

314 4810

UBCHEA ARCHIVES
COLLEGE FILES
RG 11

Yenching
Academic
College of Natural Sciences
General bulletins + reports 1929-1930

0272

0272

燕京大學
YENCHING UNIVERSITY
BULLETIN

College of Natural Sciences
Announcement of Courses

1929=30



Peping, China
July, 1929

0274

0274

COLLEGE OF NATURAL SCIENCES

Academic Regulations.

1. *Entrance.* Students graduating from Senior Middle Schools or other schools of similar standing may be admitted into the College by successfully passing the Entrance Examination.
2. *Major Departments.* A regular student in this College must elect one of the following Departments as his or her Major Department: Biology, Chemistry, Geography and Geology, Home Economics, Mathematics, and Physics.
3. *Graduation.* A regular student on fulfilling the prescribed curriculum of one of the Major Departments in this College and passing all examinations will receive the diploma of Bachelor of Science.
4. *Required Courses.* The College offers the following types of required courses

A. *General Requirements.* A regular student in the First Year Class must fulfill the following requirements during the First-Year.

<u>Subject</u>	<u>Year Credits</u>
Chinese	4 credits
English	8 "
Natural Sciences	16 "

A student must elect courses from any two of the following: Biology, Chemistry, Geography, Geology, Mathematics, Physics.

Mathematics	4 "
---------------------	-----

A student who takes 8 credits in Mathematics as one of the Natural Sciences will be excused from taking the 4-credits in some other course instead.

Social Science	4 "
------------------------	-----

Total Credits for the First Year 36 "

A woman student must take one credit in Hygiene in the second semester of the first year, making a total of 37 credits for the whole year.

B. *Department Requirements.*

- (1) A regular student in this College must at the beginning of the Second Year elect one of the Departments as his or her Major Department. If for special reasons the student is unable to do so at the stated time, he or she must secure permission of the Dean to defer the decision to a later date.
- (2) In addition to the general requirements prescribed for the First Year, a regular student in this College must fulfill at least the following requirements for graduation besides other requirements that are prescribed by the Major Department:

<u>Courses</u>	<u>Total Credits</u>
In Major Department.....	32-68 credits
In correlated subjects.....	16-24 "

The nature of the correlated subjects is determined by each Major Department.

5. *Credits And Grade Ratio.*

- A. A regular student in the College must take 136 credits and have a general grade ratio of 1.00 or more in order to graduate.
- B. A regular student in the First and Second Year Classes should take 18 credits each semester and a regular student in the Third and Fourth Year Classes should take 16 credits each semester. A woman student taking one credit in Hygiene in the second semester of the First Year may take a total of 19 credits in that semester.
- C. A regular student should not take less than 12 credits in any semester.
- D. On being promoted to the Second Year Class, if a student should lack 8 or less than 8 credits, he or she may be subject to one of the following regulations:
 - (1) With the approval of the Major Department and the Dean the student may during the second year take as many as 22 credits each semester to make up the deficiency.
 - (2) During the second year the student may take only 12 credits each semester. If the general grade ratio of this second year

should be 1.00 or more, the student will be permitted to spend a third year to complete the courses prescribed for the Second Year.

- E. If a student during any year has a general grade ratio of less than .80 for the work of that year, the student will be dropped from the College.
- F. If a student during any two successive years has a general grade ratio of less than 1.00 for the work of each year, that student will be dropped from the College.
6. *Short Courses.* Different types of Short Courses may be given by the College. A student on fulfilling the prescribed work in a short course and passing all examinations will be granted the certificate of that Short Course but will not be given college credits for such work.

DEPARTMENT OF BIOLOGY

Chenfu F. Wu, M. A., Ph. D. . . . .	..Professor and Chairman
Alice M. Boring, M. A., Ph. D.. . . .	..Professor
Ju-ch'i Li, M.A., Ph. D . . . . .	..Assistant Professor
Tse-ying Ch'en, M. A., Ph. D . . . . .	..Assistant Professor
Cheng-chao Liu, B. S., M. A. . . . .	..Instructor
Shao-wen Lin, B. S. . . . .	..Assistant
Shu-chun Chou, B. S. . . . .	..Assistant

The functions of the Department are (1) to provide the necessary courses which are fundamental to the curricula in Pre-medicine, Pre-nursing, Leather Tanning and Home Economics and other professional and technical work in Biology, (2) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Sciences, (3) to train students for teaching general Science and Biology, (4) to prepare students for research work in Biology, and (5) to offer opportunities to graduates for carrying on research work in Biology.

DEPARTMENTAL REGULATIONS

A major student in this Department must fulfill the following requirements for graduation:

(1) Chinese . . . . .	.. 4	credits
English . . . . .	..16	..
Chemistry.. . . .	.. 8	..
Mathematics . . . . .	.. 4	..
Social Sciences (Psy., Educ., Econ., or Soc.)	.. 8	..
Major.. . . .	..48	..

Of the 48 credits of major the following courses are required:

Biology 1-2.....	8	credits
Biology 51, 52.....	8	..
Biology 101, 102...6	..	..
Biology 103, 104...6	..	..
Biology 151, 152...4	..	..
Biology 153, 154...4	..	..
Correlated subjects (Physics,		
Chemistry, or Geology . . . . .	..16	..
Electives . . . . .	..32	..
	Total	136 credits

- (2) In Biology 151 and 152 the student must satisfactorily complete a thesis on a biological problem under the supervision of a Professor in this Department.
- (3) The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJOR CURRICULUM IN BIOLOGY.

FIRST SEMESTER		SECOND SEMESTER	
<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Biol. 1)	4	Nat. Sc. (Biol. 2)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Mathematics 1	2	Mathematics 2	2
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
		Hygiene (for women)	1
	<u>18</u>		<u>18</u>
<i>Second Year</i>		<i>Second Year</i>	
English 5	4	English 6	4
Major (Biol. 51)	4	Major (Biol. 52)	4
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
Electives	4	Electives	4
	<u>18</u>		<u>18</u>
<i>Third Year</i>		<i>Third Year</i>	
Major (Biol. 101)	3	Major (Biol. 102)	3
Major (Biol. 103)	2	Major (Biol. 104)	2
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Electives	7	Electives	7
	<u>16</u>		<u>16</u>
<i>Fourth Year</i>		<i>Fourth Year</i>	
Major (Biol. 151)	2	Major (Biol. 152)	2
Major (Biol. 153)	1	Major (Biol. 154)	1
Major (Biol. —)	4	Major (Biol. —)	4
Major (Biol. —)	4	Major (Biol. —)	4
Electives	5	Electives	5
	<u>16</u>		<u>16</u>

DEPARTMENT OF BIOLOGY

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	Biol. 106	Biol. 1-2A Biol. 53-54 Biol. 155, 156	Biol. 1-2B Biol. 3 Biol. 106	Biol. 1-2 A Biol. 53-54 Biol. 155, 156	Biol. 1-2 B Biol. 3	
9:30 to 10:30		Biol. 51,52 Biol. 105		Biol. 51,52 Biol. 105		
10:30 to 11:30		Biol. 101, 102	Biol. 158	Biol. 101, 102		
11:30 to 12:30						
1:30 to 4:30	Biol. 1-2X Biol. 53,54 Biol. 103, 104	Biol. 1-2Y Biol. 51-52 Biol. 105, 106 Biol. 155, 156	Biol. 1-2 X Biol. 53,54 Biol. 103, 104 Biol. 158	Biol. 1-2 Y Biol. 51-52 Biol. 105, 106 Biol. 155, 156	Biol. 101, 102	

Biol. 1-2 General Biology 4-4 Credits

A course in the fundamental principles of structure and function in both animals and plants. Emphasis is placed on laboratory methods and on practical applications to everyday life whenever possible. The principles of evolution and inheritance are discussed. Two lectures and six laboratory hours.

Required: Major and Pre-medical students

Elective: 1,2.

Lecture: Section A. T. Th. 8:00.

Section B. W.F. 9:00.

Laboratory: Section X M.W. 1:30-4:30.
Section Y T. Th. 1:30-4:30.

Miss Boring

Biol. 3 Principles of Biology. 4 Credits

A course in the fundamental principles of Biology, dealing with topics of immediate human interest. Offered only to students majoring in Applied Social Sciences. Two lectures and three laboratory hours a week.

Elective: Students majoring in Applied Social Sciences.

Lecture: W.F. 8:00

Laboratory:

Mr. Li

Biol. 51 Invertebrate Zoology 4 Credits

This is a course on the morphology and physiology of the invertebrate groups with special emphasis on the life histories of the pathogenic forms, the evolutionary relationships between the different phyla, and the more important biological principles. Two lectures and six laboratory hours:

Prerequisite: Biol. 1-2.

Required: Major and Pre-medical students

Elective: 2,3.

Lecture: T. Th. 9:30 offered in the first semester

Laboratory: T. Th. 1:30-4:30.

Mr. Wu

Biol. 52 Comparative Anatomy of the Vertebrates 4 Credits

A study of comparative anatomy of the different classes of vertebrates with emphasis on those features in lower vertebrates which throw light on similar features in mammals and man. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.

Required: Major and Pre-medical students

Elective: 2,3.

Lecture: T. Th. 9:30 offered in the second semester

Laboratory: T. Th. 1:30-4:30

Miss Boring

Biol. 53-54 General Botany 4-4 Credits

This course consists of the study of the structure and function of the plant body, the relation of plants to their environments, the evolutionary relationships between the different groups of plants and the classification of plants. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.

Elective: 2,3.

Lecture: T. Th. 8:00

Laboratory: M.W. 1:30-4:30

Not offered in 1929-30.

10

Biol. 101 General Embryology 3 Credits

The course is designed to acquaint the students with all the fundamental principles of embryology. The cell and mitosis are taken up first; then the descriptive and analytical aspects of germ cells, maturation, fertilization, and cleavage phenomena are treated with more or less detail. The most important facts of recent experimental embryology are outlined. The latter part of the semester is devoted to a comparative study of the early development of the vertebrates, particularly frog and chick; the origin and development of the germinal layers, organogenesis and the formation of embryonic membranes are emphasized. Two lectures and three laboratory hours.

Prerequisite: Biology 51,52.

Required: Major students in Biology

Elective: 3,4.

Lecture: T. Th. 10 30 offered in the first semester

Laboratory: F. 1:30-4:30

Mr. Li

Biol. 102 Genetics 3 Credits

The object of the course is to give the students an idea of the theories of organic evolution, Mendelism and biometry. The main emphasis is laid on Mendelism. The study of linkage and crossing-over, chromosome theory of heredity and mechanism of sex determination are critically discussed. The work is rounded up by the study of biometry and its applications. The first two weeks of laboratory work are devoted to the study of unit characters and method of handling experimental material. The study of the inheritance in corn is taken up, followed by a number of breeding experiments on Drosophila. Two lectures and three laboratory hours.

