those who come from non-accredited schools, are required to take subject-examinations in addition to the examinations specified above for students from accredited schools. Further details may be obtained from the Registrar.

Students applying for admission with advanced standing, in addition to satisfying the requirements for admission to the Freshman class, must present a transcript covering work of collegiate grade for which credit is desired. Students who have completed the regular curriculum for one or more years at another college may or may not be required to make up specific subjects required of students who enter Lingnan as Freshmen. In all cases, however, they are required to present the prerequisites for their major in the Upper Division.

### Enrollment

**T**HE PROCESS of entering college for the first time is called *matriculation*. Application for matriculation should be made through the Registrar. Following matriculation, Freshmen are assigned by the Registrar to an advisor who helps them in selecting the required courses in the field of study (e.g., Agriculture, Business Administration, Science, or Arts) in which they are most interested. Students in the College of Arts and Sciences choose at the beginning of their Sophomore year the field of work (e.g., Biology, Chinese Literature, Education, etc.) in which they wish to specialize. This field of specialization determines the choice of courses in the Sophomore year. The same advisor is appointed for all students in Sophomore, Junior and Senior years who are taking, or preparing to take, work in the same field. This enables students to map out their program for several years in advance, and to secure the best possible arrangement of courses.

Unless students are handicapped by having had entrance conditions, they are expected to follow a regular curriculum. The schedule of classes is arranged for the regular student, and the one who does not take a course in its regular year will find himself handicapped in many ways.

### Credits and Standing

**A** STUDENT IS RANKED according to the number of *credit-units* (defined in the next paragraph) he has secured, and the quality of work done in securing that number of credit-units. A student with fewer than 25 credit-units is ranked as a *Freshman*. One who has been in residence a full year, but who has not yet completed the program of the Lower Division, is ranked as a *Sophomore*. Students who have completed the Lower Division program and have satisfied the other requirements for admission to the Upper Division, but who have fewer than 30 Upper Division credit-units, are ranked as *Juniors*. Students with 30 or more Upper Division credit-units are ranked as *Seniors*.

All credit is given by points or *credit-units*. Credit-units are allowed for courses (that is, for classes attended, with work completed and examinations passed) at the rate of one credit-unit for each hour of lecture or recitation per week per semester, or for each two hours (or in certain cases, three hours) of laboratory work per semester. In addition to credit-units students are required to secure *grade points*, which are awarded on the basis of the quality of work done. The normal number in any course is equal to the number of credits for the course. Excellent work earns excess grade points and inferior work is penalized by reduced grade points. The ratio of credits obtained, plus grade points obtained, to credits enrolled plus an equal number of grade points is called the *efficiency ratio*. This is a measure of the quality of work done. The majority of each class should have an efficiency ratio of 1.00; some students will have a higher ratio and some a lower ratio. The amount of work which a student may enroll for in any semester is fixed by his efficiency ratio in the previous semester. This also affects the awarding of certificates and the completion of the requirements for admission to the Upper Division, and for graduation. A good quality of work is therefore essential at all times.

### Admission to the Upper Division

Admission to the Upper Division in any college is granted only to those students who have satisfactorily completed the Lower Division program in that college. In the College of Arts and Sciences the requirements for admission to the Upper Division are as follows:

1. The student must have no unremoved college entrance conditions.



2. He must have completed the Lower Division program with an efficiency ratio of not less than 1.00 for either the second semester of his sophomore year, or for his whole sophomore year, or
3. Lacking not more than six (6) credits in the Lower Division program, he must have secured an efficiency ratio of 1.05 for the second semester of his sophomore year, or for the whole sophomore year.

Students in the Lower Division who have removed all entrance conditions, and have obtained 64 credits in courses in the Lower Division program, but whose efficiency ratio is below 1.00 (in the second semester of the sophomore year), may elect courses in the Upper Division, provided that they undertake a total load of not more than five courses, amounting to not more than 15 credits in one semester.

### Upper Division Curricula

THE *Upper Division* curricula in the College of Arts and Science for majors in Chinese Literature, Economics, Education, English Literature, Government, History, Household Arts (beginning in 1930), or Philosophy and Religion, consists of 30 to 36 credits of work in the major subject, 12 credits in the minor subject, 12 credits in the minor subject, and 28 to 22 credits of approved electives, a total of 70 credits. All students choosing any of the above majors are required to take at least one course in Chinese Literature and students choosing either Chinese or English Literature are required to study French, which reduces somewhat the time available for approved electives. The courses offered by each department in 1929-30, for a major in that department, are listed on later pages of this announcement.

The Upper Division curricula in the Colleges of Agriculture, Business Administration, and Silk Industry, and for majors in Biology, Chemistry, Physics, and Pre-Engineering (this last not offered in 1929-30) in the College of Arts and Sciences are more exactly prescribed. Later pages of this announcement give detailed information about curricula for majors in science in the College of Arts and Sciences. Students should consult the respective bulletin boards at the beginning of each semester for information about the Upper Division curricula in the other Colleges.

### Certificates and Diplomas

JUNIOR CERTIFICATES are awarded by the College of Agriculture, the College of Business Administration and the School of Silk Industry to students who have satisfactorily completed the Lower Division program in one of those colleges, and have removed all entrance conditions. Junior certificates are awarded by the College of Arts and Sciences to students (with the exception of those in the Pre-Medical course) who meet the following requirements:

1. No unremoved college entrance conditions.
2. Sixty-four (64) credits obtained, with an efficiency ratio of not less than 0.90, in courses in the Lower Division program.

The Junior certificate in the Pre-Medical course in the College of Arts and Sciences is awarded upon satisfactory completion of the prescribed three-year Pre-Medical course.

### Graduation

IN ORDER to qualify for graduation from the College of Arts and Sciences with the degree of Bachelor of Arts, the candidate must have completed the curriculum specified in one department or field with an efficiency ratio of 1.00 for the Upper Division as a whole.

Graduation from the other Colleges is practically on the same basis.

### Fees and Expenses

#### Tuition

ALL FEES are stated in "big" dollars (大洋), and are payable in Canton local silver at the fixed rate of exchange of \$1.25 Canton local silver=\$1.00, (大洋).

Tuition in all of the colleges is charged on the basis of \$4.50 per credit unit. Students in the Sub-freshman class are charged \$180.00 per year. Students who are taking courses either in the Sub-freshman class or in the Middle School to remove conditions also pay at the rate of \$4.50 for each period of subcollegiate work. As the normal amount of work for which a student enrolls is 18 credits, the normal tuition is \$81.00 each semester; or from admission to graduation (140 credits), \$630.00 (141 credits and \$634.50 in the College of Arts and Sciences).

#### Laboratory Fees

Laboratory Fees are charged only in the courses Biology 1, Chemistry 1, Chemistry 25, and Physics A-B (Physics A-B is only for students who have entrance conditions in Physics). Students are, however, required to pay for articles (except ordinary chemicals) consumed or broken in the laboratories.

#### Other Fees

The other fees payable by college students are as follows:

		First Semester	Second Semester
Quarters (Room, etc.)	...	\$ 30.00	\$ 30.00
Board	...	37.80	37.40
General Student Union	...	1.00	1.00
College Student Union	...	3.00	2.00
Laundry	...	6.00	6.00

### Summary of Expenditures

The amount payable to the institution each semester of Freshman year is from \$157.40 (no laboratory fees) to \$175.80 (including laboratory fees for both Biology 1 and Chemistry 1). The average after Freshman year is \$160 each semester. Books will cost between \$30 and \$100 each year, depending on courses taken. Expenditures for clothing and personal items vary with tastes and habits. There are a few occasional fees (e.g., for registration, uniform, or diploma) which, in general, are charged only once in the four years. Each student is required to have on deposit at the beginning of each year a guarantee fee of \$20 to cover breakage in the laboratories, or other similar charges.

### Student Aid; Scholarships

IN ORDER TO HELP deserving students the University provides a sum equal to about one-fourth of the tuition fees paid by collegiate students. Some of this comes from the income from endowed scholarships, and is awarded as partial or complete tuition scholarships to the most deserving and able students. A large part is a "working scholarship" fund. Students willing to do manual labor have the first claim on this fund and are paid the higher rate, \$0.50 Mx. per hour for work done during term time. Other students work in the library, offices, and laboratories and are paid \$0.35 per hour during term time. Work done during vacations is paid for at a lower rate. Students who work two hours a day during term time and full time during the summer vacation are able to earn a sum nearly equal to their fees. There is also a "Student Loan Fund" from which students may borrow limited amounts without interest before graduation on their promise to repay within a reasonable time after graduation.

It is advisable that new students have, when admitted, sufficient funds to cover all of their expenses for the first semester. They are then able to devote all of their energy to their studies and to make the best possible beginning in a new environment. If they do earn any money it is available for the next semester's fees. An occasional student has tried to earn most of his fees from the time of entrance, but is severely handicapped. It is much easier after the first semester or the first year, when adjustment to the new environment of college has been made.

## Courses of Study Offered In 1929-1930

### Range of this Announcement

THIS ANNOUNCEMENT gives below all Lower Division courses in all the colleges and the Upper Division courses in the College of Arts and Sciences and in the School of Silk Industry for the year 1929-1930. With few exceptions it does not list the courses which it is planned to offer in 1930-31 or thereafter, nor does it list any of the Upper Division courses offered in the College of Agriculture and the College of Business Administration in 1929-30. Later announcement of such courses will be made at the beginning of each semester by each college. The right is reserved to withdraw courses which are elected by too few students, and to add other courses if there is demand for them.

### Order of Subjects

Because of the close interrelationship between the colleges (the College of Arts and Sciences provides the instruction for students enrolled in all colleges in the courses in Biology, Chemistry, Chinese, English, Government, History and Languages and the College of Business Administration provides the instruction in Economics and Business Administration), all subjects, irrespective of the college which offers them, are listed here-in-after in alphabetical order. Students in any one of the colleges may elect, with the approval of their advisor, courses in any other college for which they have the prerequisites.

### System of Numbering Courses

Courses of study for college students are designated by the name of the subject or field of work to which the course belongs and a number, e.g., Biology 1. Courses numbered from 1 to 9 are open to Freshmen; those numbered from 11 to 20 are courses required of Sophomores in that year; those numbered from 21 to 50 are elective for Sophomores but may be taken by Upper Division students with the approval of their advisors for credit in the Upper Division; those numbered from 51 to 99 are open only to Upper Division students, or those Lower Division students who have satisfied all requirements for admission to the Upper Division except the minimum efficiency ratio. Courses numbered from 1 to 20 may not be taken for credit by Upper Division students without specific faculty action. Courses designated by the small letters *a-b* following the course number, e.g., English 1 *a-b*, are year courses, 1*a* being given the first semester and 1*b* the second semester, and the entire course must be completed satisfactorily before credit can be counted towards a degree or a certificate. Courses designated by capital letters, without a number, e.g., Physics A-B, are Sub-Freshman courses, and may not be offered for credit towards the degree.

In order to emphasize the distinction between Lower Division work, many of the more advanced courses have been renumbered. For the convenience of students now enrolled the old number will be given in parenthesis after the new number.