Prerequisite: Biology 51,52.

Required: Major students in Biology.

Elective: 3, 4

Lecture: TTh 10:30. offered in the second semester

Laboratory: F. 1:30-4:30

Mr. Li

Biol. 103 Biological Technique 2 Credits

Principles and practice of making microscopic preparations. Guyer's Animal Micrology will be followed. Six laboratory hours.

Prerequisite: Biol. 51, 52

Required: Major students in Biology

Elective: 3, 4

Offered in the first semester

Laboratory: MW 1:30-4:30

Mr. Wu

Biol. 104 Biological Technique 2 Credits

A practical study of various laboratory methods in collecting, preserving and preparing biological specimens for class and laboratory work. Six laboratory hours.

Prerequisite: Biol. 103

Required: Major students in Biology

Elective: 3, 4

Offered in the second semester

Laboratory: MW 1:30-4:30

Mr. Wu.

11

0281

Biol. 105 Animal Histology 4 Credits

A general study of animal cells and tissues and some typical organs. Fresh material will be studied where possible, and its reaction to various chemicals, which constitutes a foundation for the study of microscopic technique. Two lectures and six laboratory hours.

Prerequisite: Biol. 51, 52

Elective: 3, 4

Lecture: TTh 9:30 offered in the first semester

Laboratory: TTh 1:30-4:30

Miss Boring

Biol. 106 General Entomology 4 Credits

A study of the morphological characters of insects and the representatives of the different orders, with emphasis on their evolutionary relationships, life histories, economic importance and methods of control. Two lectures and six laboratory hours.

Prerequisite: Biol. 51

Elective: 3, 4

Lecture: MW 8:00 offered in the second semester

Laboratory: TTh 1:30-4:30

Mr. Wu

Biol. 151 Biological Problem 2 Credits

Each Major student is expected to show the ability of working out independently a simple problem in Biology under the supervision of one of the Professors who is best trained in the special line. Amount of work equivalent to at least six laboratory hours

Prerequisite: Two years of Biology

Required: Major students in Biology

Elective: 3, 4

Offered in the first semester

Laboratory: Time to be arranged

Biology Staff

Biol. 152 Biological Problem 2 Credits

Each Major student is expected to show the ability of working out independently a simple problem in Biology under the supervision of one of the Professors who is best trained in the special line. Amount of work equivalent to at least six laboratory hours.

Prerequisite: Two years of Biology

Required: Major students in Biology

Elective: 3, 4 offered in the second semester

Laboratory: Time to be arranged

Biology staff

Biol. 153 Journal Club 1 Credit

In this course the faculty and students will give reports on articles in current biological journals. One conference hour.

Prerequisite: Two years of Biology

Required: Major students in Biology

Elective: 3, 4 offered in the first semester

Conference: Time to be arranged

Mr. Li

Biol. 154 Journal Club 1 Credit

In this course the faculty and students will give reports on articles in current biological journals. One conference hour.

Prerequisite: Two years of Biology

Required: Major students in Biology

Elective: 3, 4 offered in the second semester

Conference: Time to be arranged

Mr. Li

Biol. 155 Animal Physiology 4 Credits

A study of the normal functions of the animal body, with special reference to man. Recommended for Home Economic students and Science teachers. Two lectures and six laboratory hours.

Prerequisite: Biol. 51, 52, Chem. 3-4

Elective: 3, 4

Lecture: TTh 8:00 offered in the first semester

Laboratory: TTh 1:30-4:30

Mr. Chen

Biol. 156 General Bacteriology 4 Credits

A general study of the action of bacteria, yeasts and molds, with emphasis on cultural and staining methods. Two lectures and six laboratory hours.

Prerequisite: Biol. 51, 52, Chem. 3-4

Elective: 3, 4

Lecture: TTh 8:00 offered in the second semester

Laboratory: TTh 1:30-4:30

Mr. Chen

Biol. 158 Protozoology 2 Credits

The course deals with an intensive study of the protozoons. Morphological, physical and systematic survey of the unicellular animals are to be taken up in succession. Recent experimental works on the problems of regeneration, conjugation and endomixis are discussed. Emphasis is also laid upon the relation of the protozoon to disease and human welfare. One lecture and three laboratory hours.

Prerequisite: Biol. 51

Elective: 3, 4

Lecture: W 10:30 offered in the second semester

Laboratory: W 1:30-4:30

Mr. Li

DEPARTMENT OF CHEMISTRY.

Stanley D. Wilson, M. A., Ph. D. *Professor and Chairman.*
 Wm. H. Adolph, A. B., Ph. D. *Professor.*
 E. O. Wilson, B. S., S. M. *Professor, in Charge of Industrial and Applied Chemistry.*
 C. P. Ts'ao, B. A. *Instructor.*
 T. C. Wang, B. A. *Instructor.*
 Miss T. Y. Wang, M. S. *Instructor.*
 Paul. C. Chang, B. S. *Instructor in Industrial Chemistry.*
 *L. S. Tsai, B. S., M. S. *Instructor.*
 *Y. C. Wang, B. S. *Graduate Assistant.*
 I. F. Yu, B. S. *Graduate Assistant.*
 W. T. Chang, B. S. *Assistant in Industrial Chemistry.*

The functions of the Department are (1) to provide the fundamental courses necessary in the curricula in Pre-medicine, Pre-nursing, Leather Tanning and Home Economics; (2) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Sciences; (3) to train students for teaching chemistry; (4) to train students as practical chemists and tanners; (5) to offer students specializing in other lines an opportunity to become acquainted with the science of chemistry; and (6) to offer opportunities for graduates to carry on research in Chemistry.

DEPARTMENTAL REGULATIONS.

Students in this Department who take a major in the general field of Chemistry must fulfill the requirements for graduation listed in section A below. Students who take a major in Chemistry with an option in Leather Tanning must fulfill the requirements for graduation listed in section B Below.

A. I.	Chinese.....	4	credits
	English.....	16	„
	Physics or Biology.....	8	„
	Mathematics	4	„
	Social Sciences (Econ, Soc., Hist., Psy., Rel., or Pol. Sci.).....	8	„
	Hygiene (for Women)	1	„
	Major	48	„

The following courses must be taken in making up the 48 credits in the Major.

*Absent, 1929-30.

Chemistry 3-4.....	8	credits
Chemistry 5-6.....	8	„
Chemistry 9-10.....	8	„
Chemistry 125.....	2	„
Chemistry 131-132.....	8	„
Correlated subjects (Biology, Geology, Education, Home Economics, Mathematics or Physics.)...	16	„
Electives.....	32	„
	Total 136 credits	
	Total (for Women) 137 „	

2. In Chemistry 125 the student must complete in a satisfactory manner a thesis on a chemical problem, under the direction of a member of the staff of the Department.
3. The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

B. I.	Chinese	4	credits
	English	16	„
	Social Sciences (Econ.)	12	„
	Mathematics 1-2	4	„
	Biology 1-2	8	„
	Biology 105	4	„
	Biology 156	4	„
	Physics 5-6	8	„
	Leather 71-72	4	„
	Leather 73-74	8	„
	Leather 75-76	8	„
	Chemistry 3-4	8	„
	Chemistry 5-6	8	„
	Chemistry 9-10	8	„
	Chemistry 119-120	8	„
	Chemistry 121-122	8	„
	Chemistry 131-132	8	„
	Chemistry 125	2	„
	Electives	6	„

Total 136 credits.

2. In Chemistry 125 the student must complete in a satisfactory manner a thesis on a problem relating to leather, under the direction of some member of the staff of the Department.
3. The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

0283

MAJOR CURRICULUM IN THE GENERAL FIELD
OF CHEMISTRY.

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Major (Chemistry 3)	4	Major (Chemistry 4)	4
Physics 5 or Biology 1	4	Physics 6 or Biology 2	4
Mathematics 1	2	Mathematics 2	2
Social Science (Econ. Soc., Hist., Psyc., Rel., or Pol., Sci.)	2	Social Science (Econ., Soc., Hist., Psy., Rel., or Pol., Sci.)	2
		Hygiene (for women)	1
	<hr/>		<hr/>
	18		18
<i>Second Year</i>			
English 5	4	English 6	4
Major (Chemistry 5)	4	Major (Chemistry 6)	4
Cor. Subj. (Biol., Geol., Home Eco., Math., Phys. or Educ.)	4	Cor. Subj. (Biol., Geol., Home Econ., Math., Phys. or Educ.)	4
Social Science (Econ., Soc., Hist., Psy., Rel. or Pol. Sci.)	2	Social Science (Econ., Soc., Hist., Psy., Rel., or Pol., Sci.)	2
Elective	4	Elective	4
	<hr/>		<hr/>
	18		18
<i>Third Year</i>			
Major (Chemistry 9)	4	Major (Chemistry 10)	4
Major (Chemistry)	4	Major (Chemistry)	4
Cor. Subj. (Biol., Geol., Home Eco., Math., Phys. or Educ.)	4	Cor. Subj. (Biol., Geol., Home Eco., Math., Phys. or Educ.)	4
Elective	4	Elective	4
	<hr/>		<hr/>
	16		16
<i>Fourth Year</i>			
Major (Chemistry 131)	4	Major (Chemistry 132)	4
Major (Chemistry 125)	2	Major (Chemistry)	4
Major (Chemistry)	2	Elective	8
Elective	8		
	<hr/>		<hr/>
	16		16
	16		16

MAJOR CURRICULUM IN CHEMISTRY WITH
AN OPTION IN LEATHER TANNING.

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Major (Chemistry 3)	4	Major (Chemistry 4)	4
Biology 1	4	Biology 2	4
Mathematics 1	2	Mathematics 2	2
Social Science (Econ.)	2	Social Science (Econ.)	2
	<hr/>		<hr/>
	18		18
<i>Second Year</i>			
English 5	4	English 6	4
Major (Chemistry 5)	4	Major (Chemistry 6)	4
Major (Leather 71)	2	Major Leather 72)	2
Cor. Subj. (Physics 5)	4	Cor. Subj. (Physics 6)	4
Economics	4	Economics	4
	<hr/>		<hr/>
	18		18
<i>Third Year</i>			
Major (Chemistry 9)	4	Major Chemistry 10)	4
Major (Leather 73)	4	Major (Leather 74)	4
Major (Chemistry 119)	4	Major (Chemistry 120)	4
Cor. Subj. (Biology 105)	4	Cor. Subj. (Biology 156)	4
	<hr/>		<hr/>
	16		16
<i>Fourth Year</i>			
Major (Leather 75)	4	Major (Leather 76)	4
Major (Chemistry 121)	4	Major (Chemistry 122)	4
Major (Chemistry 131)	4	Major (Chemistry 132)	4
Elective	4	Major (Chemistry 125)	2
	<hr/>	Elective	2
	16		<hr/>
			16
	17		

0284

DEPARTMENT OF CHEMISTRY.