# EXHIBIT OF FRESHMAN PROGRAMS SPECIFIED IN THE COLLEGES OF

SUBJECTS	BUSINESS ADMINISTRATION		ARTS AND SCIENCES		AGRICULTURE		SILK INDUSTRY	
	ALL MAJORS		MAJORS IN ARTS		MAJORS IN SCIENCES		ALL MAJORS	
	SEMESTER I	SEMESTER II	SEMESTER I	SEMESTER II	SEMESTER I	SEMESTER II	SEMESTER I	SEMESTER II
Animal Husbandry 1.....							3	Students may choose either
Biology 1.....	5			5			5	the curriculum of the
Biology 31.....							4	College of Agriculture
Business Admin. 5 ab.....	4	4			5	5	5	or of the Science
Chemistry 1 ab.....							3	ence Major in College of
Chinese Literature 1 ab.....	3	3	3	3			4	Arts and Science
Economics (B. Ad.) 1.....	4	4	4	4			1	
English 1 ab.....	4	4	4	4	4	4	4	
Government 2.....							1	
Government 5.....							1	
History 1 ab.....	3	3	3	3			1	
Hygiene 1.....			1				4	
Mathematics 3 ab.....					4	4	3	
Survey 1.....			3				3	
Total credits.....	19	18	18	18	18	18	18	18-19

## EXHIBIT OF SPECIFIED SOPHOMORE PROGRAMS

### College of Agriculture

#### FIRST SEMESTER

SUBJECTS	CREDITS
Agronomy; Soils 12	5
Biology 34	3
Chemistry 21 a	5
Economics 1a	2
Horticulture 11	3
	—

Total for semester 18

#### SECOND SEMESTER

SUBJECTS	CREDITS
Biology 32	3
or Animal Husbandry 46	3
Biology 44	4
Chemistry 21 b	5
Economics 1b	2
Education 41 (Rural Ed.)	3
	—

Total for semester 17

### College of Business Administration

#### FIRST SEMESTER

SUBJECTS	CREDITS
Business Administration 11a	3
Business Administration 15a	5
English 21a	3
History 21	3
Psychology 21	5
	—

Total for semester 19

#### SECOND SEMESTER

SUBJECTS	CREDITS
Business Administration 11b	3
Business Administration 15b	5
English 21b	3
Government 2	1
Government 5	3
History 22	3
	—

Total for semester 18

### School of Silk Industry

#### FIRST SEMESTER

SUBJECTS	CREDITS
Biology 47	3
Business Administration 5a	4
Chemistry 21a	5
Chinese Literature 1a	3
(or <i>Elective</i> if Ch. Lit. has been completed)	
Economics 1	4
	—

Total for semester 19

#### SECOND SEMESTER

SUBJECTS	CREDITS
Biology 44	4
Business Administration 5b	4
Chemistry 23	4
Chinese Literature 1b	3
(or <i>Elective</i> if Ch. Lit. has been completed)	
Sericulture 21	3
	—

Total for semester 18

**Arts and Sciences**

For Students Expecting to Major in ARTS (Literature, Education, Social Sciences, Household Arts or Philosophy)

FIRST SEMESTER			SECOND SEMESTER		
SUBJECTS	CREDITS		SUBJECTS	CREDITS	
Chemistry 25a	3		Chemistry 25b	3	
English 15a	3		English 15b	3	
Government 2	1				
<i>Prerequisites to Upper Division Majors (*below)</i>			<i>Prerequisites to Upper Division Majors (*below)</i>		
Government 21	5		Sociology 21	5	
or French 21a	5		or French 21b	5	
or Psychology 21	5		or Education 21	5	
Chinese Lit. 21a (d)	3		Chinese Lit. 21b (d)	3	
or e, History 21	3		or e, History 22	3	
or f, Philos. 21 or 23	3		or f, Philos. 26 or 28	3	
or g, Economics 11a	3		or g, Economics 11b	3	
or h, House. Arts 21a	3		or h, House. Arts 21b	3	
or i, History 31a	3		or i, History 31b	3	
<i>Approved Electives (**below)</i>			<i>Approved Electives (**below)</i>		
Chin. Lit (d) or e or f,	3		Chin. Lit (d) or e or f,	3	
Total for semester	18		Total for semester	17	
If the UPPER DIVISION MAJOR is to be			*The Sophomore <i>Prerequisites</i> are:		
Chinese Literature	French 21ab	10	History 21, 22	6	
	Chin. Lit. 21ab	6	or Philos. 21, 26	6	
English Literature	French 21ab	10	History 21, 22	6	
	Chin. Lit. 21ab	6	or Philos. 21, 26	6	
Economics	Government 21	5	Chin. Lit. 21ab	6	
	Sociology 21	5	or History 21,22;	6	
	Economics 11ab	6	or Philos. 21,26	6	
Education	Psychology 21	5	Chin. Lit. 21ab	6	
	Education 21	5	or History 21,22	6	
	Philos. 21,26	6			
Government or Political Science	Government 21	5	Chin. Lit. 21ab	6	
	Sociology 21	5	or Philos. 21,26	6	
	History 21, 22	6			
History	Government 21	5	Chin. Lit. 21ab	6	
	Sociology 21	5	or Philos. 21,26	6	
	History 31ab	6			
Household Arts (Practical Arts)	Chemistry 1ab	10	Chin. Lit. 21ab	6	
	(not Chem. 25ab)		and/or Hist. 21,22	6	
	House. Arts 21ab	6	&/or Philos. 21,26	6	
Philosophy-Religion	Psychology 21	5	Chin. Lit. 11ab	6	
	Sociology 21	5	or History 21,22	6	
	Philosophy 21,26	6			

## Sophomore Program for Students Expecting to Major in SCIENCE

FIRST SEMESTER		SECOND SEMESTER	
SUBJECTS	CREDITS	SUBJECTS	CREDITS
Chinese Literature 1a	3	Chinese Literature 1b	3
Physics 21	4	Physics 22	4
<i>Prerequisites to Upper Division Majors</i>		<i>Prerequisites to Upper Division Majors</i>	
10-12		10-11	
3 courses as specified on appropriate program, to be chosen from		3 courses as specified on appropriate program, to be chosen from	
Biology 21	5	Biology 24	4
Chemistry 12 a	4	Biology 31	4
Economics 1 a	2	Chemistry 12 b	4
English 21 a	3	Economics 1b	2
Mathematics 13 a	4	English 21 b	3
Physics 23	4	Mathematics 13 b	4
		Physics 24	4
Total for semester	17-19	Total for semester	17-18
If the UPPER DIVISION MAJOR is to be		The Sophomore <i>Prerequisites</i> are	
Biology, either Teaching or Entomology		Biology 21, 24 and 31	
Chemistry, either Teaching or Professional		Chemistry 12 a	4
Physics, either Teaching or Professional		Economics 1	4
		Chemistry 12 ab and 13	9
		Economics 1	4
		Mathematics 13 ab	8
		Economics 1	4
		Mathematics 13 ab	8
		Physics 23 and 24	8

Further details of the programs for each of the majors listed above will be found at the beginning of the appropriate sections describing the courses of study in detail on later pages of this announcement. As there are no sections devoted to Medicine and Engineering the programs for the Pre-Medical and Pre-Engineering courses are given on the next page.



**The Pre-Medical Course**

	FIRST SEMESTER		SECOND SEMESTER	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
SOPHOMORE YEAR	Biology 21	5	Biology 22	4
	Chemistry 12 a	4	Chemistry 12 b	4
	Chinese Literature 1 a	3	Chinese Literature 1 b	3
	English 21 a	3	English 21 b	3
	Physics 21	4	Physics 22	4
	Total for semester	19	Total for semester	18
JUNIOR	Chemistry 33 a	4	Chemistry 33 b	4
	Chinese Literature 71 a	2	Chinese Literature 71 b	2
	German 21 a	5	German 21 b	5
	Physics 23	4	Physics 24	4
	Approved Electives	3-2	Approved Electives	3-2
	Total for semester 19-18		Total for semester 19-18	

**Pre-Engineering Major.\***

	FIRST SEMESTER		SECOND SEMESTER	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
SOPHOMORE YEAR	Chinese Literature 1a	3	Chinese Literature 1b	3
	Economics 1a	2	Economics 1b	2
	Mathematics 13a	4	Mathematics 13b	4
	Physics 21	4	Physics 22	4
	Physics 23	4	Physics 24	4
	Total for semester	17	Total for semester	17
JUNIOR	Surveying or Descriptive Geometry	4	Surveying or Descriptive Geometry	4
	Applied Mechanics or Highway Construction	5	Applied Mechanics or Highway Construction	5
	Approved Electives	9	Approved Electives	9
	Total for semester	18	Total for semester	18
SENIOR	Descriptive Geometry or Surveying	4	Descriptive Geometry or Surveying	4
	Highway Construction or Applied Mechanics	5	Highway Construction or Applied Mechanics	5
	Approved Electives	9-8	Approved Electives	9-8
	Total for semester	18-17	Total for semester	18-17

\*As the Upper Division courses especially for this major will not be offered in the year 1929-30, the courses in Applied Mechanics, Descriptive Geometry, Highway Construction and Surveying are not described in this announcement.

**COURSES OF STUDY OFFERED IN 1929-30**

COURSE	SEMESTER I		SEMESTER II		CR. TEACHER
	No.	TITLE	No.	TITLE	
<b>Agronomy; Soils Animal Husbandry</b>	12	Elementary Soils	46	Physiology of Dom. Animals	3 Siu T. F. 3 Zook
	1	General Biology	1	General Biology	5 Hartman, Wu Chue
<b>Biology</b>	21	Vertebrate Zoology	22	Embryology	4 Miller
	32	Plant Physiology	24	Invertebrate Zoology	4 Miller
	34	Systematic Botany	26	Ornithology	2 Miller
	41	Biological Technique	31	Botany	4 McClure
	47	Genetics	35	Economic Botany	4 McClure
<b>Business Administration</b>	51	General Entomology	44	Bacteriology	4 Hartman
			52	Economic Entomology	5 Chan K. S.
	5a	Elementary Bookkeeping and Accounting	1	Elementary Economics	4 Sioux
	11a	General Economic Theory	5b	Elementary Bookkeeping and Accounting	4 Ma
	15a	Second Year Accounting	11b	General Economic Theory	3 Ma
<b>Chemistry</b>	1a	General Chemistry	15b	Second Year Accounting	5 Ma
	12a	Analytical Chemistry	1b	General Chemistry	5 Laird, Hoh
	21a	Agricultural Chemistry	12b	Analytical Chemistry	4 Chiu
	25a	Introduction to Chemistry	13	Quantitative Analysis	1 Chiu
	51a	Physical Chemistry	21b	Agricultural Chemistry	5 Chiu, Hoh
<b>Chinese Literature</b>	61a	Organic Chemistry	25b	Introduction to Chemistry	3 Laird, Hoh
	93	Ad. Thermodynamics	51b	Physical Chemistry	4 Frank, Hoh
	95	Seminar	61b	Organic Chemistry	5 Frank, Hoh
				A course	2 Frank
				Seminar	2 Frank
	1a	Introduction to Chinese Literature	1b	Introduction to Chinese Literature	3 Chan S. Y.
	21a	Survey of Chinese Lit.	21b	Survey of Chinese Lit.	3 Chan S. Y.

	42a Masterpieces of Chinese Prose	3 Yeung S. C.	42b Masterpieces of Chinese Prose	3 Yeung S. C.
	43a Masterpieces of Chinese Poetry	3 Sinn Y. T.	43b Masterpieces of Chinese Poetry	3 Sinn Y. T.
	51a Formation of the Chinese Characters	3 Yeung S. C.	51b Formation of the Chinese Characters	3 Yeung S. C.
	55 Introduction to the Confucian Classics	3 Yeung S. C.	A course	3 Yeung S. C.
	69 Versification	3 Sinn Y. T.	A course	3 Sinn Y. T.
	75 Chinese Literature from the Beginning to the Han Dynasty	3 Chan S. Y.	76 Chinese Literature of the Han and Six Dynasties	3 Chan S. Y.
	91a Research	3 Chan S. Y.	91b Research	3 Chan S. Y.
<b>Economics</b>	1 Elementary Economics	4 Sieux	1 Elementary Economics	4 Sieux
	1a Elementary Economics	2 Sieux	1b Elementary Economics	2 Sieux
<b>Education</b>	51 Technique of Instruction	3 Rankin	21 Principles and Practices in Education	5 Chan T. N.
	53a Practice Teaching	2 Chan T. N.	41 Rural Education	3 Rankin
	54 Practice Teaching	3 Chan T. N.	53b Practice Teaching	2 Chan T. N.
			55 Technique of Instruction and Supervision in Primary Schools	5 Rankin
	71 Educational Psychology	3 Rankin	57 Scientific Study of the Curriculum	4 Rankin
	73 Measurement in Education	4 Rankin	89 Physical Education	2 New Man
<b>English</b>	1a Composition and Reading	4 Grieder	1b Composition and Reading	4 Grieder
		Hostetter Dawson		Hostetter Dawson
	3a Phonics	0 Grieder	3b Phonics	0 Grieder
	15a Types and Masterpieces of Western Literature	3 Chan S. Y.	15b Types and Masterpieces of Western Literature	3 Chan S. Y.
	21a Advanced Composition	3 Hostetter	21b Advanced Composition	3 Hostetter
	65a The Short Story	3 Hostetter	67 Great Essayists	3 Hostetter
	71a Development of European Drama	3 Grieder	71b Development of European Drama	3 Grieder
	81a English Poetry	3 Spencer	81b English Poetry	3 Spencer

<b>French</b>	21a Elementary French	5 Dawson	21b Elementary French	5 Dawson
<b>German</b>	21a Elementary German	5 Grieder	21b Elementary German	5 Grieder
<b>Government</b>	21 Comparative Western Governments	5 Marshall	5 Principles of Government	3 Marshall
	51a Municipal Government	3 Wu P. S.	51b Municipal Government	3 Wu P. S.
	61 Elements of Jurisprudence	3 Chao Z.	A course	3 Chao Z.
	63 International Law	3 Chao Z.	64 International Law	3 Chao Z.
	A course	3 Chao Z.	A course	3 Chao Z.
<b>History</b>	1a Europe During the Last Century	3 Brownell	1b Europe during the Last Century	3 Brownell
	21 Modern Chinese History	3 Brownell	22 Modern Chinese History	3 Brownell
	31a World at War and Since 1918	3 Brownell	31b World at War and Since 1918	3 Brownell
	61 Modern Japan	3 Brownell	62 Modern Japan	3 Brownell
	75 Development of Civilization in England since 1815	3 Rees	A Course	3 Rees
	79 Turkey Reconstructed	3 Marshall	77 History of Russia	3 Marshall
<b>Horticulture</b>	11 Principles of Vegetable Growing	3 Cheung		
<b>Household Arts</b>	21a Introduction to Household Arts	3 Liu T. C.	21b Introduction to Household Arts	3 Liu T. C.
<b>Hygiene</b>	1 Personal Hygiene	1 Cadbury &	1 Personal Hygiene	1 Cadbury &
<b>Mathematics</b>	3a Introduction to Mathematical Analysis	4 MacDonald	3b Introduction to Mathematical Analysis	4 MacDonald
	3b Introduction to Mathematical Analysis	4 MacDonald	13a Mathematical Analysis	4 MacDonald
<b>Philosophy</b>	23 Philosophy of Life	3 Zia N. Z.	26 Ethics	3 Lo K. W.
	51 Ancient Chinese Philosophy	3 Zia N. Z.	52 Modern Chinese Philosophy	3 Zia N. Z.



<b>Physics</b>	67 Nineteenth Century Thought	3 Lo K. W.	A course	3 Zia N. Z.
	68 Contemporary Philosophy	3 Zia N. Z.	70 Philosophy of Value	3 Zia N. Z.
<b>Psychology</b>	21 General Physics, Mechanics	4 Knipp, Hui	22 General Physics, Heat and Sound	4 Knipp, Hui
	23 General Physics, Light	4 Knipp, Hui	24 General Physics, Electricity and Magnetism	4 Knipp, Hui
<b>Religion</b>	41 Introduction to Radio	5 Knipp, Ng	51 Advanced General Psychology	5 Spencer
	21 Elementary Psychology	5 Spencer	53 Experimental Psychology	5 Spencer
<b>Sericulture</b>	55 Creative Personalities in Christian History	3 Rees	52 Christian Ethics	3 Rees
	67 Christianity and Chinese Culture	3 Zia N. Z.	66 Chinese Religious Ideas	3 Zia N. Z.
<b>Sociology</b>	51 General Sociology	3 Chao Z.	21 Introduction to Study of Sericulture	3 Fu P. K.
	1 Contemporary Civilization	3 Lo K. W.	21 Social Problems	5 Chao Z.
<b>Survey</b>			1 Contemporary Civilization	3 Lo K. W.

### SUB-FRESHMAN COURSES OF STUDY

<b>Chinese</b>	A Composition	4 Yeung S. C.	B Composition	4 Yeung S. C.
<b>English</b>	A Composition and Reading	5 Dawson	B Composition & Reading	5 Dawson
<b>Mathematics</b>	F Algebra	4 MacDonald	G Geometry and Trigonometry	5 MacDonald
<b>Physics</b>	A General Physics	5 Hui, Lei	B General Physics	5 Hui, Lei

## DESCRIPTION OF COURSES OF STUDY

### AGRONOMY

#### VI. Soils

12. ELEMENTARY SOILS (土壤學概論). Formation, composition, properties and plant relationships of soils.

Classroom 4 hours, laboratory 3 hours, (5 credits); one semester.

### ANIMAL HUSBANDRY

MESSRS. L. Hoh, T. F. Siu and Zook

The courses in Animal Husbandry are so arranged as to give the student special instruction in the selection, breeding, feeding, marketing and management of live stock. Attention is given to sanitation, and the treatment of the common forms of the diseases to which the animals are subject. The animals are studied from the standpoint of the breeder and feeder. A model dairy of fifteen Chinese buffaloes, ten Indian buffaloes and ten pure-bred Holsteins supplies milk to the community. The dairy provides for experimental work and for practical experience for students interested in dairying. Similar opportunities are provided in poultry and in pork production. In addition to the following courses for Lower Division students other courses are outlined and will be offered for Upper Division students.

I. FARM ANIMALS (畜牧概論). An introductory course, acquainting the student with the more common breeds and varieties of animals.

Class-room 2 hours, laboratory 2 hours (3 credits); one semester.

46. PHYSIOLOGY OF DOMESTIC ANIMALS (家畜生理學). Physiology of blood, lymphatic, circulatory, respiratory, muscular and nervous systems; digestion, absorption, metabolism, secretion, excretion, ductless glands; nutrition. Prerequisite: Animal Husbandry 1.

3 hours; one semester.

### BIOLOGY

PROFESSORS HOFFMANN, MCCLURE, HARTMAN AND MILLER;

MESSRS. CHEN, K. S. CHAN, CHU, WU AND YEUNG

THE DEPARTMENT OF BIOLOGY is amply provided with staff, equipment, and supplies for teaching and carrying on research work in theoretical and applied biology in its several phases or subdivisions. A good herbarium and a large zoological collection, especially rich in local fauna and flora, facilitate biological study. The library includes the publications of the United States National Museum, the Carnegie Institution of Washington, the United States Department of Agriculture and other scientific institutions, as well as nearly all standard reference books, and files and current numbers of the leading biological periodicals. The Lingnan Science Journal, published by the University, offers a splendid opportunity for the early publication of original work performed by students and staff of the department.

The department now offers a Major in Entomology and a Major for those who are planning to teach Biology. Other Majors in Botany and for those planning to do post graduate work in Biology will be offered as demand arises. Courses are also offered primarily for students in agriculture and for pre-medical students.

The Freshman year program specified on page 10 for students preparing to major in science is prerequisite for all later special work in biology. The programs specified for the work of the other years in either major in biology are the following:

**Program For Sophomore Year For All  
Majors In Biology**

SEMESTER I		SEMESTER II	
SUBJECTS	CREDITS	SUBJECTS	CREDITS
Biology 21	5	Biology 24	4
Chemistry 12a	4	Biology 31	4
Chinese Literature 1a	3	Chinese Literature 1b	3
Economics 1a	2	Economics 1b	2
Physics 21	4	Physics 22	4

**Upper Division Program For Those Preparing  
To Teach Biology**

SENIOR JUNIOR YEAR	SEMESTER I		SEMESTER II	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
	Biology 51	5	Biology 22	4
	Chemistry 33a	4	Chemistry 33b	4
	Physics 23	4	Education 21	5
	Psychology 21	5	Physics 24	4
	Biology Electives	9	Biology Electives	9
	Education (approved by both departments)	5	Approved Electives	9
	Approved Electives	3		

**Upper Division Program For Major In Entomology**

SENIOR JUNIOR YEAR	SEMESTER I		SEMESTER II	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
	Biology 34	3	Biology 44	4
	Biology 41	2	Biology 52	5
	Biology 51	5	Chemistry 33b	4
	Chemistry 33a	4	Physics 24	4
	Physics 23	4		
	Biology 38	2	Biology 35	4
	Biology 54	2	Biology Electives	5
	Biology 61	4	Approved Electives	8
	Biology 72	3		
	Approved Electives	7		

1. GENERAL BIOLOGY (生物學概論) The fundamental principles of biology. Local plants and animals are studied. Prescribed for all students in all colleges and a prerequisite for all other courses in biology. Given each semester. Laboratory fee \$7.00.

Scott: The Science of Biology.

Classroom 3 hours, laboratory 6 hours (5 credits); one semester.

21 (15). VERTEBRATE ZOOLOGY (脊椎動物學). A comparative study of the anatomy and physiology of chordate animals, making use of local fauna whenever possible. Prerequisite: Biology 1.

Classroom 3 hours, laboratory 6 hours (5 credits); one semester.

22. EMBRYOLOGY (胚胎學). An introduction to the methods of development of the individual and a critical study of the early stages of at least two classes of vertebrates. The student will be given training in the preparation of material for study. Prerequisites: Biology 1 and 21.

Summary: Vertebrate Embryology.

Classroom 2 hours, laboratory 6 hours (4 credits); one semester.

24. INVERTEBRATE ZOOLOGY (無脊椎動物學). A study of the local forms of various phyla of animals, other than Chordata. Prerequisite: At least Biology 1.

Classroom 2 hours, laboratory 4 hours, collecting trips by arrangement (4 credits); one semester.

26. ORNITHOLOGY (禽鳥學). A survey of the major groups of birds with training in the identification of local birds. Prerequisite: Biology 1 or its equivalent.

Laboratory and conference 6 hours (2 credits); one semester.

28 (20). PHYSIOLOGY (生理學). This course deals with body activities in animals and in man. Prerequisite: Biology 21. *Not offered in 1929-30.*

Classroom 2 hours, laboratory 3 hours (3 credits); one semester.

29 (22). MEDICAL ENTOMOLOGY (醫類昆蟲學). A study of insects in relation to human health, prefaced by a brief study of related Arthropoda of medical importance. Designed for Pre-Medical students but open to others.

3 hours; one semester.

31 (5). BOTANY (植物學). This course is designed to familiarize the student with the great groups of the plant kingdom, the characters peculiar to each and the advances made by each succeeding group. (Open by special arrangement to Freshmen in the College of Agriculture.)

Brown: A Textbook of General Botany.

Brown: Laboratory Botany.

Classroom 2 hours, laboratory 6 hours (4 credits); one semester.



32 (14). PLANT PHYSIOLOGY (植物生理學). The emphasis is placed upon laboratory work with plants, supplemented by class room discussion and reading assignments. The physiological processes of nutrition, growth and reproduction are studied.

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

34 (15). SYSTEMATIC BOTANY (植物分類學). This course is designed to familiarize the student with the local flora, to make him acquainted with the literature on Chinese botany and to give him training in the fundamental principles of taxonomic work. Prerequisite: Biology 31.

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

35 (16). ECONOMIC BOTANY (實用植物學). Economic plants are studied from the ecological and historical points of view, emphasizing the influence of various factors upon the distribution of cultivated plants and the consequent influences upon the human race. Prerequisite: Biology 34.

Classroom 2 hours, laboratory 6 hours (4 credits); one semester.

38. TAXONOMY (分類學). *Not offered in 1929-30.*

Classroom 1 hour, laboratory 3 hours (2 credits); one semester.

41 (16). BIOLOGICAL TECHNIQUE (生物學技術). Training in the technique of handling materials with which the individual student intends to work. Prerequisites: Credit for or enrollment in a course in biology in addition to Biology 1.

1 to 4 credits; one semester.

44 (12). GENERAL BACTERIOLOGY (細菌學概論). An introduction to the study of bacteria and their relation to and effects upon other living organisms. Prerequisites: Biology 1 and Chemistry 1.

Classroom 2 hours, laboratory 6 hours (4 credits); one semester.

47 (21). GENETICS (遺傳及優生學). A study of the laws by which characteristics of living organisms are inherited from one generation to another. Prerequisites: Biology 1, and 10 other credits in science.

3 hours; one semester.

51 (31). GENERAL ENTOMOLOGY (昆蟲學概論). General introductory study of the Hexapoda, prefaced by a consideration of related Arthropoda. Morphology, taxonomy, biology and ecology of insects, with special reference to agriculture; collection and preservation technique. Prerequisite: Biology 31.

*Wellhouse: How Insects Live.*

Classroom 2 hours, laboratory 6 hours (5 credits); one semester.

52 (32). ECONOMIC ENTOMOLOGY (實用昆蟲學). Detailed taxonomy, biology and ecology of economic insects; insectary and practical field work collection, preservation and identification of representative economic forms of this locality; history of economic entomology and entomological literature. Prerequisite: Biology 51.

*Hoffmann: Notes on Some Economic Insects of South China (mimeographed).*

Classroom 2 hours, laboratory 6 hours (5 credits); one semester.

72 (33). PLANT PATHOLOGY (植物病理學). A consideration of the bacteria and fungi which attack cultivated crops, as well as other causes of plant diseases. Prerequisites: Biology 34 and 44.

Classroom 1 hour, laboratory 4 hours (3 credits); one semester.

81 (37). PROBLEMS IN BIOLOGY (生物學專論). Individual research work for advanced students under the supervision of an instructor. Offered each semester and during the summer. Each student attempts a different problem. Credit is given only when the work is sufficiently accurate and complete to warrant publication. Open only to those students who have shown special ability. Prerequisite: At least Biology 31.