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00		Chem. 1-2 Chem. 3-4 B	Chem. 133-134	Chem. 1-2 Chem. 3-4 B	Chem. 133-134	
9:30 to 10:30	Chem. 5-6 Chem. 12 Leather 71-72		Chem. 5-6 Chem. 12		Leather 71-72	Chem. 7-8 Lab.
10:30 to 11:30		Chem. 7-8 Chem. 119 Chem. 120 Chem. 131-132	Chem. 9-10	Chem. 119 Chem. 120 Chem. 131-132	Chem. 9-10	Chem. 7-8 Lab.
11:30 to 12:30						Chem. 7-8 Lab.
1:30 to 2:30	Chem. 3-4 A Lect. Chem. 3-4 Chem. 5-6 Leather 73-74 Lab.	Chem. 3-4 Chem. 7-8 Chem. 12 Leather 75-76 Lab.	Chem. 3-4 A, Lect. Chem. 3-4 Chem. 5-6 Chem. 9-10	Chem. 3-4 Chem. 12 Leather 73-74 Lect. Leather 75-76 Lab.	Chem. 7-8 Chem. 9-10	
2:30 to 3:30	Chem. 3-4 Chem. 5-6	Chem. 3-4 Chem. 7-8 Chem. 12	Chem. 3-4 Chem. 5-6 Chem. 9-10	Chem. 3-4 Chem. 12	Chem. 7-8 Chem. 9-10	
3:30 to 4:30	Chem. 3-4 Chem. 5-6	Chem. 1-2 Chem. 3-4 Chem. 7-8 Chem. 12	Chem. 3-4 Chem. 5-6 Chem. 9-10	Chem. 1-2 Chem. 3-4 Chem. 12	Chem. 7-8 Chem. 9-10	
4:30 to 5:30	Chem. 3-4	Chem. 1-2	Chem. 3-4	Chem. 1-2		

The time at which other courses meet will be arranged by conference between the instructors and the students who elect such courses.

Chemistry 1-2 Chemistry for Nurses 4-4 Credits

A study of the elements of general, analytical, organic, and physiological chemistry with special emphasis on problems connected with nursing. Two lectures and four hours of laboratory.

Required: Freshman in prenursing course
Lecture: T, Th. 8:00.
Laboratory: T, Th. 3:30-5:30.

Miss Wang

Chemistry 3-4 Inorganic Chemistry 4-4 Credits

A course in general inorganic chemistry covering both the non metals and the metals, one half of the laboratory time is devoted to qualitative analysis. The course acquaints the student with the important laws, theories and applications of chemistry. The bearing of upon the life of the community and nation is emphasized. Two lectures and six hours of laboratory.

Required: Major in Chemistry and Premedical.
Elective: 1,2, (also 3,4).
Lecture:
Section A: M; W; 1:30, C103.
Section B: T; Th; C103.
Laboratory: Any two of the following periods
M. W. 2:30-5:30 T. Th. 1:30-4:30.

Mr. S. D. Wilson

Mr. C. P. Tsao and
Assistant

Chemistry 5-6 Second Year College Chemistry 4-4 Credits

An intensive study of the fundamental laws and principles of chemistry. About one half of the laboratory work consists of simple experiments illustrating the laws of physical chemistry, while the remainder of the laboratory time is devoted to quantitative analysis. Two lectures and six hours of laboratory.

Prerequisite: Chemistry 3-4.
Required: Major in Chemistry and Premedical.
Elective: 2,3,4.
Lecture: M;W; 9:30 C213
Laboratory: M;W; 1:30-4:30 C220

Mr. Adolph
and Assistant

Chemistry 7. Quantitative Analysis 2,3, or 4 Credits

A study of the theory and practice of gravimetric analysis. As far as possible the laboratory work will be adapted to the needs of the individual students. One hour lecture and three, six, or nine hours laboratory.

Prerequisite: Chemistry 5-6.
Required:
Elective: 3-4.
Lecture: T 10:30 C213. T;F; 1:30-4:30 C208 First Semester.
Laboratory: S 9:30-12:30 C208.

Mr. E. O. Wilson

Chemistry 8. Quantitative Analysis 2,3, or 4 Credits

A study of the theory and practice of volumetric, colorimetric, and electrolytic analysis. As far as possible the laboratory work will be adapted to the needs of the individual students. One hour lecture and three, six, or nine hours of laboratory.

Prerequisite: Chemistry 5-6. advisable to have 7.

Elective: 3-4.

Lecture: T 10:30 C213

Laboratory: S 9:30-12:30 C208 T;F; 1:30-4:30 C208

Mr. E. O. Wilson

Chemistry 9-10 Organic Chemistry 4-4 Credits

A course in the elements of organic chemistry for those beginning the subject. The aliphatic series. The emphasis is placed on general principles. (Students in Home Economics who elect Chemistry 117 may receive credit for Chemistry 9 without taking Chemistry 10.) 2 lectures and 6 laboratory hours.

Prerequisite: For Home Economics students Chemistry 3-4. For all other either the completion of Chemistry 5-6 or the election of Chemistry 5-6 at the same time.

Required: Major in Chemistry

Elective: 2,3,4.

Lecture: W;F; 10:30 C213.

Laboratory: T; Th 1:30-4:30 C216.

Mr. T. C. Wang.

Chemistry 12 Organic Chemistry 4 Credits

A rapid survey of the more important topics of organic chemistry for premedical students. Special emphasis is given to fundamental principles. As far as possible illustrations are drawn from the field of medicine. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 6

Required: Premedical

Lecture: M; W; 9:30 c, 103 second semester.

Laboratory: T; Th, 1:30-4:30 c

Mr. S.D. Wilson and Mr. T.C. Wang

Chemistry 114 History of Chemistry 2 Credits

A brief study of the more important features in the development of Chemistry from the earliest times to the present. 2 lectures and classroom reports. To be elected with permission of the instructor.

Elective: 3-4

Lecture: To be arranged. Not Offered 1929-30.

Chemistry 116 Food Chemistry 4 Credits

A study of the chemistry of food and nutrition. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 6 and 9

Elective: 3, 4.

Lecture: To be arranged First Semester.

Laboratory: To be arranged

Mr. Adolph

Chemistry 117 Physiological Chemistry 4 Credits

A comprehensive course covering the usual topics in physiological chemistry. Special attention will be given to the needs of students majoring in Home Economics and Biology. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 9

Elective: 3, 4

Lecture: To be arranged Second Semester.

Laboratory: To be arranged.

Mr. Adolph

Chemistry 119 Leather Chemistry 4 Credits

A study of the chemistry of leather manufacture. The subject is taken up from the viewpoint of physical chemistry. The various tanning operations are reviewed and the importance of chemical control emphasized. The laboratory work illustrates in a quantitative manner some of the most important of the theories presented. Two lectures and six laboratory hours.

Prerequisite: Chem. 6, and if Chem. 9 has not been completed, it must be taken at the same time.

Required: Major in Leather

Lecture: T; Th, 10:30 First Semester.

Laboratory: To be arranged.

Mr. E. O. Wilson

Chemistry 120 Leather Chemistry 4 Credits

The analysis of materials and products used in the leather industry. Rapid methods suitable for actual use in the tannery are studied. 2 conferences and 6 laboratory hours.

Prerequisite: Chemistry 119

Required: Majors in leather

Elective:

Conference: T; Th, 10:30 Second Semester.

Laboratory: To be arranged.

Mr. E. O. Wilson

Chemistry 121-122 Industrial Chemistry Credits 4-4

The most important of the industries in which chemical reactions play a major part are considered. Plant equipment is described in some detail and the factors which influence economic large-scale production are discussed. One half of the time in this course is devoted to the subject of industrial stoichiometry. A large number of numerical problems will be solved by the students. Four lectures and recitations.

Prerequisite: Chemistry 6

Lecture: To be arranged

Laboratory:

Mr. E. O. Wilson

Chemistry 123 Technical Analysis Credits 4

This course is designed to accompany Course 121. Instruction will be given in gas, fuel and water analysis. Considerable range of choice will be allowed the individual student, depending upon his interests and previous training. Rapid methods for the analysis of various commercial products, training in the use of the hydrogen electrode, and the practical use of the thermocouple will also be included. One conference and nine laboratory hours.

Prerequisite; Chemistry 6
Conference; To be arranged First Semester.
Laboratory; To be arranged

Mr. E. O. Wilson

Chemistry 124 Special Problems in Applied Chemistry 4 Credits

This course should accompany or follow the courses in industrial chemistry and technical analysis. Individual or group investigations will be conducted, the particular nature of the problems will depend upon the interests and previous training of the students. Laboratory and informal conferences.

Prerequisite; Chemistry 123
Lecture; To be arranged Second semester
Laboratory; To be arranged

M. E. O. Wilson

Chemistry 125 Senior Thesis 2 Credits

This course involves either a critical study of the literature of some field in chemistry or a simple original investigation. Each case is decided in conference with the head of the department.

Time to be arranged. Offered both semesters.
Required; Seniors who are majoring in Chemistry.

Staff

Chemistry 127 Qualitative Organic Analysis 3 Credits

This course includes the systematic qualitative analysis of organic compounds and the determinations of unknowns including mixtures. 1 lecture and 6 laboratory hours.

Prerequisite; Chemistry 10.
Elective; 3,4
Lecture; To be arranged. Not offered 1929-30.
Laboratory; To be arranged

Mr. T. C. Wang

Chemistry 129 Quantitative Organic Analysis 3 Credits

This course consists of the determination of carbon, hydrogen, nitrogen and other elements by the methods usually employed in elementary organic analysis. 1 lecture and 6 laboratory hours.

Prerequisite; Chemistry 10.
Elective; 3,4
Lecture; to be arranged. First Semester.
Laboratory; To be arranged

Mr. T. C. Wang

Chemistry 130 Qualitative Analysis 4 Credits

This course includes a review of the principles of qualitative analysis, and a drill in careful manipulation and exact qualitative procedure. 1 lecture and 9 hours laboratory.

Prerequisite: Chemistry 6.
Elective: 3, 4.
Lecture: To be arranged. Not offered 1929-30.
Laboratory: To be arranged.

Chemistry 131-132 Physical Chemistry 4-4 Credits

A careful study of the fundamental laws and principles of chemistry. The laboratory exercises are all of a quantitative nature. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 6 and 10. (It is recommended that students take calculus with this course)
Required: Majors in Chemistry
Elective: 4.
Lecture: T; Th; 10:30 c213.
Laboratory: To be arranged

Mr. S. D. Wilson

Chemistry 133-134 Advanced Organic Chemistry 4-4 Credits

Lectures, reports on literature and laboratory work in organic chemistry of a more advanced nature than that given in Chemistry 9-10. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 10.
Elective: 4.
Lecture: W; F; 8:00. Not offered 1929-30.
Laboratory: To be arranged.