Number of hours and credits dependent upon the problem selected.

84 (38). PREPARATION OF BIOLOGICAL MANUSCRIPT FOR PUBLICATION (科學稿本出版預備法). Designed to follow Biology 81. A paper is prepared for publication and followed through the press. Practice is given in making photographs and pen-and-ink drawings for illustration. Instruction and practice are given in making copy for the printer, correcting proof, preparing an index, etc. Prerequisites: Biology 31 and 81.

1 to 3 credits; one semester.

## BUSINESS ADMINISTRATION

PROFESSORS KWOK, CHAU, AND SIEUX; MESSRS. MA,

M. C. CHAN AND HU

THE COLLEGE OF BUSINESS ADMINISTRATION is an outgrowth of the Department of Business Administration which for many years offered the courses in Economics and Business Administration in the College of Arts and Sciences.

Modern China is demanding men trained in the theory and practice of business as it is carried on, not only in China, but also in the rest of the world. A knowledge of accounting, statistics, labour problems, business law, commercial geography, transportation, banking and exchange, and of the fundamental economic principles underlying the complex relations of the business world in general is necessary for the proper direction and the intelligent control of the modern industrial system now developing in China. The well trained business man of to-day also needs the broad

outlook and liberal understanding to be gained from a knowledge of sociology, history, political science, psychology and other fundamental arts and sciences. The curriculum has been drafted to give this fundamental training.

The University and private libraries on the campus furnish a large amount of well selected material for economic and business study. Files and current numbers of the *American Economic Review*, *The Annalist*, *Annals of the American Academy*, *Chinese Social and Political Science Review*, *Economic Journal*, *Harvard Business Review*, *Journal of Accountancy*, *Journal of the American Statistical Association*, *Journal of Economy, Management and Administration*, *Quarterly Journal of Economics*, *System*, *Trans-Pacific*, and other similar periodicals are available. In some cases the files are complete. The near-by cities of Canton and Hongkong afford unusual opportunities for studies of modern business and economic problems.

The courses offered are arranged in four groups; I, *Economic Theory and Problems*; II, *Accounting and Statistics*; III, *Commerce and Transportation*; and IV, *Banking and Finance*. Certain courses are elective. Aside from the prescribed courses of study the student may, with the approval of his advisor and the professor in charge, choose his electives either from one of these four groups or from courses offered by one of the other Colleges. Arrangements to major in one of these groups may be made if the student desires to specialize in one field.

The program of courses specified for the Freshman year is given on page 10 and the program for the Sophomore year is given on page 11 of this announcement. The program for the Upper Division work will be announced at the beginning of each semester of 1929-30. As most of the courses offered by the College of Business Administration are Upper Division courses only a few (those for the Lower Division) are described below.

#### I. Economic Theory and Problems

1. ELEMENTARY ECONOMICS; ORGANIZATION OF INDUSTRIAL SOCIETY (初級經濟學). Identical with Economics 1, described on a later page. Prerequisite for all other courses in Business Administration.

4 hours, one semester.

11a-b. GENERAL ECONOMIC THEORY (經濟學原理). Identical with Economics 11a-b, described on a later page.

3 hours; two semesters.

#### II. Accounting and Statistics

5a-b. ELEMENTARY BOOKKEEPING AND ACCOUNTING (初級會計學). General principles of bookkeeping and an introduction to the entire field of accounting. Both technique and accounting theory are emphasized.

Kester: Accounting Theory and Practice, Revised, Vol. I.

Practice Data Accompanying Kester's Accounting, Vol. I.

Classroom 2 hours, laboratory 4 hours (4 credits); two semesters.

15a-b. SECOND-YEAR ACCOUNTING (高級會計學). Emphasis is placed on the accounting involved in the organization of the corporation and its balance sheet, on the principles of valuation, and on the theory of depreciation, allowance and reserve accounts. Prerequisite: Business Administration 5a-b.

Kester: Accounting Theory and Practice, Vol. II.

Practice Data Accompanying Kester's Accounting, Vol. II.

#### CHEMISTRY

PROFESSORS LAIRD, CHIU, AND FRANK; MESSRS. S. K. HOH AND NG.

THE DEPARTMENT OF CHEMISTRY has, in the Willard Straight Science Hall, laboratories for General, Analytical, Organic, Physical, Advanced Inorganic, and Industrial Chemistry and for Food and Technical Analysis with facilities for three hundred students, working in sections. Each desk has gas, water, and fume vent, and also, in certain laboratories, steam and electricity (both a.c. and d.c.). Ventilation is secured by fans in the attic. In addition to these facilities for undergraduate students two rooms and equipment are available for research work.

South China is rich in materials for many chemical industries. Some of these are already being made use of to a limited extent, but processes are generally simple and often crude. Courses are offered which aim to train men to improve these processes and further develop these resources, especially those of a non-metallurgical character. A number of processes will be put in operation on a small scale in connection with the courses in industrial chemistry. Returned students and other qualified persons interested in the development of the chemical resources of South China are invited to use the facilities of the Department.

In addition to several hundred well selected books, there are available current numbers, and in some cases long runs, of the *American Chemical Journal* (Vols. 8-50), *Biochemical Journal*, *Chemical Abstracts* (complete), *Chemical and Metallurgical Engineering*, *Chemical Reviews* (complete), *Industrial and Engineering Chemistry* (complete), *Journal of the American Ceramic Society*, *Journal of the American Chemical Society* (1900-), *Journal of the Association of Official Agricultural Chemists*, *Journal of Biological Chemistry* (complete), *Journal of Chemical Education* (complete), *Journal of the Chemical Society* (1882-), *Journal of the Franklin Institute*, *Journal of Physical Chemistry*, *Journal of the Society of Chemical Industry* (1900-), *Physiological Reviews* (complete), *Proceedings of the National Academy of Sciences* (Washington), *Proceedings of the Royal Society of London*, *Recueil des Travaux Chimiques des Pays-Bas*, *Science*, *Science* (China), *Transactions of the Faraday Society*, *Transactions of the American Electrochemical Society*, *Zeitschrift fuer Electrochemie*, *Zeitschrift fuer Physik*, and *Zeitschrift fuer physikalische Chemie*.



The Department offers a Major for students who plan to make chemistry their profession and a Major for those who expect to teach chemistry, besides special courses for students in agriculture and sericulture. Some of the most advanced courses are given in alternate years. Students planning to major in chemistry should follow the program specified on page 10 for Freshmen in science. The detailed program for the three upper years, both majors, follows.

**Program For Sophomore Year For Both  
Majors In Chemistry**

SEMESTER I		SEMESTER II	
SUBJECTS	CREDITS	SUBJECTS	CREDITS
Chemistry 12a	4	Chemistry 12b	4
Chinese Literature 1a	3	Chemistry 13	1
Economics 1a	2	Chinese Literature 1b	3
Mathematics 13a	4	Economics 1b	2
Physics 21	4	Mathematics 13	4
		Physics 22	4
Total for semester	17	Total for semester	18

**Upper Division Program For Those Preparing  
To Teach Chemistry**

	SEMESTER I		SEMESTER II	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
JUNIOR YEAR	Chemistry 51a	4	Chemistry 51b	4
	Chemistry 61a	5	Chemistry 61b	5
	Physics 23	4	Physics 24	4
	Psychology 21	5	Education 21	5
SENIOR YEAR	Chemistry 62	3	Chemistry 58	3
	Chemistry, Elective	3	Chemistry, Elective	3
	Education, (approved by both departments)	5	Education,	4-7
	Approved Electives,	6	Approved Electives	7-4

**Upper Division Program For Professional  
Major In Chemistry**

	SEMESTER I		SEMESTER II	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
JUNIOR YEAR	Chemistry 51a	4	Chemistry 51b	4
	Chemistry 61a	5	Chemistry 61b	5
	German 21a	5	German 21b	5
	Physics 23	4	Physics 24	4
SENIOR YEAR	Chemistry 62	3	Chemistry 58	3
	Chemistry 83a	3	Chemistry 83b	3
	Chemistry, Elective	3	Chemistry, Elective	3
	German 61a	3	German 61b	3
	Approved Electives	6-5	Approved Electives	6-5

1a-b. GENERAL INORGANIC CHEMISTRY (普通無機化學). The ordinary non-metallic (first semester) and metallic (second semester) elements and their compounds are studied. The theoretical basis is emphasized. Most of the laboratory work of the second semester is qualitative analysis. Prerequisite to all later courses in chemistry. Prerequisites: Entrance Mathematics and Physics. Laboratory fee: \$10.00 per semester.

*Deming*: General Chemistry.

*Deming and Arenson*: Exercises in General Chemistry.

Classroom 3 hours, laboratory 6 hours (5 credits); two semesters.

12a-b. ANALYTICAL CHEMISTRY (分析化學). Qualitative analysis part of first semester, quantitative analysis balance of first and all of second semester. Prerequisite: Chemistry 1.

Classroom 2 hours, laboratory 6 hours (4 credits); two semesters.

13. QUANTITATIVE ANALYSIS (定量分析). Short course, primarily for majors in chemistry, amplifying Chemistry 12b. Prerequisite: Chemistry 12a.

Laboratory 3 hours (1 credit); one semester.

21a-b. AGRICULTURAL CHEMISTRY (農業化學). Essentials of organic chemistry as related directly to agriculture; food and nutrition of plants and animals; chemical basis for valuation of animal foods, soils and fertilizers; analysis of soils, fertilizers and farm products. Prerequisite: Chemistry 1.

*Chamberlain*: Organic Agricultural Chemistry.

Classroom 3 hours, laboratory 6 hours (5 credits); two semesters.

23. TEXTILE CHEMISTRY (織物化學). The characteristics of different kinds of textile fibers and their reception of dyes. Prescribed for Sericulture students. Prerequisite: Chemistry 21a. *Not offered in 1929-30.*

Classroom 2 hours, laboratory 6 hours (4 credits); one semester.

25a-b. INTRODUCTION TO CHEMISTRY (普通化學). A semi-popular presentation of the relation of chemistry to modern life. Lectures, assigned readings, written reports and laboratory. Prescribed for all students who do not take Chemistry 1a-b. Laboratory fee: \$5.00 per semester.

*Foster*: The Romance of Chemistry.

Classroom 2 hours, laboratory 3 hours (3 credits); two semesters.

51a-b (38). PHYSICAL CHEMISTRY (物理化學). An introduction to the theories of chemistry and the borderland between chemistry and physics. Prerequisites: Chemistry 12, Mathematics 13, College Physics.

*Getman*: Outlines of Theoretical Chemistry.

Classroom 3 hours, laboratory 3 hours (4 credits); first semester.

Classroom 2 hours, laboratory 6 hours (4 credits); second semester.

52. ADVANCED PHYSICAL CHEMISTRY (高級物理化學). *Not offered in 1929-30.*

Classroom 2 hours, laboratory 3 hours (3 credits); one semester.

53. CHEMICAL THERMODYNAMICS (熱力化學). A discussion of the first and second laws of thermodynamics and their most important consequences for chemistry. Prerequisites: Mathematics 13, College Physics. *Not offered in 1929-30.*

*Lewis and Randall*: Thermodynamics.

3 hours; one semester.

58. ADVANCED INORGANIC CHEMISTRY (高級無機化學). Presentation of chemical behavior in terms of free energies and reaction velocities. Review of the chemistry of the more important elements. Inorganic preparations. Prerequisite: Chemistry 51. *Not offered in 1929-30.*

*Latimer and Hildebrand*: Reference Book in Inorganic Chemistry.

Classroom 2 hours, laboratory 3 hours (3 credits); one semester.

61a-b (33) ORGANIC CHEMISTRY (有機化學). General discussion of the compounds of carbon and a survey of the important theories of organic chemistry. Preparation of typical compounds emphasizing the technique of organic laboratory operations. (Students majoring in biology or taking the Pre-Medical course may arrange to take only one afternoon of laboratory work each semester.) Prerequisites: Chemistry 12 and College Physics.

*Lowy and Harrow*: An Introduction to Organic Chemistry.

*Lowy and Baldwin*: A Laboratory Book of Elementary Organic Chemistry.

Classroom 3 hours, laboratory 6 hours (5 credits); two semesters.

62 (36). ADVANCED ORGANIC CHEMISTRY (高級有機化學). More detailed discussion of the theories of organic chemistry; reports on recent advances in organic chemistry. Prerequisite: Chemistry 61. *Not offered in 1929-30.*

3 hours; one semester.