Mr. S. D. Wilson

Chemistry 135-136 The Chemistry of Colloids 3-3 Credits

A general study of the methods of preparation, properties, and applications of colloids. 1 hour lecture and 6 laboratory hours.

Prerequisite; Chemistry 10.
Elective; 3,4.
Lecture: T 11:30. Not Offered 1939-30.
Laboratory: To be arranged.

Mr. S. D. Wilson

Leather 71-72 Elements of Tanning 2-2 Credits

A general descriptive course, covering in an elementary way, the entire field of Leather Tanning.

Required; Major students in Leather.
Lecture: M. F. 9.30
Laboratory:

Mr. P. Chang.

Leather 73-74 Leather Manufacture 4-4 Credits

The lectures deal with the principles of Chrome, Alum, Iron, and Oil Tanning. Chrome tanning is studied in great detail. The methods of dyeing leather will also be presented.

Laboratory practice is given in the technic of soaking, liming, unhairing, bating, pickling, and in Chrome tanning.

Required; Major students in Leather.
Lecture; M. Th. 1. 30.
Laboratory: Hours to be arranged.

Mr. P. Chang

Leather 75-76 Leather Manufacture 4-4 Credits

The lectures include a discussion of the finishing of the various kinds of leather, including the methods of currying, lubricating, staking, and glazing. The principles of fur tanning are also presented.

Laboratory practice in vegetable, aldehyde, and alum tannage. Laboratory practice in fur dressing.

Required: Major students in Leather.

Lecture: T. F. 1. 30.

Laboratory: Hours to be arranged

Mr. P. Chang.

DEPARTMENT OF GEOGRAPHY and GEOLOGY.

W. W. Davis, M. S. Professor and Chairman.

George B. Barbour, M. A., Ph. D. . . . Professor.

Miss Yü Jung Huang, M. A. Instructor.

The functions of the Department are (1) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Sciences, (2) to train students for teaching work in Geography, (3) to train students as practical Geologists, and (4) to offer to students specializing in other lines of study a chance to become better acquainted with our Earth.

DEPARTMENTAL REGULATIONS.

A major student in this department must fulfill the following requirements for graduation:

(1) Chinese	4 credits
English	16 "
Geography 1-2 or Geology 1-2,	8 "
A Second Natural Science (Biology, Chemistry, Mathematics or Physics),	8 "
Social Sciences	4 "
Major	36 "
Correlated Subjects (One of the following: Biology, Chemistry, Physics, Mathematics, Home Economics, History, Education, Economics, Political Science or Sociology) 16-24	16-24 "
Electives	44-36 "
Total	136 "

(2) A Student must under the supervision of a professor in this Department satisfactorily complete a thesis on a geographical or geological problem.

(3) A student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJORS.

A student majoring in this Department has a choice between three lines of work.

- (a) Geography.
- (b) Geology.
- (c) Geography and Geology combined.

MAJOR CURRICULUM IN GEOGRAPHY

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits.
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Geography 1	4	Geography 2	4
Natural Science (Biology 1, Chemistry 3, Physics 5 or Mathematics)	4	Natural Science (Biology 2, Chemistry 4, Physics 6 or Mathematics)	4
Mathematics	2	Mathematics	2
Social Science	2	Social Sciences	2
		(Hygiene for women)	1
	18		18 or 19
<i>Second Year</i>			
English 5	4	English 6	4
Major (Geol. 1)	4	Major (Geol. 2)	4
Major	2 or 4	Major	2 or 4
Correlated Subject	4	Correlated Subject	4
Electives	4 or 2	Electives	4 or 2
	18		18
<i>Third Year</i>			
Major	6	Major	6
Correlated Subject	4	Correlated Subject	4
Electives	6	Electives	6
	16		16
<i>Fourth Year</i>			
Major (Geog. 193)	2	Major (Geog. 194)	2
Major	2 or 4	Major	2 or 4
Correlated Subject and Electives	12 or 10	Correlated Subject and Electives	12 or 10
	16		16

0288

MAJOR CURRICULUM IN GEOLOGY.

First Year

Chinese 7 2	Chinese 8 2
English 1 4	English 2 4
Geol. 1 4	Geol. 2 4
Biol. 1 4	Biol. 2 4
Mathematics 2	Mathematics .. . 2
Social Science 2	Social Science .. . 2
<hr/>	
	18

Second Year

English 5 4	English 6 4
Major (Chem. 3.) .. . 4	Major (Chem. 4) .. . 4
Major 2 or 4	Major 2 or 4
Correlated Subject .. . 4	Correlated Subject .. . 4
Electives 4 or 2	Electives.. . . . 4 or 2
<hr/>	
	18

Third Year

Major 6	Major 6
Correlated Subject .. . 4	Correlated Subject .. . 4
Electives.. . . . 6	Electives.. . . . 6
<hr/>	
	16

Fourth Year

Major (Geol. 193) .. . 2	Major Geol. 194).. . 2
Major 2 or 4	Major 2 or 4
Correlated Subject and Electives 12 or 10	Correlated Subject and Electives 12 or 10
<hr/>	
	16

MAJOR CURRICULUM IN GEOGRAPHY AND GEOLOGY

This is like the major curriculum in Geography with the following modifications:

In the First Year the Second Natural Science must be either Biol. 1-2 or Chem. 3-4,

In the Second, Third and Fourth Years the student may include in his major a total of from 6 to 12 credits in Geology in addition to Geology 1-2.

DEPARTMENT OF GEOGRAPHY and GEOLOGY
Schedule

Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	Geog. 1-2 A & B		Geog. 1-2 A & B		Geog. 1-2 A & B	
9:30 to 10:30	Geog. 5 (or 6)*	Geog. 57 (or 58)*	Geog. 5 (or 6)*	Geog. 57 (or 58)*	Geog. 5 (or 6)*	
10:30 to 11:30	Geol. 107 -108	Geol. 107 -108	Geol. 107 -108	Geol. 107 -108		
10:30 to 11:30	Geog. 3 (or 4)* Geol. 9	Geog. 113 (or 114)* Geol. 112*	Geog. 3 (or 4)* Geol. 9	Geog. 113 (or 114)* Geol. 112*	Geog. 3 (or 4)*	
11:30 to 12:30	Geol. 1-2		Geol. 142		Geol. 1-2	
1:30 to 2:30	Geog. 1-2 Lab. **		Geol. 1-2 Lab.	Geog. 1-2 Lab. **		
2:30 to 3:30	..		..	..
3:30 to 4:30	..		..	..

*Second Semester Courses.

**Two sections if necessary.

Time left to be arranged. Geol. 5, Geol. 6, Geol. 109-110.
Laboratory in Geog. 3 (or 4) and Geog. 5 (or 6).

Geography 1-2 Fundamentals of Geography Credits 4-4

A study of the geographical factors of environment and how they affect life.
Required: Major Students in Geography.
Elective: 1,2, (also 3,4.)
Lecture: M.W.F. 8:00 Section A Miss Huang
Laboratory: Mon. 1:30-4:30. or Thursday 1:30-4:30. Section B Mr. Davis

Geography 3 Agricultural Economic Geography Credits 4

A study of the geographic factors underlying Agriculture.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: M.W.F. 10:30 First Semester.
Laboratory: 3 hours to be arranged

Miss Huang

Geography 4 Industrial Economic Geography Credits 4

A study of the geographical factors underlying some of the leading industries.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: M.W.F. 10:30 Second Semester.
Laboratory: 3 hours to be arranged

Miss Huang

Geography 5 China Credits 4

The physical, human and economic geography of China.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: M.W.F. 9:30 First Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 6 Asia Credits 4

The physical, human and economic geography of Asia.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: M.W.F. 9:30 Second Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 55 Hopei Credits 2

The physical and economic geography of the Province of Hopei.
Required: May be included as part of the requirements of students majoring in Geography.
Elective: 3,4.
Lecture: T, Th 9:30 Offered 1930-31 and alternate years. First Semester.
Laboratory: None Mr. Davis.

Geography 56 Manchuria Credits 2

The physical and economic geography of the Three Manchurian Provinces.
Required: May be included as part of the requirements of students majoring in Geography.
Elective: 3,4.
Lecture: T. TH 9:30 Offered 1930-31 and alternate years. Second Semester.
Laboratory: None Mr. Davis.

Geography 57 India Credits 2

The physical, human and economic geography of India.
Required: May be included as part of the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: T. TH 9:30 Offered 1929-30 and alternate years. First Semester.
Laboratory: None Mr. Davis.

Geography 58 Siberia Credits 2

The physical and economic geography of Siberia.
Required: May be included as part of the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: Offered 1929-30 and alternate Years. Second Semester.
Laboratory: None Mr. Davis.

Geography 107 Europe Credits 2

The natural regions of Europe, the geographic and geologic factors which have made Europe, its resources and possibilities.
Required: May be included as part of the requirements of students majoring in Geography.
Elective: 3,4.
Lecture: T. TH 10:30 Offered 1928-29 and alternate years. First Semester.
Laboratory: None Mr. Davis.

Geography 108 North America Credits 2

The natural regions of North America, the geographic and geologic factors that have made North America, its resources and possibilities.
Required: May be included as part of the requirements of students majoring in Geography.
Elective: 3,4.
Lecture. T. TH 10:30 Offered 1928-29 and alternate years. Second Semester.

Geography 109 Some Geographic Factors in History Credits 2

A study of a few of the leading geographic factors that have helped to control history, namely, the desert, the sea, the plain, the forest, the steppe, the ocean, rivers and coal.
Required: May be included in the requirements of students majoring in Geography.

- Elective: 3,4.
Lecture: T. TH 8:00 Given 1930-31 and alternate years. First Semester.
Laboratory: None Mr. Davis.
- Geography 110 Climate Credits 2
A study of climate.
Required: May be included as part of the requirements of students majoring in Geography.
Elective: 3,4.
Lecture: T Th 8:00 Offered 1929-30 and alternate years. Second Semester.
Laboratory: None Mr. Davis.
- Geography 113 Japan Credits 2
The physical, economic and human geography of Japan.
Required: May be included as part of the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: T. Th. 10:30 Offered 1929-30 and alternate years. First Semester.
Laboratory: None Mr. Davis.
- Geography 114 Malaya Credits 2
The physical, economic and human geography of Malaya.
Required: May be included in the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: T. Th. 10:30 Offered 1929-30 and alternate years. Second Semester.
Laboratory: None Mr. Davis.
- Geography 119 Political Geography of Europe Credits 2
A study of Europe from the angle of Political Geography.
Required: May be included in the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: 11:30 T. Th Offered 1928-29 and alternate years First Semester.
Laboratory: None Mr. Davis.
- Geography 120 Political Geography of North and South America Credits 2
A study of the two Americas from the angle of Political Geography.
Required: May be include in the requirements of a student majoring in Geography.
Elective: 3,4.
Lecture: 11:30 T Th Offered 1928-29 and alternate years Second Semester.
Laboratory: None Mr. Davis.
- Geography 191 Research Course Credits 1 or 2
An advanced reading or research course in some special geographical problem under supervision. Credit depending on the amount of work done.

- Prerequisite: At least 20 hours of work in Geography in addition to Geog. 1-2.
Required: May be included by students majoring in Geography.
Elective: 4.
Laboratory: Mr. Davis.
- Geography 192 Research Course Credits 1 or 2
Like 191:
Prerequisite: Geog. 1-2 and at least 20 hours additional work in Geography.
Required: May be included in the requirements of a student majoring in Geography.
Elective: 4.
Laboratory: Mr. Davis.
- Geography 193-194 Thesis Credits 2-2
Senior Thesis in some geographical problem.
Prerequisite: Geog. 1-2 and at least 24 other credits in Geography.
Required: Major students in Geography.
Elective: 4.
Laboratory: Mr. Davis.
- Geology 1-2 General Geology Credits 4-4
An introduction to the Earth Sciences. The work of the atmosphere, ground-water, running water, snow and ice, lakes, and oceans. Study of the common rocks and minerals; vulcanism, crustal movements etc; brief outline of Earth History.
Required: Students majoring in either Geology or Geography.
Elective: 1,2,3,4.
Lecture: M.W.F. 11:30
Laboratory: W. 1:30-4:39 Mr. Barbour
- Geology 5 Field and Laboratory Methods Credits 2
Interpretation of geologic maps. Elementary map drawing with training in the field, sketching, stratigraphic and other field work.
Prerequisite: Geol 1-2
Required: Students majoring in Geology.
Elective: 2,3,4.
Laboratory: 2 afternoons a week. Mr. Barbour.
- Geology 6 Field Work. Credits 2
Field work in geology.
Prerequisite: Geol. 1-2 and Geol. 5.
Required: Students majoring in Geology
Elective: 2,3, 4.
Lecture: One afternoon a week and
Laboratory: occasional Saturdays Mr. Barbour.

Geology 9	Introduction to Historical Geology	Credits 2
A brief outline of geologic history for those who wish to study geology from the cultural point of view.		
Elective: 2, 3, 4.		
Lecture: 10:30 M. F.		
Laboratory: None		
		Mr. Barbour.
Geology 107-108	Historical Geology	Credits 4-4
Detailed work in Historical Geology with special reference to that of China		
Prerequisite: Geol. 1-2.		
Required: Students majoring in Geology		
Elective: 3-4.		
Lecture: 9:30 M. T. W. TH		
Laboratory:		
		Mr. Barbour.
Geology 109-110	Advanced Geology.	Credits 4-4
An advanced course in geology. The nature of the course will vary from year to year.		
Prerequisite: Geol 1-2		
Required: Students majoring in Geology		
Elective: 3-4		
Lecture: To be arranged		
Laboratory: To be arranged		
		Mr. Barbour.
Geology 112	Mineral Resources of China	Credits 2
A discussion of China's mineral resources.		
Elective: 3, 4.		
Lecture: 10:30 T. TH		
Laboratory:		
		Mr. Barbour.
Geology 191	Research Course	Credits 1 or 2
Advanced reading or research in special geological problems under supervision.		
Prerequisite: Geol. 1-2 and at least 20 additional hours in Geology		
Required: May be taken by students majoring in Geology		
Elective: 4.		
Laboratory:		
		Mr. Barbour.
Geology 192	Research Course	Credits 1 or 2
Like Geol, 19;		
Prerequisite: Geol. 1-2 and at least 20 additional hours in Geology.		
Required: May be taken by students majoring in Geology		
Elective, 4.		
Laboratory:		
		Mr. Barbour.
Geology 193-194	Thesis	Credits 2-2
Senior Thesis in some geological problem.		
Prerequisite: Geol. 1-2 and at least 24 other credits in Geology		
Required: Major students in Geology.		
Elective: 4.		
Laboratory:		
		Mr. Barbour.

DEPARTMENT OF HOME ECONOMICS

Miss Camilla Mills, B. S., M. A. *Instructor and Chairman*
Miss Caroline I. Ch'en, B. A., M. A. *Instructor*

The functions of the Department are (1) To offer education for homemaking as a part of the general University education of Women. (2) To offer training for teaching Home Economics in Secondary Schools. (3) To provide a sequence of courses which will fulfill the requirements for graduation prescribed in the academic regulations of the College of Natural Science. (4) To Provide the Home Economics courses which are necessary to the curricula in Pre-nursing. (5) To provide foundation courses for those interested in hospital dietetics.

DEPARTMENTAL REGULATIONS

A major student in this Department must fulfill the following requirements for graduation:

I. Chinese	.. .. .	4 credits
English	.. .. .	16 credits
Chemistry	.. .. .	16 credits
Biology	.. .. .	8 credits
Mathematics	.. .. .	4 credits
Social Sciences	.. .. .	8 credits
Major	.. .. .	33 credits

Of the 33 credits of the major the following courses are required:

H. Ec. 3	.. .. .	3 credits
H. Ec. 5	.. .. .	4 credits
H. Ec. 23	.. .. .	3 credits
H. Ec. 26	.. .. .	3 credits
H. Ec. 27	.. .. .	4 credits
H. Ec. 30	.. .. .	3 credits
H. Ec. 45-46	.. .. .	4 credits
Correlated Subjects	.. .. .	16 credits
Electives	.. .. .	31 credits

(2) The student may choose a correlated subject from the following: Biology, Chemistry, Economics, Education, or Sociology. (3) The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Science.

MAJOR CURRICULUM

FIRST SEMESTER

SECOND SEMESTER

<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Biol. 1)	4	Nat. Sc. (Biol. 2)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Mathematics. 1	2	Mathematics. 2	2
Soc. Sc. (Soc. 1 or Ec. 11)	2	Soc. Sc. (Soc. 2 or Ec. 12)	2
		Hygiene	1
	<hr/>		<hr/>
	18		19
<i>Second Year</i>			
English 5	4	English 6	4
Cor. Subj.	4	Cor. Subj.	4
Chemistry 9	4	Chemistry 116	4
Soc. Sc. (Soc. 1 or Ec. 11)	2	Soc. Sc. (Soc. 2 or Ec. 12)	2
Electives.	4	Electives	4
	<hr/>		<hr/>
	18		18
<i>Third Year</i>			
Major (H. Ec. 3)	3	Major (H. Ec. 26)	3
Major (H. Ec. 1)	3	Major (H. Ec.)	3
Cor. Subj.	4	Cor. Subj.	4
Electives	6	Electives	6
	<hr/>		<hr/>
	16		16
<i>Fourth Year</i>			
Major (H. Ec. 5)	4	Major (H. Ec. 27)	4
Major (H. Ec. 45)	2	Major (H. Ec. 46)	2
Major (H. Ec. 23)	3	Major (H. Ec. 30)	3
Major (H. Ec.)	3	Electives	7
Electives	4		
	<hr/>		<hr/>
	16		16

Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8 to 9	H. Ec. 26	H. Ec. 15 H. Ec. 23	H. Ec. 3 H. Ec. 26	H. Ec. 15 H. Ec. 23	H. Ec. 3 H. Ec. 26	
9:30 to 10:30	H. Ec. 27	H. Ec. 27		H. Ec. 27	H. Ec. 27	
10:30 to 11:30	H. Ec. 11 H. Ec. 14	H. Ec. 5	H. Ec. 11 H. Ec. 14	H. Ec. 5		
11:30 to 12:30	H. Ec. 42		H. Ec. 42		H. Ec. 42	
1:30 to 4:30	H. Ec. 5	H. Ec. 15 H. Ec. 23	H. Ec. 5	H. Ec. 3	H. Ec. 11 H. Ec. 14	

H. Ec. 3. Food Selection and Preparation 3 Credits

An introduction to the subject of foods; selection, marketing, preparation, and service; and the fundamental principles of nutrition.

Required: Major students in Home Economics, Pre-nursing Courses II.

Elective: 2, 3, 4.

Lecture: W. F. 8:00 to 9:00.

Laboratory: Th 1:30 to 4:30

Miss Ch'en

H. Ec. 5. Nutrition Dietetics 4 Credits

A study of nutrition with application of the principles to everyday feeding problems of individuals and groups; food values in relation to cost; combination of foods in meals.

Prerequisite: H. Ec. 3 Chem. 109, 116.

Required: Major students in Home Economics.

Lecture: T, Th 10:30 to 11:30.

Laboratory: M. W. 1:30 to 4:30

Mills & Ch'en.

H. Ec. 11. Clothing and Textiles 3 Credits

A study of textile fibers and their manufacture and the principles underlying the selection, cost, care, and use of clothing.

Elective: 2, 3, 4.

Lecture: M. W. 10:30 to 11:30.

Laboratory: F. 1:30 to 4:30

Miss Ch'en.

H. Ec. 14. Home Decoration 3 Credits

A study of art principles and their application to the choice and arrangement of furnishings and decorations of the moderate sized home.

Elective: 2, 3, 4.

Lecture: M. W. 10:30 to 11:30.

Laboratory: F. 1:30 to 4:30

Miss Ch'en.

H. Ec. 15. Applied Design 3 Credits

A study of the principles of design and color developed and applied to clothing and decorative articles in the home; block-printing; tie-dyeing and batik work.

Elective: 2, 3, 4.

Lecture: T. Th 8:00 to 9:00.

Laboratory: T. 1:30 to 4:30

Miss Ch'en.

H. Ec. 23. Household Technology 3 Credits

A study of the technical processes of housekeeping, selection of equipment, methods of cleaning, laundering, etc; a study of the sanitary aspects of the home, and their relation to the health of the home and community.

Required: Major students in Home Economics.

Elective: 2, 3, 4.

Lecture: T. Th 8:00 to 9:00.

Laboratory: T. 1:30.

Miss Mills

H. Ec. 26. Household Management 3 Credits

A study of the organization and management of household operations and finances; family and community relationships.

Required: Major students in Home Economics; Pre-Nursing Course II.

Elective: 2, 3, 4.

Lecture: M. W. F. 8:00 to 9:00.

Laboratory:

Miss Mills.

H. Ec. 27. Child Care and Developments 4 Credits

A study of the growth and development of the child through the Pre-Natal period; infancy, childhood and adolescence; factors influencing the health of children; habit formation; proper feeding.

Required: Major students in Home Economics.

Elective: 3, 4.

Lecture: M. T. Th. F. 9:30 to 10:30.