64 (34). ADVANCED ORGANIC SYNTHESIS (高級綜合有機化學). Prerequisite: Chemistry 61. *Not offered in 1929-30.*

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

66 (35). ANALYTICAL ORGANIC CHEMISTRY (分析有機化學). Prerequisite: Chemistry 61. *Not offered in 1929-30.*

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

68 (37). CHEMISTRY OF SYNTHETIC DYE STUFFS AND DRUGS (染料及醫藥化學). Prerequisite: Chemistry 61. *Not offered in 1929-30.*

3 hours; one semester.

71. ADVANCED ANALYTICAL CHEMISTRY (高級分析化學). Prerequisites: Chemistry 12 and 51. *Not offered in 1929-30.*

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

75 (47) FOOD ANALYSIS (食料分析). Prerequisite: Chemistry 21 or 61. *Not offered in 1929-30.*

Classroom 1 hour, laboratory 6 hours (3 credits); one semester.

81a-b (41). INDUSTRIAL CHEMISTRY (工業化學). Prerequisite: Chemistry 61. *Not offered in 1929-30.*

Classroom 3 hours, laboratory 6 hours (5 credits); two semesters.

82 (42). SPECIAL PROBLEMS IN INDUSTRIAL CHEMISTRY (工業化學研究). Prerequisite: Chemistry 61 and 81a. *Not offered in 1929-30.*

Laboratory 9 hours (3 credits); one semester.

83 (43). CHEMICAL FACTORY EQUIPMENT (化學工廠機械). Prerequisites: Chemistry 51 and 61. *Not offered in 1929-30.*

93. ADVANCED CHEMICAL THERMODYNAMICS (高級熱力化學). A further discussion of the concept of activity and its measurement in various kinds of solutions. Third law of thermodynamics. Prerequisites: Chemistry 51 and 53, and the approval of the instructor.

*Lewis and Randall*: Thermodynamics.

2 hours; one semester.

95. SEMINAR (化學研究組). Advanced discussion by staff members and specially accredited students. The topic for 1929-30 is the Quantum Theory and the structure of matter. Meetings twice weekly.

## CHINESE

### 中國文學

PROFESSORS S. Y. CHAN AND S. C. YEUNG; MISS Y. T. SINN.

THE DEPARTMENT OF CHINESE offers an unusual opportunity for students to specialize in the study of Chinese Literature and the Chinese language. Libraries in Canton supplement the University library to advantage.

A Major is offered in Chinese Literature which stresses the field of comparative literature. Each student choosing this major must elect a minor in English Literature and have a reading knowledge of French before his senior year in order to work in this field.

All students in the University are required to take the course Chinese Literature 1. Students in the College of Arts and Sciences who are not majoring in science are required to take a course in Chinese Literature in the Upper Division. Students majoring in English Literature must take a minor in Chinese Literature. Many of the courses described below are given in alternate years, thus offering students a wide variety of courses in this field during the time that they are in the Upper Division. Students planning to major in Chinese Literature will take the regular Arts curriculum in the Freshman year, and follow it with the following program, which gives general requirements in some subjects, leaving the specific courses open to election.



**Program for Students Majoring in  
Chinese Literature.**

YEAR	SEMESTER 1		SEMESTER 1	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
SOPHOMORE	Chemistry 25a	3	Chemistry 25b	3
	Chinese Literature 21a	3	Chinese Literature 21b	3
	English Literature 15a	3	English Literature 15b	3
	French 21a (or German 21a)	5	French 21b (or German 21b)	5
	Government 2	1	History 22	3
JUNIOR	History 21	3	or Philosophy 26	3
	or Philosophy 21	3		
	Chinese Literature	9-6	Chinese Literature	9-6
	English Literature	3	English Literature	3
SENIOR	French 51 (or German)	3	French 52 (or German)	3
	Approved Electives	3-6	Approved Electives	3-3
	Chinese Literature	9	Chinese Literature	9
	English Literature	3	English Literature	3
	Approved Electives	6-5	Approved Electives	6-5

3 hours; two semesters.

1a-b. INTRODUCTION TO CHINESE LITERATURE (文學導論). This course seeks to familiarize the student with the main genres of Chinese Literature, and to prepare him for the study of special types and periods. Lectures, assigned readings, and bi-weekly papers. Prerequisite for all other courses in Chinese.

3 hours; two semesters.

21a-b (11). SURVEY OF CHINESE LITERATURE (文學史略). A brief survey of the development of Chinese Literature from the earliest ages to the end of the Manchu dynasty. Lectures, discussions, collateral reading, and reports.

3 hours; two semesters.

42a-b (12). MASTERPIECES OF CHINESE PROSE (散文名著). A study of the representative prose writings of the various schools and periods, including brief discussions of the theory of style. Lectures, imitative exercises, and reports.

3 hours; two semesters.

43a-b. MASTERPIECES OF CHINESE POETRY (韻文名著). A study of the different types of Chinese poetry with emphasis on the significance of biographical and historical background. Lectures, discussions, and papers.

3 hours; two semesters.

51a-b (C. Lang. 11). FORMATION OF THE CHINESE CHARACTERS (文字學一形義). A study of the philology and linguistics of the Chinese characters, both ancient and modern.

3 hours; two semesters.

52. ANCIENT CHINESE PHONOLOGY (古音通論). A critical examination of the existing theories regarding initial and final sounds of the ancient Chinese language.

3 hours; two semesters.

55. INTRODUCTION TO THE CONFUCIAN CLASSICS (經學通論). A methodical study of the sources and fundamental ideas of the Chinese classics of the Confucian school.

3 hours; two semesters.

56 (31). LITERARY CRITICISM (文學評論). A brief examination of the important essays on literary criticism, and a discussion of the theories of modern Chinese critics.

3 hours; one semester.

57. CHINESE PROSE ROMANCES (唐宋傳奇). Reading and discussion of representative prose romances of the Tang and Sung dynasties.

3 hours; one semester.

58. THE EPISTOLARY AND FAMILIAR ESSAY (小品選讀). A study of personal letters and familiar essays which are of literary interest.

3 hours; one semester.

59. THE EARLY CHINESE NOVEL (初期小說). Reading in chronological order of the outstanding novels of the Yuan and Ming dynasties.

3 hours; one semester.

60. THE CHINESE NOVEL OF THE MANCHU DYNASTY (清代小說). This course is a continuation of Chinese Literature 59, but may be taken separately.

3 hours; one semester.

61 (15). THE CHINESE SHORT STORY (短篇小說). This course studies the material and technique of the modern short story in China, drawing freely from older Chinese tales as well as from Western authors.

3 hours; one semester.

62 (37). ANTITHETIC PROSE (駢體文). A study of the origin and development of antithetic prose writings of the different schools and periods.

3 hours; one semester.

63. THE CHINESE DRAMA (戲曲). A brief review of the development of the Chinese drama mainly as a literary genre, with special emphasis on the drama of the Yuan dynasty.

3 hours; one semester.

65. BIBLIOGRAPHY (書目學). A study of the history and development of bibliographical methods in China with special emphasis on the relationship between bibliographical technique and independent study and the methods of discriminating between texts.

3 hours; one semester.

68. ADVANCED COMPOSITION (高級習作). This course undertakes to give the student ample practice in the application of rhetorical

principles. Weekly exercises on assigned topics.

3 hours; one semester.

69 (13). **VERSIFICATION** (韻文習作). This course aims to train the student in verse writing and to give him an understanding of the technique of verse, thus increasing his appreciation of Chinese poetry. It includes the analysis of assigned poems and original composition of the various types of Chinese verse.

3 hours; one semester.

71. **COMPOSITION FOR SCIENCE STUDENTS** (科學論文習作). The aim of this course is to guide and encourage the student to make use of the knowledge which he has acquired through the media of the European languages by expressing it in modern and idiomatic Chinese. Discussions and conferences.

2 hours; two semesters.

75. **CHINESE LITERATURE FROM THE BEGINNING TO THE HAN DYNASTY** (先秦文學). Confucius to 206 B. C. *Not offered in 1930-31.*

3 hours; one semester.

76. **CHINESE LITERATURE OF THE HAN AND SIX DYNASTIES** (中古文學). 206 B. C. to 617 A. D. *Not offered in 1930-31.*

3 hours; one semester.

77. **CHINESE LITERATURE OF THE TANG, SUNG, YUAN AND MING DYNASTIES** (近古文學). 618 A. D. *Not offered in 1929-30.*

3 hours; one semester.

78. **CHINESE LITERATURE OF THE MANCHU DYNASTY** (清代文學). 1644 A. D. to 1911 A. D. *Not offered in 1929-30.*

3 hours; one semester.

79. **MODERN WRITERS** (近代作家). An intensive study of the literature since 1842, with special emphasis on the influence of the West.

3 hours; one semester.

81. **CULTURAL RELATIONS BETWEEN CHINA AND THE WEST** (中西文明之關係). An historical survey of reciprocal influences and conflicts. Lectures and independent investigations.

3 hours; one semester.

85. **THE GROWTH OF THE CHINESE LANGUAGE** (文字學). Seminar.

3 hours; one semester.

86. **CONTEMPORARY CHINESE LITERATURE** (當代文學). Seminar.

3 hours; one semester.

87. **METHODS OF LITERARY HISTORY** (文學史之方法). Seminar.

3 hours; one semester.

91. **SPECIAL RESEARCH** (專題研究). A course intended for advanced students who are capable of doing independent work. Enrollment only by permission of the head of the department.

3 hours; one or two semesters.

## ECONOMICS

**THE COURSES** in Economics are taught by the members of the faculty of the College of Business Administration. Only the two fundamental courses are described here, the more advanced courses being listed on the special announcement of the College of Business Administration to be issued at the beginning of the year.

Students in the College of Arts and Sciences may elect a major, a minor, or separate courses in Economics, making their selection from the courses offered by the College of Business Administration. Those students who wish to major in Economics with or without the more practical courses in Business Administration should follow the regular program for Arts students in Freshman year, as given on page 10. In their Sophomore year they should choose the following subjects from those listed in the Sophomore program given on page 12: Chemistry 25, Economics 11, English Literature 21, Government 2, Government 21 and Sociology 21 and either Chinese Literature 21 or History 21 and 22 or Philosophy 21 and 26.

In the Upper Division the program is: *Junior* year, each semester; Chinese Literature, 3 credits; Major (Economics), 9 to 6 credits; Minor, 3 credits; Approved Electives, 3 to 6 credits; *Senior* year, each semester; Major (Economics), 9 credits; Minor, 3 credits; Approved Electives, 6 or 5 credits.

1, 1a-b. **ELEMENTARY ECONOMICS: ORGANIZATION OF INDUSTRIAL SOCIETY** (初級經濟學). Nature of human wants and of economic resources; structure, function and interrelation of our industrial organizations; significance of the characteristic attributes and assumptions of modern industrial society. Identical with Business Administration 1. Prerequisite for all later courses in economics. Prescribed for all students in the University.

*Marshall and Lyon:* Our Economic Organization.

*Marshall:* Readings in Industrial Society.

4 hours; one semester, or 2 hours; two semesters.

11a-b. **GENERAL ECONOMIC THEORY** (經濟學原理). A comprehensive survey of the structure and operations of the economic world and of the more important economic principles, emphasizing economic theory. Prerequisite: Economics 1. Required of all students majoring in Economics or Business Administration.

*Ely:* Outlines of Economics (Revised Edition).

*Duncan:* Exercises in Elementary Economics.

3 hours; two semesters.

## EDUCATION

PROFESSORS CHU, T. N. CHAN AND RANKIN; MESSRS. Y. T. HOH AND K. T. YEUNG

**THE DEPARTMENT OF EDUCATION** is organized to facilitate the correlation of:



1. The professional preparation of teachers, supervisors and administrators, through Education courses in the College of Arts and Sciences.
2. The supervision of primary and middle schools conducted in connection with Lingnan University.
3. The maintenance of a Teachers' Employment Bureau.
4. The preparation of educational publications, and the conduct of investigations and other activities designed for the service of Chinese schools in general, both public and private, and of Kwangtung Province in particular.

THE JUNIOR CERTIFICATE of the College of Arts and Sciences is awarded to students in Education, as it is to others, upon satisfactory completion of the requirements for the first two years of College work (See page 6).

THE DIPLOMA IN EDUCATION is awarded to students upon completion of a major in education *in addition* to the regular diploma for the degree of Bachelor of Arts. The fee for the Diploma in Education is \$5.00.

THE CERTIFICATE IN EDUCATION is awarded to students upon completion of certain specified minors in education *in addition* to the regular diploma for the degree of Bachelor of Arts or Bachelor of Science. The fee for the Certificate in Education is \$2.00.

THE BACHELOR OF ARTS DEGREE in Education is awarded students who, in meeting the general requirements stated on page 7, have met these requirements:

1. Satisfactory completion of all courses in a Lower Division program, preparatory to majors in arts or to majors in science, including two specified courses, Psychology 21 and Education 21.
2. Satisfactory completion of courses in a Major in Education.

#### Majors in Education

The Department of Education now offers three majors in Education:

1. Supervisor of Instruction
2. Teacher in Teacher Training Institution
3. City or District Director of Education

The general requirements in the Upper Division for each of these majors are the same, viz.:

- a. Major; 30 to 36 credits in courses in Education.
- b. Minor; 12 credits in one related field, to be approved by the Department of Education.
- c. Electives; 28 to 22 credits in any approved field or fields.

The specific courses in Education to be taken will depend on which of these majors is selected, and will be announced by the department.

#### Minors in Education for Students in Other Fields

Students majoring in other subjects may elect Education as a Minor, and specific programs have been prepared for science students who are preparing to teach those sciences (see pages 20 and 26, for example). Such students may choose any sequence of courses approved by the department in which they are majoring. The Education Department offers to students who elect Education as a minor the opportunity to secure a "Certificate in Education." All students who elect Education as a minor are urged to elect courses leading to one of these certificates. (Note that Psychology 21 and Education 21 are prerequisite to all later courses in Education.)

#### Certificates in Education

1. Certificate A, Teacher in Primary School:  
Education Requirements: Education 53a-b and 54 (7 credits); 55, 71 and 73 (12 credits), and the B. A. or B. S. degree.
2. Certificate B, Teacher in Middle School:  
Education Requirements: Education 53a-b and 54 (7 credits); 56, 71 and 73 (12 credits), and the B. A. or B. S. degree.
3. Certificate C, School Administrator:  
Education Requirements: Education 53a-b and 54 (7 credits); 65, 71 and 73 and the B. A. or B. S. degree.

#### Program for Students Majoring in Education

Students who wish to major in Education should follow the regular program in Freshman year for Arts students, as given on page 10. In the Sophomore year they should choose the following subjects from those listed in the Sophomore program given on page 12: Chemistry 25, English Literature 15, Government 2, Philosophy 21 and 26, Psychology 21 and Education 21, and either Chinese Literature 21 or History 21 and 22.

In the Upper Division the program is: *Junior* year, each semester; Chinese Literature, 3 credits; Major (Education), 9 to 7 credits; Minor, 3 credits; Approved Electives, 3 to 5 credits; *Senior* year, each semester; Major (Education), 9 credits; Minor, 3 credits; Approved Electives, 6 or 5 credits.

21 (13). PRINCIPLES AND PRACTICES IN EDUCATION (教育原理與實施). An introductory course, dealing with the major problems of education, the practices in different countries, especially China, in dealing with these problems, and the results of the application of scientific methods to their solution. Prerequisite to all other courses in Education.

Grizzell: Education; Principles and Practices.

5 hours; one semester.

41 (15). RURAL EDUCATION (鄉村教育). An introduction to the problems of rural education in China, and a survey of rural school systems in other countries. The best practices in China and other countries are studied in an effort to build up a sound procedure for rural school work in South China.

Mueller: Progressive Trends in Rural Education.

3 hours; one semester.

51 (11). TECHNIQUE OF INSTRUCTION (普通教學法). An general introduction to classroom management and the teacher's art.

Stormzand: Progressive Methods of Teaching.

3 hours; one semester.

53a-b (9). PRACTICE TEACHING (教學實習). An applied course in the art of teaching, designed for those who have had no previous experience in teaching. Observation, and practice under a critic teacher. Education 51 must be taken before or in the same semester as 53a.

Classroom 1 hour, laboratory 2 hours (2 credits); two semesters.

54 (10). PRACTICE TEACHING (教學實習). Open to students who: (a) have had Education 53a-b, or (b) have had equivalent experience, or (c) are part-time teachers in one of the sub-collegiate schools of the University. Prerequisite: Education 51. Either Education 55, 56 or a "Special" (courses 76 to 83) must be taken before or in the same semester.

Classroom 1 hour, laboratory 4 hours (3 credits); one or two semesters.

55 (16). TECHNIQUE OF INSTRUCTION AND SUPERVISION IN PRIMARY SCHOOLS (小學教學及觀察法). A detailed and highly practical course dealing with classroom efficiency, organization of the teacher's work, improvement of instruction, etc. Prerequisite: Education 51.

Parker: General Methods of Teaching in Elementary Schools.

5 hours; one semester.

56 (12). METHODS OF TEACHING THE MIDDLE SCHOOL SUBJECTS (中學各科教學法). A detailed and highly practical course in the essentials of modern special method in the teaching of particular subjects. Lesson plans are made and criticised. Prerequisite: Education 51. *Not offered in 1929-30.*

Douglass: Modern Methods in High School Teaching.

5 hours; one semester.

57 (31). SCIENTIFIC STUDY OF THE CURRICULUM (課程之科學的研究). An advanced course dealing with the principles and the technique of constructing school curricula.

Charters: Curriculum Construction.

61 (37). HISTORY OF EDUCATIONAL IDEAS IN CHINA (中國教育思想史). Lectures and reports. Open without prerequisites to Upper Division students. *Not offered in 1929-30.*

2 hours; one semester.

62 (17). NATIONAL SYSTEMS OF EDUCATION (各國教育制度比較論). A survey of the educational systems of such nations as Canada, England, France, Germany, Japan, Russia and the United States. *Not offered in 1929-30.*

2 hours; one semester.

63 (32). PROBLEMS OF ADMINISTRATION AND SUPERVISION IN CHINA (中國學校管理及觀察的問題). A treatment of the important general problems of school administration. Prerequisites: Education 51 and 73. *Not offered in 1929-30.*

3 hours; one semester.

65 (14). SCHOOL ADMINISTRATION (學校管理法). An advanced practical course in the conduct and supervision of schools. *Not offered in 1929-30.*

Cubberley: The Principal and His School.

3 hours; one semester.

66 (17). SCHOOL PLANNING (學校經營法). An advanced course in the working out of school building programs. *Not offered in 1929-30.*

3 hours; one semester.

71 (34). EDUCATIONAL PSYCHOLOGY (教育心理學). A study of the practical applications of psychology to educational work. Prerequisite: Psychology 21 (or Psychology 11 of 1928-29).

Gates: Psychology for Students of Education.

Classroom 2 hours, laboratory 2 hours (3 credits); one semester.

72 (36). INTELLIGENCE AND ITS TESTING (智力與智力測驗). An advanced study of the various theories concerning intelligence, with a critical examination of the present methods of measuring intelligence. Prerequisite: Psychology 21. Education 71 is recommended but not required as a prerequisite. *Not offered in 1929-30.*

Pintner: Intelligence Testing.

Classroom 2 hours, laboratory 2 hours (3 credits); one semester.

73 (30). MEASUREMENT IN EDUCATION (教育測驗). An introduction to the technique of scientific measurement of the results of instruction.

Rugg: A Primer of Graphics and Statistics.

McCall and Bixler: How to Classify Pupils.

Classroom 2 hours, laboratory 4 hours (4 credits); one semester.

74 (33). SCIENTIFIC METHOD IN THE STUDY OF EDUCATION (教育之科學的研究方法). An introduction to the technique of statistical and experimental investigation as applied to the work of the school. Prerequisite: Education 73. *Not offered in 1929-30.*

McCall: How to Experiment in Education.

Classroom 2 hours, laboratory 2 hours (3 credits); one semester.



**SPECIAL COURSES.** The following special courses are offered in rotation as demand arises. An effort is made to include in each course observation and actual participation in classroom work. *None offered in 1929-30.*

- 76 (20). THE TEACHING OF ENGLISH. (英文教學法) 4 credits.  
 77 (21). THE TEACHING OF CHINESE. (中文教學法) 4 credits.  
 78 (22). THE TEACHING OF MATHEMATICS. (數學教學法) 4 credits.  
 79 (23). THE TEACHING OF NATURAL SCIENCE. (自然科學教學法) 5 credits.  
 80 (24). THE TEACHING OF SOCIAL SCIENCE. (社會科學教學法) 5 credits.  
 81 (25). THE TEACHING OF RELIGION AND ETHICS. (宗教及倫理科教學法) 4 credits.  
 82 (27). THE TEACHING OF ART. (美術科教學法) 4 credits.  
 83 (28). THE TEACHING OF COMMERCIAL SUBJECTS. (商科教學法) 4 credits.

85 (8). PRACTICE IN SCHOOL MANAGEMENT (學校管理實習). A limited number of students acquire by experience under supervision an acquaintance with the practice and details of efficient school administration. No credit if the student has had Education 65. *Not offered in 1929-30.*

1 credit; one semester.

87 (3). BOY SCOUT LEADERSHIP (童子軍領袖的訓練). A practical study of the program and work of the Boy Scouts and similar Boys' work programs. Open to men students only. *Not offered in 1929-30.*

Class work 1 hour, practical work 3 hours (2 credits); one semester.

88 (39). LIBRARY TECHNIQUE (圖書館管理法). The problem of the library in the school, particularly the smaller ones, with practical suggestions as to its equipment, organization and administration.

1 hour; one semester.

89. PHYSICAL EDUCATION (體育學).

Classroom 1 hour, practical work 2 hours (2 credits); one semester.

91 (40). SEMINAR (教育專題研究). For advanced students, subjects of investigation to be determined by special arrangement.

1 to 3 credits.

### ENGLISH

PROFESSOR GRIEDER, SPENCER, S. Y. CHAN AND HOSTETTER;

MISS DAWSON

THE DEPARTMENT OF ENGLISH offers a major in Western Literature, the purpose of which is to acquaint students with the history, the ideas, and the forms of European and American Literature. While special study is made of some of the national literatures, the approach aims to be general and international, with emphasis upon the universal elements in the literature of the western countries.

Students choosing Western Literature as their major are required to take a minor in Chinese. They must also have a reading knowledge of French by the time they enter their Senior year. A minor in western literature is open to students (except those majoring in the Natural sciences) with majors in other departments in the College of Arts and Sciences or in the College of Business Administration.

Students planning to major in Western Literature will take the regular Arts curriculum in the Freshman year, and follow it with the following program, which gives general requirements in some subjects but leaves the specific courses open to election.

### Program for Students Majoring in Western Literature

	FIRST SEMESTER		SECOND SEMESTER	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
SOPHOMORE	Chemistry 25a	3	Chemistry 25b	3
	Chinese Literature 21a	3	Chinese Literature 21b	3
	English Literature 15a	3	English Literature 15b	3
	French 21a (or German 21a)	5	French 21b (or German 21b)	5
	Government 2	1	History 22	3
	History 21	3	or Philosophy 26	3
	or Philosophy 21	3		
	Chinese Literature	3	Chinese Literature	3
	English Literature	9-6	English Literature	9-6
	French 51 (or German)	3	French 52 (or German)	3
JUNIOR	Approved Electives	8-6	Approved Electives	3-6
	Chinese Literature	3	Chinese Literature	3
	English Literature	9	English Literature	9
SENIOR	Approved Electives	6-5	Approved Electives	6-5

1a-b. COMPOSITION AND READING (英文作文及瀏覽). Organization of sentence, paragraph and theme. Systematic practice in writing. Reading of essays, stories, short plays, and poems. Particular attention to building up the vocabulary. Prescribed for all Freshmen. (Textbooks for 1 a only are given below.)

Greever and Jones; Century Collegiate Handbook.

Hart and Perry: Representative Short Stories.

4 hours; two semesters.

3c-d. PHONICS (英文發音及演說學). Drill in pronunciation and oral expression. For students taking English 1a-b who need additional practice in spoken English. No credit, but the hours are counted towards the total number of credit-hours permitted.

2 hours; each semester.

15a-b. TYPES AND MASTERPIECES OF WESTERN LITERATURE (西洋文學之身曾載及名著). A general survey of the field of western literature, with special attention to significant writers and important literary forms.

Shoverman and Cunliffe: Century Readings in Ancient, Mediaeval and Modern Literature.

3 hours; two semesters.

21a-b. ADVANCED COMPOSITION (高級作文). Studies in written discourse, based upon extensive reading of selected material. Practice in the writing of essays, dialogues, short stories, letters and book reviews.

*Fulton*: Writing Craftsmanship.

*Grose*: College Composition.

3 hours; two semesters.

51a-b (31). HISTORY OF ENGLISH LITERATURE (英文文學史). English Literature considered as an expression of the intellectual growth and social development of the English people. *Offered in 1930-31.*

3 hours; two semesters.