Laboratory:

Miss Mills.

H. Ec. 30. Home Management House 3 Credits

A course dealing with the problems of the homemaker. Students live in the Home management House for one semester each student in turn being responsible for the various duties in the house.

Prerequisite: H. Ec. 3, 5, 23, 26.

Required: Major Students in Home Economics.

Laboratory:

Miss Ch'en.

H. Ec. 42. Methods of Teaching Home Economics 3 Credits

A study of the materials and methods of teaching Home Economics with supervised practice teaching by the students whenever possible. Emphasis will be placed on organization of courses of study.

Prerequisite: At least 16 credits of Home Economics.

Lecture: M. W. F. 11:30 to 12:30.

Laboratory:

Mills & Ch'en.

H. Ec. 45-46. Thesis 2-2 Credits

Required: Major students in Home Economics.

Laboratory:

Miss Mills

DEPARTMENT OF MATHEMATICS.

T. H. Ch'en M. A., Ph. D. Professor and Chairman.

Miss P. L. Konank M. A. Professor.

Miss E. N. Hancock. B. Sc. Professor.

The functions of the Department are, to provide courses fundamental to the curricula of other Departments of the University, to provide a sequence of courses which will fulfil the requirements for graduation, prescribed in the academic regulations of the College of Natural Sciences, to train students to teach mathematics, and to offer opportunities to graduate students for more advanced study of the subject.

DEPARTMENTAL REGULATIONS.

A major student in this Department must fulfill the following requirements for graduation:

(1) Chinese	4	Credits.
English	16	„
Physics 5-6	8	„
Social Sciences	8	„
Major	40	„

(Of the credits of major) the following courses are required.

Mathematics 21-22	8	Credits.
„ 23-24	8	„
„ 27-28	8	„
„ 55-56	8	„

Correlated Subjects (Physics, Chemistry or Biology) 16 Credits
Electives.. .. . 44

Total 136 „

- (2) The student must, under the supervision of a Professor in this Department, satisfactorily complete a thesis on a Mathematical Subject.
- (3) The student must fulfill all the requirements, prescribed in the academic regulations of the College of Natural Sciences.

MAJOR CURRICULUM

FIRST SEMESTER

SECOND SEMESTER

<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	4
English 1	4	English 2	2
Nat. Sc. Mathematics 21 ..	4	Nat. Sc. Mathematics 22 ..	4
Nat. Sc. Physics	4	Nat. Sc. Physics.. .. .	4
Elective	2	Elective	2
Soc. Sc.	2	Soc. Sc.	2
		Hygiene (for women)	1
	18		19

Second Year

English 5	4	English 6	4
Major. Mathematics 23.. ..	4	Major Mathematics 24	4
Cor. Subject	4	Cor. Subj.	4
Social Science	2	Social Science	2
Electives	4	Electives	4
	18		18

Third Year

Major. Mathematics 27.. ..	4	Major. Mathematics 28.. ..	4
Major. Mathematics .. 3 or 2		Major. Mathematics .. 3 or 2	
Cor. Subj.	4	Cor. Subj.	4
Electives.. .. .	5 or 6	Electives	5 or 6
	16		16

Fourth Year

Major. Mathematics 55 .. 4		Major Mathematics 56	4
Mathematics	3 or 2	Mathematics	3 or 2
Electives.. .. .	9 or 10	Electives	9 or 10
	16		16

Summary:

Credits

Chinese	4
English	16
Nat. Sc. (First Year)	16
Physics.. .. .	8 (if not included above)
Soc. Sc.	8
Hygiene (for women)	1
Major	40
Cor. Subj.	16-44
Electives	27
	136

Notes on Curriculum.

I. Correlated Subject.

While the Mathematics Department does not wish to make Physics the correlated subject, that must be taken by all its Major

Students, it would emphasize the special value of the subject in making certain aspects of higher mathematics more easily understood.

2. *Social Science Requirement.*

Courses to fulfill this requirement must be chosen from one or more of the following Departments.

- Economics
- Education
- History
- Political Science.
- Psychology
- Religion.
- Sociology.

3. Students who are intending to teach are advised to take, as some of their electives, courses in Education, and Psychology.

TIME SCHEDULE.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	31-32	21-22	31-22	21 22	31-22	21-22
9:30 to 10:30	23-24 29-30	23-24 53	29-30	23-24 53	23-24 29-30	53
10:30 to 11:30	27-28	27-28		27-28	27-28	
11:30 to 12:30	3-4 35-36	1-2 (A)	1-2 (B)	1-2 (A) 35-36	1-2 (B) 3-4 35-36	
1:30 to 2:30	21-22					
2:30 to 3:30						
3:30 to 4:30						

001513

Mathematics 1-2 Introduction to Mathematical Analysis 2-2 Credits

A unified course in trigonometry, algebra, analytic geometry and calculus. These are all treated in a very elementary way, the course being specially planned for Science Students, and others, not intending to major in mathematics

Required: of all Science College Students who do not major in Mathematics.
Elective: 1,2,3, not majoring in Mathematics.
Lecture: T. Th. 11.30 or B.W.F. 11.30 each section not more than 20 students. Miss Hancock

Mathematics 3-4 Elementary Mathematical Analysis 2-2 Credits

A Course mainly for science students and those not majoring in Mathematics.
Prerequisite: 1-2
Elective: for students not majoring in Mathematics.
Lecture: Mon. Fri-11:30 Miss E. L. Konantz

Mathematics 21-22 Algebra, Trigonometry 4 4 Credits

A course in College Algebra, Trigonometry to De Moirres Theorem & mainly for major students in their Freshman year.
Required: Major Students in Mathematics.
Elective: 1,2, (also 3,4.)
Lecture: M. 1:30 T. Th S. 8:00 Miss E. M. Hancock

Mathematics 23-24 Analytic Geometry 4-4 Credits

The fundamental principles of plane and Solid Analytic Geometry including some work in homogenous co-ordinates.
Prerequisite: 21-22.
Required: Major Students in Mathematics.
Elective: 2,3,4.
Lecture: M. T. Th. F. 9.30.
Laboratory: Miss E. L. Konantz

Mathematics 27-28 Calculus 4-4 Credits

An elementary course in differential and integral calculus.
Prerequisite: 23-24 or 1-2.
Required: Major Students in Mathematics.
Elective: 2,3,4.
Lecture: M. T. Th. F. 10.30. Miss Konantz

Mathematics 29-30 Pure Geometry 3-3 Credits

Pure Geometry and Mathematical Drawing an introductory course in modern Geometry.
Elective: 1,2,3.
Lecture: M.W.F. 9.30.
Laboratory: Miss Hancock

Mathematics 31 Differential Equations 3 Credits

Formation of a Differential Equation; Equations of First Order of the different Degrees; Singular Solutions; Linear Equations with Constants and Variable Coefficients; Exact Differential Equations and Equations of Particular Forms; Equations of the Second Order; Equations involving more than Two Variables; Partial Differential Equations; And Applications to Geometry, Mechanics, and Physics.

Prerequisite: Math 27-28.
Elective: 3-4.
Lecture: M.W.F. 8:00

Mr. T. H. Chen

Mathematics 32 Theory of Equations 3 Credits

Relations between roots and coefficients of equations. Solution of Cubic and Quartic Equations and of those of higher degree.
Prerequisite: 27-28.
Elective: 3,4.
Lecture: M.W.F. 8.00. Mr. Ch'en

*Mathematics 53 Higher Pure Geometry 3 Credits

Continuation of 29-30. Projective Geometry.
Prerequisite: 29-30.
Elective: 3,4.
Lecture: T. Th. S. 9.30. Miss Hancock

*Mathematics 54 Solid Geometry 3 Credits

An elementary Course on Coordinate Geometry of three dimensions.
Prerequisite: Math. 23-24.
Elective: 3,4.
Laboratory: Miss E. M. Hancock
*Not given every year.

Mathematics 55-56 Advanced Calculus 4-4 Credits

A continuation of Mathematics 27-28 arranged with special reference to the needs of major and more advanced science students.
Prerequisite: 27-28.
Required: Major Students in Mathematics.
Elective: 3,4.
Lecture: M. W. Th. Nr 11:30 Mr. Ch'en

Mathematics 113-114 Methods of Teaching Mathematics 2-2 Credits

A course on special methods teaching on Mathematics, mainly for Junior and Senior Middle School.
Elective: Seniors.
Lecture: T. F. 2:30 Miss Hancock.

Mathematics History of Mathematics 3-4 Credits

A course dealing with the rise and development of Western mathematics.
Prerequisite: Math-43-24.
Elective: 3-4.
Lecture: Tu. Thu. 11:30. Miss Konantz

Mathematics 119-120 History of Chinese Mathematics 2-2 Credits

The origin and history of Chinese Mathematics,
Elective: 四年級選修 Mr. Chen.

Mathematics 151-152 Theory of Function Credits 2-2

A Course on theory of functions and infinite series.
Elective: 4th Year. Mr. Ch'en

DEPARTMENT OF PHYSICS.

Y. M. Hsieh, M.A., Ph.D.....Assistant Professor & Chairman
 D. K. Yang, B.S., M. S.....Assistant Professor
 William Band, B. Sc., M.Sc.....Instructor
 C. H. Wu, B.S., M.S.....Instructor
 C. Y. Meng, B. S.....Graduate Assistant
Graduate Assistant
Graduate Assistant

The instructional work in physics is directed toward the following ends: (1) the training of premedical and pre-engineering students for professional study, (2) the training of general students in scientific methods of work and in the understanding of the place of physical science in the modern world; (3) the training of teachers of physics; (4) the training of research workers in physics.

The plans of the Department for the future are directed toward the development of advanced work and research. A definite beginning has been already made in this direction.

DEPARTMENTAL REGULATIONS.

A major student in this Department must fulfill the following requirements for graduation:

(1)	Chinese	4	credits
	English	16	"
	Chemistry (Second Year College Chemistry)	8	"
	Mathematics	16	"
	Social Sciences	4	"
	Major	48	"

of the 48 credits of Major the following courses are required:

Physics 5, 6, 7.....	12 Credits
Physics 101.....	4 "
Physics III.....	4 "
Physics 131.....	4 "
Physics 141, 142.....	6 "
Physics 151.....	4 "
Physics 161, 162.....	2 "
Physics 171, 172.....	4 "

40 Credits

Correlated subjects (Biology, Chemistry, Education, Geology, or Mathematics) 16 credits
 Elective 24 "

Total 136 Credits

- (2) In registering for Physics 171 and 172 the student must under the supervision of a Professor in this Department satisfactorily complete a thesis on a physical problem.
- (3) The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

SUGGESTED MAJOR CURRICULUM IN PHYSICS.