62a-b. THE CONTEMPORARY NOVEL (現代小說). Recent tendencies in form and in choice of subject matter. Rapid reading of significant novels by English, American and Continental authors. *Offered in 1930-31.*

3 hours; two semesters.

63a-b. THE EUROPEAN NOVEL (歐洲小說). A brief enquiry into origins. Chief emphasis is placed upon the English, American, French and Russian novelists of the nineteenth century. *Not offered in 1929-30.*

3 hours; two semesters.

65 (41). THE SHORT STORY (短篇小說). The content and technique of the short story, with particular reference to recent tendencies.

*Brewster*: A Book of the Short Story.

*Clark*: A Manual of the Short Story.

3 hours; one semester.

67. GREAT ESSAYISTS (論文名家). The development of the essay as a literary form. Extensive reading in the work of the great essayists, with attention to present day writers.

3 hours; one semester.

71a-b. DEVELOPMENT OF EUROPEAN DRAMA (歐洲戲劇之演進). From the origins in Greece down through the realistic revolt of Ibsen, Becque, Hauptmann and their followers. Especial attention to the evolution of the theater, and to the relationship between the drama and the theater. *Offered in alternate years, beginning with 1929-30.*

*Hubbell and Beaty*: An introduction to Drama.

3 hours; two semesters.

72a-b. WESTERN DRAMA SINCE IBSEN (易卜生以後之西劇). The themes and technique of recent drama in Europe and America. Attention to the changing conditions in the theater, and to significant experiments in dramatic form. *Offered in alternate years, beginning with 1930-31.*

3 hours; two semesters.

74a-b. SHAKESPEARE AND HIS TIMES (莎士比亞及其時代). The principal plays of Shakespeare are studied against the background of the Elizabethan age. Attention is paid to the work of Shakespeare's contemporaries, and to the conditions of the Elizabethan play-houses. *Offered in 1930-31.*

3 hours; two semesters.

81a-b. ENGLISH POETRY (英文詩歌). An introductory study of poetic forms, followed by readings from English and American poets, chiefly of the nineteenth and twentieth centuries. *Offered in alternate years, beginning with 1929-30.*

*Elliott and Foerster*: English Poetry of the Nineteenth Century.

3 hours; two semesters.

85a-b SPECIAL PROBLEMS IN WRITING (著作之特別問題). The writing of original essays, sketches and other forms, under the supervision of an instructor. Individual conferences. Enrollment only by permission of the head of the department. *Not offered in 1929-30.*

Credits and hours to be arranged individually.

## FRENCH

MISS DAWSON

21a-b (1). ELEMENTARY FRENCH (初級法文). Essentials of grammar, including all the irregular verbs; daily written exercises; conversation. Reading of prose of simple to moderate difficulty.

*Fraser and Squair*: Shorter French Coures.

*Guerber*: Contes et Legendes.

*Lesage*: Gil Blas

*Fontaine*: En France.

5 hours; two semesters.

23 (8). FRENCH CONVERSATION (法語會話). A course in conversation and oral composition, conducted entirely in French. Prerequisite: French 21a.

*Fournon and Broussard*: Pour Parler Francais.

3 hours; one semester.

51 (12.) FRENCH PROSE AND POETRY (法文文學). A rapid reading course in the best French novels and poems of the classical and modern authors. Some work in composition is included. *Not offered in 1929-30.*

3 hours; one semester.

52 (18). FRENCH DRAMA (法文戲劇). Rapid reading of selected plays of Corneille, Racine, Moliere, Hugo and Rostand. Advanced composition and grammar. *Not offered in 1929-30.*

3 hours; one semester.



**GERMAN**

PROFESSOR GRIEDER

21a-b (1). ELEMENTARY GERMAN (初級德文). Grammar and exercises, with conversation and composition. Reading of simple texts.

*Manfred*: Ein Praktischer Anfang.

*Foster*: Geschichten und Maerchen.

*Bacon*: Im Vaterland.

5 hours; two semesters.

51a-b (11 12). INTERMEDIATE GERMAN (高級德文). Rapid reading of short stories and plays. Study of syntax and idiom; frequent compositions. *Not offered in 1929-30.* Prerequisite: German 21.

3 hours; two semesters.

61a-b (21). SCIENTIFIC GERMAN (科學應用德文). Students are prepared to read scientific articles in German. Special attention is given to difficulties of grammatical construction. Prerequisite: German 21. *Not offered in 1929-30.*

3 hours; two semesters.

**GOVERNMENT**

PROFESSORS BROWNELL AND CHAO; MR. MARSHALL.

Students may elect a major, a minor, or separate courses in Government, relating their work to either Economics, History or Sociology. Students who wish to major in government should follow the regular program for Arts students in the Freshman year, as given on page 10: In their Sophomore year they should choose the following subjects from those listed in the Sophomore program on page 12: Chemistry 25, English Literature 21, Government 2, Government 21, History 21 and 22, and Sociology 21, and either Chinese Literature 21 or Philosophy 21 and 26.

In the Upper Division the program is: *Junior* year, each semester; Chinese Literature, 3 credits; Major (Government), 9 to 6 credits; Minor, 3 credits; Approved Electives, 3 to 6 credits; *Senior* year, each semester; Major (Government), 9 credits; Minor, 3 credits; Approved Electives, 6 or 5 credits.

1. GOVERNMENT AND POLITICS OF DR. SUN YAT-SEN (中國政府及政治問題). *Not offered in 1929-30.*

2 hours; one semester.

2. SOCIAL PRINCIPLES OF DR. SUN YAT-SEN (中山遺教). Lectures on the principles and life-work of Dr. Sun Yat-sen. Required of all candidates for graduation, all colleges.

1 hour; one semester.

5. PRINCIPLES OF GOVERNMENT (政治原理). An introductory study of the fundamental principles, functions and problems of government.

*Garner*: Political Science and Government.

3 hours; one semester.

21 (12). COMPARATIVE WESTERN GOVERNMENTS (西洋政體之比較). A comparative study of the political institutions of the leading countries of Europe and America, and the problems confronting them. Prerequisite: Government 5. Prerequisite to all later courses in government.

*Munro*: Governments of Europe.

5 hours; one semester.

51a-b (13). MUNICIPAL GOVERNMENT (市政府). A general study of the modern municipality in its various aspects; principles and methods of municipal administration.

*Munro*: Municipal Government and Administration.

3 hours; two semesters.

55 (27). INTRODUCTION TO PUBLIC ADMINISTRATION (民衆管理學導論). A general survey of the problems of public administration; organization, personnel, control and finance; applications to the situation in China.

3 hours; one semester.

61 (30). ELEMENTS OF JURISPRUDENCE (法理學初步). Scope and method of jurisprudence; meaning, sources and object of law; analysis and legal rights; nature and elementary principles of private, public and international laws. *Offered in alternate years, beginning with 1929-30.*

3 hours; one semester.

63 (21). INTERNATIONAL LAW (國際公法). The origin, development and actual applications of the principles of law governing the intercourse of states in peace and war.

*Hershey*: The Essentials of International Public Law and Organization.

3 hours; one semester.

64 (23). INTERNATIONAL LAW (國際公法). Continuation of course 63, using the case method. Prerequisite: Government 63.

3 hours; one semester.

71 (24). HISTORY OF WESTERN POLITICAL THOUGHT (西洋政治思想史). A survey of the development of Western political theories from the classical period to the present time, emphasizing the evolution of systematic political reasoning in its relation to social and political movements and intellectual currents. *Not offered in 1929-30.*

3 hours; one semester.

76 (21). INTERNATIONAL ORGANIZATION (國際組織). A study of the origin and development of the modern state system; consular and diplomatic services; methods of settling international disputes; the League of Nations, etc.

Potter: And Introduction to the Study of International Organization.

3 hours; one semester.

79 (18). PROBLEMS OF POLITICAL GEOGRAPHY (政治地理問題). Problems of political sovereignty and administration arising from the expansion of Europe in the nineteenth century and the peace settlements at the close of the World War, studied in their geographic background. A discussion of areas of friction, mandated territories, and problems of empire in the borderlands of China. *Not offered in 1929-30.*

Bowman: New World.

3 hours; one semester.

81 (18). PROBLEMS OF DEMOCRACY (民主政體問題). An examination of some of the more important problems of modern democracy.

3 hours; one semester.

83 (31). PROBLEMS OF CHINESE DIPLOMACY (中國外交問題). A close study of China's foreign relations. Prerequisites: History 21 and 22.

3 hours; one semester.

91 (32). RESEARCH IN CHINESE DIPLOMACY (中國外交研究課). A seminar course dealing with special problems. Students may register for the course only with the approval of the instructor.

2 hours; one or two semesters.

### HISTORY

PROFESSORS BROWNELL AND REES; MR. MARSHALL

Students may elect a major, a minor, or separate courses in History, relating their work to any of the social sciences. Those who wish to major in History should follow the regular program for Arts students in the Freshman year, as given on page 10. In their Sophomore year they should choose the following subjects from those listed in the Sophomore program on page 12: Chemistry 25, English Literature 21, Government 21, Government 2, History 31, and Sociology 21, and either Chinese Literature 21 or Philosophy 21 and 26.

In the Upper Division the program is: Junior year, each semester; Chinese Literature, 3 credits; Major (History), 9 to 6 credits; Minor, 3 credits; Approved Electives, 3 to 6 credits; Senior year, each semester; Major (History), 9 credits; Minor, 3 credits; Approved Electives, 6 or 5 credits.

1a-b. EUROPE DURING THE LAST CENTURY (歐洲近世史). The progress of the older powers, the rise of Germany and Italy, the Concert of Europe, national imperialism, and the causes of the World War. Lectures, discussion and essays.

Hayes: Political and Social History of Modern Europe, Vol II.

3 hours; two semesters.

21 (11). MODERN CHINESE HISTORY (中國近世史). Emphasis on the intercourse of China with the West, particularly from the time of Chien Lung through the first foreign war. Lectures and assigned readings in Chinese and foreign authorities.

3 hours; one semester.

22 (12). MODERN CHINESE HISTORY (中國近世史). As above, beginning with the treaty regime and including the intercourse with Japan and the final years of the Tsing dynasty.

3 hours; one semester.

31 a-b (18). THE WORLD AT WAR AND SINCE 1918 (大戰時與戰後之世界形勢). A discussion of war guilt, the political phases of the struggle, the settlement, the League of Nations, the Succession States, the minorities, Germany and Italy revolutionized, and the prospects for peace.

Slosson: Twentieth Century Europe.

3 hours; two semesters.

41 (3). THE CIVILIZATION OF GREECE AND ROME (希臘羅馬文化史). A study of the foundations of western civilization. Great personalities of the period and achievements in politics, art, literature and science, showing how these are related to the modern world and are of value to it.

3 hours; one semester.

51 (34). LEGAL AND POLITICAL HISTORY OF CHINA (中國法制史). A general survey of the legal and political aspects of China's history and development. *Not offered in 1929-30.*

2 hours; one semester.

53 (35). HISTORY OF CHINESE IMMIGRATION INTO FOREIGN COUNTRIES (華僑史). A historical study of the conditions under which Chinese have emigrated and are living abroad. *Not offered in 1929-30.*

2 hours; one semester.

56 (33). HISTORY OF CHINESE RITES, CUSTOMS, CEREMONIES AND ETIQUETTE (中國禮俗史). A historical and critical study of the Chinese principles and rules of propriety and social order. Lectures, discussions and reports. *Not offered in 1929-30.*

2 hours; one semester.

61 (15). MODERN JAPAN (日本近世史). The opening of Japan, her revolution and constitutional progress during the Meiji era; her foreign relations, especially with China, and her rise to the rank of a great power. Lectures and assigned readings in Japanese and foreign authorities.

3 hours; one semester.

62 (16). MODERN JAPAN (日本近世史). Social and economic progress of Japan since her revolution, and political and foreign relations since the Meiji era; The bearing of her problems on the situation in China. Lectures and assigned readings in Japanese and foreign authorities.

3 hours; one semester.



72, 73 (19, 20). CONTEMPORARY HISTORY (時事問題). A running survey of current affairs throughout the world based on the most recent magazines, to familiarize the student with present-day events, to enable him to connect them up with their historical backgrounds, and to create a permanent interest in public opinion and public life. Reports on articles by students at each class meeting and a discussion by all the class. *Not offered in 1929-30.*

2 hours; one or two semesters.

75. THE DEVELOPMENT OF CIVILIZATION IN ENGLAND SINCE 1815. (一八一五年後之英國文化). A study of various aspects of national life: political, social and economic, literary and scientific, educational and religious, and of some of the leading personalities.

*Trevelyan*: British History in the Nineteenth Century.

*Marvin*: The Century of Hope.

3 hours; one semester.

77 (22). HISTORY OF RUSSIA (俄國史). The geography, people and historical background of modern Russia, and the political and social development up to 1905. The revolutions of 1905 and March and November 1917, and conditions during the Soviet regime.

*O'Hara and Makeef*: Russia.

*Pares*: A History of Russia.

3 hours; one semester.

79 (21). TURKEY RECONSTRUCTED (土耳其維新史). The history of the Ottoman Empire traced in rapid outline; Turkey in the 20th century defeated in three wars, victorious in a fourth; freed from extraterritoriality, unified and transformed into a republic of western type. Some parallels with Chinese problems.

*Toynbee and Kirkwood*: Turkey.

3 hours; one semester.

81 (31). HISTORY OF THE UNITED STATES (美國史). The founding, expansion and unifying of the nation studied with special emphasis on the problems of federalism and the cases of democracy. *Not offered in 1929-30.*

*Hockett*: Political and Social History of the United States (1472-1828.).

3 hours; one semester.

82 (32) HISTORY OF THE UNITED STATES (美國史). The growth of the nation, its political, social, racial and international problems down to the present. *Not offered in 1929-30.*

*Schlesinger*: Political and Social History of the United States (1829-1925).

3 hours; one semester.

## HORTICULTURE

PROFESSORS GROFF, CHEUNG, LEE AND SHIU; MR. H. T. HOH

THE DEPARTMENT of Horticulture offers courses of instruction in growing and marketing vegetables, flowers and fruits. A wealth of illustrative material for the classes in Horticulture is found in the large

collection of foreign and native species growing upon the University campus, in the lychee and citrus orchards to the south of the University, in the extensive vegetable gardens close at hand, and in the commercial flower gardens at Fati. Each student is required to maintain a garden of his own, where he can put into practice the ideas received. All students in the College of Agriculture are required to take Horticulture 11 in the Sophomore year, and two Upper Division courses, not listed below. Students who wish to major in Horticulture will find a variety of courses offered especially for them, and described on the special bulletin to be posted at the beginning of the year. Students may take any of the courses in Horticulture as electives if they have the prerequisites, and the approval of their advisor.

11. PRINCIPLES OF VEGETABLE GROWING (蔬菜園藝大要). Problems and possibilities of the market garden; necessary soil requirements and sanitary methods of applying fertilizers, methods of starting early fall vegetables by protecting the seedling from the intense heat of the summer; systems of cropping; methods of tilling, irrigating, picking and marking.

Classroom 2 hours; laboratory 3 hours (3 credits); one semester.

## HOUSEHOLD ARTS

MISS LIAO

21a-b. INTRODUCTION TO HOUSEHOLD ARTS (家政學入門). A general survey of the field of Household, or Practical, Arts, preparatory to the special courses to be provided in the Upper Division beginning with 1930-31

3 hours; two semesters.

## HYGIENE

1. PERSONAL HYGIENE (個人衛生). Lectures dealing with different aspects of the students' health and well being. Prescribed for all Freshmen in the College of Arts and Sciences. Separate sections for men and women students.

1 hour; one semester.

51 (Biol. 4). HYGIENE AND SANITATION (衛生學). Domestic and public hygiene, the science and practice of sanitation, public health administration. Especial emphasis on tropical hygiene in general and on local conditions in particular. *Not offered in 1929-30.*

3 hours; one semester.

## JAPANESE

21a-b (11, 12). ELEMENTARY JAPANESE (初級日文). Essentials of grammar and composition, with the reading of simple texts followed by modern Japanese essays and short stories. *Not offered in 1929-30.*

3 hours; two semesters.

## MATHEMATICS

PROFESSOR MACDONALD

3a-b. INTRODUCTION TO MATHEMATICAL ANALYSIS (數學原理分析概論). A survey of the field of elementary mathematics for Freshman

students, introducing them to the first principles of college algebra, trigonometry, the calculus and analytic geometry. Applications are emphasized.

*Griffin*: Introduction to Mathematical Analysis.

3 hours; two semesters.

5. ASTRONOMY (天文學). Descriptive astronomy, with problem work and naked-eye studies of the sky. *Not offered in 1929-30.*

13a-b. MATHEMATICAL ANALYSIS (數學原理分析). A second course, presupposing a knowledge of Mathematics 3 and developing particularly analytic methods and the principles and applications of the calculus.

*Griffin*: Mathematical Analysis.

3 hours; two semesters.

### PHILOSOPHY

PROFESSORS ZIA AND K. W. LO.

Students may elect separate courses or a minor in Philosophy or a major in the field of Philosophy and Religion. Students who wish to major in philosophy and religion should follow the regular program for Arts students in the Freshman year, as given on page 10. In their Sophomore year they should choose the following subjects from those listed in the Sophomore program on page 12; Chemistry 25, English Literature 21, Government 2, Philosophy 21, Philosophy 26, Psychology 21, Sociology 21, and either Chinese Literature 21 or History 11 and History 21.

In the Upper Division the program is: *Junior* year, each semester; Chinese Literature 3 credits; Major (Philosophy and Religion), 9 to 6 credits; Minor, 3 credits, Approved Electives, 3 to 6 credits; *Senior* year, each semester; Major (Philosophy and Religion), 9 credits; Minor, 3 credits; Approved Electives, 6 or 5 credits.

21. INTRODUCTION TO PHILOSOPHY (哲學導論). An introductory course dealing with the nature and import of philosophy, the problems of metaphysics, epistemology, and value. *Offered in alternate years, beginning in 1929-30.*

3 hours; one semester.

23. PHILOSOPHY OF LIFE (人生哲學). A study of the problems of human life in the light of the present age. Life ideals by various schools, oriental and western, will be compared. Special attention is given to the theory of life based upon emergent evolution. *Offered in alternate years, beginning in 1930-31.*

3 hours; one semester.

26 (13). ETHICS (倫理學). The origin and development of morality; typical ethical theories; modern ethical problems. *Offered in alternate years, beginning in 1929-30.*

3 hours; one semester.

28 (14). LOGIC (邏輯學). Fundamental principles of logic; the nature and laws of reasoning; deduction, induction, scientific method and judicial proof. *Offered in alternate years, beginning in 1930-31.*

3 hours; one semester.

51 (21). ANCIENT CHINESE PHILOSOPHY (中國古代哲學). A careful and critical study of pre-Tsin thoughts: Taoism, Confucianism, and other types.

4 hours; one semester.

52 (22). MODERN CHINESE PHILOSOPHY (近世中國哲學). The origin and basis of Neo-Confucianism from the Sung to the Chiu dynasty, with a comparison with similar types of Western philosophy.

4 hours; one semester.

54 (24). CHINESE ETHICAL IDEAS (中國倫理思想). An analytical study of the theories of social and individual ethics presented by various Chinese philosophers, comparing them with the ethical ideas of other nations.

3 hours; one semester.

59. INDIAN PHILOSOPHY (印度哲學). An introductory survey of the Buddhistic view of life and the universe, as well as other forms presented by ancient and modern thinkers of India.

3 hours; one semester.

61 (23a). ANCIENT AND MEDIAEVAL WESTERN PHILOSOPHY (西洋古代中世哲學). A general survey of the development of western philosophy from the early Greek to mediaeval scholasticism. *Not offered in 1929-30.*

3 hours; one semester.

62 (23b). MODERN WESTERN PHILOSOPHY (西洋近代哲學). A continuation of course 51, from philosophy of the renaissance to Kantianism. *Not offered in 1929-30.*

3 hours; one semester.

65. SOCIAL AND POLITICAL THOUGHT (社會政治哲學). The typical problems of state and social organization and progress are considered. The conceptions of freedom, justice, rights and democracy are dealt with with reference to present economic and industrial conditions.

3 hours; one semester.

66 (15). AESTHETICS. (美學). The nature and genesis of art; the elements of aesthetic experience; the meaning of beauty in the various fields of art; relation of art to morality and religion.

3 hours; one semester.

67. NINETEENTH CENTURY THOUGHT (西洋十九世紀思想). The main currents of thought in the nineteenth century are traced; romanticism, idealism, positivism, utilitarianism and the doctrine of evolution are considered.

3 hours; one semester.



68 (31). CONTEMPORARY PHILOSOPHY (現代哲學). A general survey of contemporary philosophical tendencies: the main issues of various contemporary systems.

3 hours; one semester.

69 (31). CONTEMPORARY METAPHYSICS (現代學). Problems in current metaphysics, especially the theory of knowledge. Materials from recent writings of contemporary philosophers.

3 hours; one semester.

70 (26). PHILOSOPHY OF VALUE (價值哲學). A discussion of the meaning and principles of instrumental and intrinsic values.

3 hours; one semester.

75 (25). PHILOSOPHY OF RELIGION (宗教哲學). The meaning and value of religion; the problem of God, of immortality, of the vocation of man; the nature and evolution of religious consciousness.

3 hours; one semester.

91 (33). SEMINAR (哲學研究班).

1-2 hours; one or two semesters.

## PHYSICS

PROFESSORS KNIPP AND GILROY; MESSRS. HUI AND NG

THE DEPARTMENT OF PHYSICS has, in the Willard Straight Science Hall, both the space and equipment for regular classwork and for research. Besides three lecture rooms, offices, apparatus and stock rooms, there are three large laboratories, two small laboratories and two research rooms. The equipment for experiments in radio is especially good.

In addition to a considerable number of well selected books, and the journals listed elsewhere (especially some of those named on page 25), the Department has available current numbers of the following: *Journal of the Optical Society of America*, *Journal of Terrestrial Magnetism*, *London, Edinburgh and Dublin Philosophical Magazine* (1832-date), *National Research Council Bulletins*, *Physical Review*, *Radio Broadcast*, *Science Abstracts*, and *Scientific American*.

The Department offers a major for those who expect to make Physics their profession. Those who are planning to teach physics may choose this major taking courses in Psychology (21) and Education (21, and others) in place of a part of the approved Electives of the Junior and Senior years. Further information about the character of the courses listed on the following program as "Advanced Physics" may be obtained by writing to the Department. Students wishing to major in Physics should take the program specified on page 10 for Freshmen in science, and the following program in later years.

## Program for Students Majoring in Physics

	SEMESTER I		SEMESTER II	
	SUBJECTS	CREDITS	SUBJECTS	CREDITS
SOPHOMORE	Chinese Literature 1a	3	Chinese Literature 1b	3
	Economics 1 a	2	Economics 1b	2
	Mathematics 13 a	4	Mathematics 13 b	4
	Physics 21	4	Physics 22	4
	Physics 23	4	Physics 24	4
JUNIOR	Chemistry 12 a	4	Chemistry 12 b	4
	Advanced Mathematics	3	Advanced Mathematics	3
	Advanced Physics	8	Advanced Physics	8
	Approved Electives	3	Approved Electives	3
SENIOR	Advanced Physics	8	Advanced Physics	9
	Approved Electives	9	Approved Electives	8

21-24 (11,12). GENERAL PHYSICS (物理學). A brief rigorous presentation of general physics. A four semester course: Semester I (21), Mechanics; Semester II (22), Heat and Sound; Semester III (23), Light; Semester IV (24), Electricity and Magnetism. Prerequisites: Physics A-B (or equivalent), Geometry, Trigonometry and College Algebra.

Caswell: Outline of Physics.

Watson, Taylor and Howe: General Physics for the Laboratory.

Classroom 3 hours, laboratory 2 hours (4 credits); two semesters.

41. INTRODUCTION TO RADIO THEORY AND MEASUREMENTS (無線電學初步). Principles of radio communication; construction and use of receiving sets. Enrollment by permission of the instructor. Prerequisite: Grade above average in entrance physics.

Classroom 2 hours; laboratory 3 hours (3 credits); one semester.

51. (41). KINETIC THEORY (顯力說). Prerequisites: Mathematics 13, Physics 21-24. Not offered in 1928-30.

3 hours; one semester.

52 (41). ELECTRON THEORY (電子說). Prerequisites: Mathematics 13, Physics 21-24. Not offered in 1929-30.

3 hours; one semester.

## PSYCHOLOGY

PROFESSOR SPENCER

21 (11). ELEMENTARY PSYCHOLOGY (心理學概論). Physiological psychology is emphasized and various tests of the sense organs are given; psychological methods and problems are studied. Prerequisite to all other courses in psychology and to Education 21.

Classroom 4 hours, laboratory 2 hours (5 credits); one semester.