FIRST SEMESTER

SECOND SEMESTER

<i>First Year</i>	<i>Credits</i>		<i>Credits.</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Phys. 3 or 5)	4	Nat. Sc. (Phys. 4 or 6)	4
Nat. Sc. (Math. 23 or 27)	4	Nat. Sc. (Math. 24 or 28)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Soc. Sc.	2	Soc. Sc.	2
		Hygiene (for women)	1
	18		18

Second Year

English 5	4	English 6	4
Major (Physics 5 or 7)	4	Major (Physics 6 or any course numbered above 100)	4
Cor. Subj. (Chem. 5)	4	Cor. Subj. (Chem. 6)	4
Math. 27 or 81	4	Math. 28 or 32	4
Electives	2	Electives	2
	18		18

Third Year

Major.. .. . 4	Major.. .. . 4
Major.. .. . 4	Major.. .. . 4
Cor. Subj. (Math., Chem., Education, Biology or Geo- logy.. .. . 4	Cor. Subj. (Math., Chem., Biology Geology or Education. 4
Electives.. .. . 4	Electives 4
16	16

Fourth Year

Major 1	Major 1
Major 2	Major 2
Major 3	Major 3
Major 4	Major 4
Electives.. .. . 6	Electives. 6
16	16

Note:

In view of the fact that the relations of Mathematics and Physics are very close, the study of two years of mathematics is required of all major student in physics. Those, who do not take the course in Differential and Integral Calculus in their freshman year, are strongly advised to take it during their sophomore year as almost every course in physics numbered above 100 required a knowledge of calculus for the theoretical studies of the subject.

The courses in mathematics and chemistry of most value to major students of physics are as follows:—

Mathematics 1-2	Elementary Analysis
Mathematics 21-22	Introductory Course
Mathematics 23-24	Analytic Geometry
Mathematics 27-28	Calculus
Mathematics 31	Elementary Differential Equations
Mathematics 32	Theory of Equations
Mathematics 35-36	Advanced Calculus
Chemistry 3-4	Inorganic Chemistry
Chemistry 5-6	Second Year College Chemistry
Chemistry 131-132	Physical Chemistry

DEPARTMENT OF PHYSICS

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	Phys. 3-4 Phys. 101	Phys. 5-7 Phys. 115 Phys. 145	Phys. 3-4 Phys. 101	Phys. 5-6 Phys. 115 Phys. 145	Phys. 3-4 Phys. 101 Phys. 115	Phys. 5 6 Phys. 145
9:30 to 10:30	Phys. 103		Phys. 103		Phys. 103	
10:30 to 11:30	Phys. 7 Phys. 111	Phys. 115	Phys. 7 Phys. 111	Phys. 131 Phys. 115	Phys. 7 Phys. 111	Phys. 115
11:30 to 12:30	Phys. 141		Phys. 141 Phys. 144		Phys. 141	
1:30 to 4:30	Phys. 3-4 (A) Phys. 7 A Phys. 145 (A)	Phys. 5-6A Phys. 131 Phys. 142 Phys. 144 Phys. 151	Phys. 5-6B Phys. 111 Phys. 145 (B)	Phys. 3-4B Phys. 7B Phys. 101 Phys. 142 Phys. 144 Phys. 151	Phys. 5-6C Phys. 7 C Phys. 131	
4:30 to 5:30		Phys. 151		Phys. 151		

COURSES OF INSTRUCTION

Physics 1. Fundamental Ideas of Physical Science Credits 4

This course, together with a similar course given by the Biology Department, is especially designed for students in the College of Applied Social Sciences. It has for its object the fixing in mind of the scientific methods of work in the modern world as demonstrated by the historical developments of a few well-selected topics.

No credits will be given to students in the College of Natural Sciences.

Lecture: Three times a week, MWF 8:00 B115

Laboratory: Section A—M 1:30—4:30 B120

Section B—Th 1:30—4:30 B120

To be given in the Spring Semester, 1930.

Mr. Yang

Physics 3-4 Principles of Physics Credits 4-4

An introductory course designed for students without adequate middle school preparation. 3 lectures and 3 laboratory hours.

Elective: 1,2.

Prerequisites: Algebra and Geometry

Lectures: MWF 8:00 B203

Laboratory: Section A-M 1:30-4:30 B122

Section B-Th 1:30-4:30

Mr. Wu

Physics 5-6 Mechanics, Heat, Sound and Light Credits 4-4

Forms with Physics 7 a general descriptive course in Physical Principles. Required of Premedical students.

Required: Major students in Physics

Elective: 1,2,3,4.

Prerequisite: Physics 3-4 or evidence of adequate middle school preparation.

Lectures: TTHS 8:00 B203

Laboratory: Section A-T 1:30-4:30

Section B-W 1:30-4:30 B120

Section C-F 1:30-4:30

Mr. Yang & Band

Physics 7 Electricity and Magnetism Credits 4

Required of Premedical students. 3 lectures and 3 laboratory hours.

Required: Major students in Physics

Elective: 2,3,4

Lectures: MWF 10:30 B203

Laboratory: Section A-M 1:30-4:30

Section B-Th 1:30-4:30 B103

Section C-F 1:30-4:30

Mr. Yang

Physics 101 Analytical Mechanics I

Statics, kinematics and the kinetics of particles and rigid bodies. 3 lectures and 3 laboratory hours.

Elective: 2,3,4. Required: Major students in Physics

Prerequisite: Physics 5-6 and Calculus

Lectures MWF 8:00 B115

Laboratory: W 1:30-4:30 B122

Mr. Hsieh

Physics 103 An Introduction to Mathematical Physics I.

An introductory course on the application of mathematics to Physics, with practice in the solution of problems. 3 lectures.

Elective: Mathematics and Chemistry Departments

Prerequisite: Physics 5-6, 7 and Calculus

Lecture: MWF 9:30 B115

Mr. Band

Physics 105 Vector Analysis Credits 3

Elements of vector algebra and calculus and the linear vector Function in three dimensions.

Prerequisite: Physics 5-6, 7, and Calculus

Lecture: Three times a week.

Time to be arranged.

Mr. Band

Physics 107 The Principle of Relativity I. Credits 3

Historical introduction. The restricted theory as formulated by Einstein and Minkowski, with applications to dynamics, gravitation and electricity. The general theory of relativity; its application to gravitation and optical phenomena; its extension to continuous media. To be elected with permission of the instructor.

Elective 4,5

Time to be arranged.

Mr. Band.

Physics 111 Molecular Physics and Heat Credits 4

Viscosity, capillarity, diffusion, change of state, the simple kinetic theory, and an introduction to thermodynamics.

Prerequisite: Physics 5-6 and Calculus

Lecture: MWF 10:30 B115

Laboratory: W 1:30-4:30 B114

Mr. Hsieh

Physics 115 Thermodynamics Credits 3

The principles of thermodynamics and their application to physical and chemical processes. 3 lectures and solution of problems.

Prerequisite: Physics 5-6 and Calculus. Physics 111 desirable.

Lecture: MWF 10:30 B115

Mr. Yang

Physics 131 Advanced optics Credits 4

The more important optical phenomena and their fundamental theory. One lecture and six laboratory hours.

Prerequisite: Physics 5-6 and Calculus

Lecture: Th 10:30

Laboratory: T 1:30-4:30 B114

F 1:30-4:30

Mr. Hsieh

Physics 141 Advanced Electricity and Magnetism Credits 3

Electrostatics, electrokinetics and magnetism.

Prerequisite: Physics 5-6, 7 and Calculus

Registration in Physics 142

Lecture: MWF 11:30 B115

Mr. Yang

Physics 142 Direct Current Electrical Measurements Credits 3

Prerequisite: as for Physics 141 with registration in the latter course.
Required: Major Students in Physics
Laboratory: TTh 1:30-4:30 B103

Mr. Yang

Physics 144 Alternating Current Electrical Measurements Credits 4

One lecture and 6 laboratory hours
Prerequisite: Physics 5-6 and 7 and Calculus
Lecture W 11:30-12:30 B115
Laboratory TTh 1:30-4:30 B103

Mr. Yang

Physics 145 Radio Telegraphy and Telephony Credits 4

A course of lectures and laboratory work consisting of elementary consideration of the fundamental laws and their applications to the circuits of modern radio telegraph and telephone systems.

Prerequisite: Physics 5-6 and 7, Calculus desirable.
Lectures: TTh 8:00 B115
Laboratory: M 1:30-4:30 B105
W 1:30 4:30

Mr. Wu

Physics 151 Modern Developments in Physics Credits 4

Conduction of electricity in gases, thermionics, photoelectricity, X-rays and atomic structure. 2 lectures and 4 laboratory hours.

Prerequisite: Physics 5-6, 7 and Calculus
Required: Major student in Physics.
Lecture: TTh 1:30
Laboratory: TTh 2:30-4:30 B103

Mr. Hsieh

Physics 161 Physics Journal Club Credits 1

This organization, consisting of all instructors and graduate and advanced students, meets weekly, for the review and discussion of the current literature in this department of study. (Regular attendance at the meetings of this club is required of graduate and advanced students in the Department.)

Required: Major Students in Physics
Elective 3,4,5
Prerequisite: 2 years of Physics
Time to be arranged.

Physics staff.

Physics 162 Physics Journal Club Credit 1

For description of the course and conditions of election see Physics 161.

Physics 163 History of Physics Credits 2

A course devoted to reading and discussions designed to acquaint the students with the historical development of physics. Two lectures and classroom reports. To be elected with permission of the instructor (Not offered in 1929-30).

Physics 171 Undergraduate Research Credits 2

Required of students majoring in Physics. Involves the preparation of a critical resume of some field of research and a simple original investigation as decided in conference with the instructor.

Time to be arranged.

Physics staff.

Physics 172 Undergraduate Research Credits 2

For description of the course and conditions of election see Physics 171.

Physics staff.

Some of these course cannot be given every year, but arrangements will be made so that each student may have opportunity to take the required work at some time during his residence at the University.

PREMEDICAL COURSE

Advisor to Pre-medical student—Miss Alice M. Boring Ph. D.

CURRICULUM FOR PREMEDICAL STUDENTS.

Student desiring to do Pre-medical work in the College of Natural Sciences of the University will enter in the same manner as other regular students in other courses and Departments of the University. There is a Pre-medical Advisor, with whom all students taking pre-medical work should consult at the time of registration.

The Pre-medical curriculum as outlined below covers the Freshman, Sophomore and Junior years.

At the end of three years study students are prepared to take the examination which may admit them to the Peking Union Medical College as regular medical students.

Those students who have fulfilled all of the requirements for the Pre-medical courses at Yenching will be given the Degree of Bachelor of Science after they have completed the first year's work in the medical school at the Peking Union Medical College.

Those students who have had an adequate course in Physics in Middle school should complete the requirements outlined in section A below, while those who have not had such an adequate course in Physics should fulfill the requirements outlined in Section B.

A. Chinese	10	Credits
English	16	"
Mathematics 1-2	4	"
Biology 1-2	8	"
Biology 51-52	8	"
Chemistry 3-4	8	"
Chemistry 5-6	8	"
Chemistry 12	4	"
Physics 5-6	8	"
Physics 7	4	"
Social Sciences (Edu., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.)	8	"
German or French (or Physical Chemistry and higher Mathematics or Psychology and Education or Sociology, Economics and Political Science)	10	"
Elective	8	"
Hygiene (for women)	1	"

Total 104 Credits
Total (for women) 105 "

B. Chinese	10	Credits
English	16	"
Mathematics 1-2	4	"
Biology 1-2	8	"
Biology 51-52	8	"
Chemistry 3-4	8	"
Chemistry 5-6	8	"
Chemistry 5-6	8	"
Chemistry 12	4	"
Physics 3-4	8	"
Physics 5-6	8	"
Physics 7	4	"
Social Sciences (Edu., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.)	8	"
German (or French, or Physical Chemistry and Mathematics, or Psychology and Education, or Sociology, Economics, and Political Science)	10	"
Hygiene (for women)	1	"

Total 104 Credits
Total (for women) 105 "

A CURRICULUM FOR PREMEDICAL STUDENTS WITH ADEQUATE MIDDLE SCHOOL PHYSICS.

FIRST SEMESTER		SECOND SEMESTER	
<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Mathematics 1	2	Mathematics 2	2
Biology 1	4	Biology 2	4
Chemistry 3	4	Chemistry 4	4
Social Sciences (Educ., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.)	2	Social Sciences (Educ., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.)	2
		Hygiene (for women)	1
			18

<i>Second Year</i>	
Biology 51	4
Chemistry 5	4
English 5	4
Physics 5	4
Economics, Political Science or Sociology	2
	18

<i>Third Year</i>	
Chinese	2
Chinese	2
Physics 7	4
German or Substitutes	5
Elective	4
	16

B CURRICULUM FOR PREMEDICAL STUDENTS WITHOUT ADEQUATE MIDDLE SCHOOL PHYSICS.

FIRST SEMESTER		SECOND SEMESTER	
<i>First Year</i>		<i>Credits</i>	
Chinese 7 .. .. .	..2	Chinese 8 .. .. .	..2
English 1 .. .. .	..4	English 2 .. .. .	..4
Mathematics 1 .. .. .	..2	Mathematics 2 .. .. .	..2
Physics 3 .. .. .	..4	Physics 4 .. .. .	..4
Chemistry 3 .. .. .	..4	Chemistry 4 .. .. .	..4
Social Sciences (Educ., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.) .. .. .	..2	Social Sciences (Educ., Econ., Soc., Hist., Psy., Rel., or Pol. Sci.) .. .. .	..2
		Hygiene (for women) .. .. .	..1
	18		18
 <i>Second Year</i>			
Biology 1 .. .. .	..4	Biology 2 .. .. .	..4
Chemistry 5 .. .. .	..4	Chemistry 6 .. .. .	..4
English 5 .. .. .	..4	English 6 .. .. .	..4
Physics 5 .. .. .	..4	Physics 6 .. .. .	..4
Economics, Political Science or Sociology .. .. .	..2	Economics, Political Science or Sociology .. .. .	..2
	18		18
 <i>Third Year</i>			
Biology 51 .. .. .	..4	Biology 52 .. .. .	..4
Chinese .. .. .	..2	Chinese .. .. .	..2
Chinese .. .. .	..2	Chemistry 12 .. .. .	..4
Physics 7 .. .. .	..4		
Economics, Political Science, or Sociology .. .. .	..4	Economics, Political Science or Sociology .. .. .	..2
		Elective .. .. .	..4
	16		16

**Pre-Nursing Course I
(Short Course)**

Yenching University offers a one year pre-nursing course which prepares students to enter Course I in the School of Nursing of the Peking Union Medical College. For further information regarding this pre-nursing course, applicants should address the Dean of the School of Nursing, Peking Union Medical College or apply to the Registrar of Yenching University for the special short course bulletin.

Pre-Nursing Course II

Course II of the School of Nursing of the Peking Union Medical College covers a period of five years and leads to the Bachelor of Science degree from Yenching University in addition to the diploma in Nursing. The first two academic years are spent at Yenching, where students take a prescribed course which includes all the University required subjects plus certain physical and social sciences. These form a foundation for the strictly nursing subjects which are given during the third and fourth years at the School of Nursing. The first part of the fifth year is devoted to nursing practice in the Peking Union Medical College Hospital and the latter half to such specialized work at either Yenching University or the Peking Union Medical College as the student may choose to pursue.

Candidates for this course must meet all requirements for admission as Freshmen to Yenching University.

Pre-Nursing Course II Curriculum

	First Year			Second Year		
	Fall	Spring	Total Credits	Fall	Spring	Total Credits
Biology	4	4	8			
Chemistry	4	4	8			
Chinese	4	4	8	4	4	8
English	4	4	8	4	4	8
Home Economics 26					3	3
Home Economics 3				3		3
Hygiene		1	1			
Physics				4	4	8
Psychology	2	2	4			
Sociology				2	2	4
Political Sc.				2	2	4
	18	19	37	19	19	38

Special Course in Leather Tanning.

(Chuan Hsiu Ke)

The work of this course is of a very specialized nature. An elementary survey of General Chemistry and Leather Chemistry is included but most of the time is devoted to instruction in Leather Manufacture and to practice work in the experimental tannery.

Students who have finished a four year middle school may be admitted. Those who satisfactorily complete the two years of work are given a certificate. No college credit, however, is given for work taken in the Special Course.

A bulletin giving further details may be obtained by application to the Registrar.

Agriculture Experiment Station.

Homer H. Lew, Ph. D., *Director*
Yu Chen Chou, B. A., B. S. *Farm Superintendent*
Shen Shou Tsuan, B. S. *Agronomist*
Chiang I Chang, B. S. *Horticulturist*
Chen Shun Yun, D. V. M., M. S., *Veterinarian*

Work of college grade in Agriculture has been suspended by Yenching University but experimental and extension work has been increased. With the reorganization of the University into colleges as a preparation for registration with the Minister of Education of the National Government, the former Department of Agriculture was changed to the Agriculture Experiment Station of the College of Natural Sciences.

Experimental Projects.

The Experiment Station carries on three lines of experimental projects, as follows: Animal Husbandry, Agronomy and Horticulture. The Station has a stock of pure-bred hogs, poultry, dairy cattle, sheep, and goats. As fast as these have become acclimated they have been to some extent distributed to farmers and have to some extent been employed in cross-breeding experiments. Feeding experiments are also under way. These have been especially successful with crosses between foreign and Chinese hogs.

For the last five years soil and fertilizer experiments have been under way, and important results have been obtained with the use of commercial fertilizers on the more valuable crops such as rice and garden products. Crop breeding experiment have been confined chiefly to a few more important North China crops, as wheat, corn, millet, rice, and cotton.

In Horticulture the station is confirming its work to the introduction of foreign fruits trees, chiefly apples.

Extension Work.

The extension work of the Station includes several projects as follows:

1. Yenta Agriculture Notes: This is a monthly bulletin discussing general agricultural problems and describing the results of experiments and investigations carried on by the Station. The bulletin is distributed free and has a circulation of over eight hundred copies per month.

2. Extension Advisory office: Farmers who wish advice on rural problems, and who are unable to come to the Station in person present their problems by letter. At present the Station receives an average of three such inquiries each day.

3. Agricultural Fair: The Station conducts several Annual Agricultural Fairs, one at the Station and others in various centers. These give opportunities for farmers to become acquainted with the work of the station.

4. Agricultural Training School: This school is conducted jointly by Tsing Hua University, Hsiang Shan Orphanage and Yenching University. It trains farmer boys for rural extension work and agricultural Colonization.

5. Winter School Course: Each winter the Station conducts a school open to farmers, rural preachers, and leaders. The instruction is conducted to practical problems in agriculture and rural problems of social, economic, educational and religious nature.

REGISTER OF STUDENTS

1928-1929

Men Students.

An T'ing Keng	LS	Jan Hui Chia	PM
Chang Fang Min	LS	Jen Hui Hsin	PM
Chang Hou Yü	P	Kao Ch'ang Shun	F
Chang Hsien Wu	PM	Ke Ch'i Yang	P
Chang Hsueh Yuan	PM	Kuan Shan T'ang	PM
Chang Te Jang	LS	Kuan Yü Ch'uan	L
Chang Wen Yü	P	Kuei I Sheng	LS
Chang Yen Ch'ing	L	Kung Wei Han	LS
Chang Yung Ch'uan	C	Kuo Ch'ang Keng	AS
Chao Chih T'ien	L	Kuo K'e Chien	LS
Chao I Ch'eng	PM	Kuo Te Lung	F
Chao Yung Chen	P	Kuo Wen Ming	LS
Ch'en Chia Feng	PM	Lei Ting Pang	L

Ch'en Ho Li	L	Li Chi	AS
Ch'en Hua	PM	Li Chi Liang	LS
Ch'en Kuo Chieh	B	Li Chien Fan	B
Ch'en Kuo Ch'ing	P	Li Chih Hsing	LS
Ch'en Kuo Chün	PM	Li Ho T'ien	PM
Ch'en Shang Yi	F	Li Hsiang Yen	F
Ch'en Cheng K'uei	LS	Li Huug Ju	PM
Ch'en Tsung Jen	C	Li K'un Ch'uan	AS
Cheng Feng En	LS	Li Liang Ch'en	LS
Ch'eng Yü T'ien	PM	Li Lien Chieh	F
Chi Feng Lan	L	Li Shao Nung	AS
Ch'i Chih Hung	PM	Li Shih Cheng	F
Ch'i Tseng P'ei	LS	Li T'ien Hsiang	PM
Chia T'ing Hsün	L	Li To	F
Chiang Lan T'ien	F	Li Wen Ho	F
Chin Chien Fan	AS	Li Wen Hsiang	M
Chin Hui Sheng	M	Lin Ch'nn Yiu	PM
Chou Hsin Fu	Au	Lin Kuan Te	G
Chou Nai Keng	Sp	Lin Shao Wen	B
Chou Pin	LS	Lin T'ung Hua	F
Chu Kuei Ch'ing	PM	Li Ch'i Hsiang	AS
Chu Liang Wei	PM	Liu Chieh San	P
Chu Wu Ying	C	Liu Hsien Chih	M
Fan Hai Shan	PM	Liu Jung K'uei	F
Fam Lo Ch'eng	PM	Liu Ke Chi	PM
Feng Lu Hsi	LS	Liu Pao Lo	C
Han Shih K'uei	PM	Liu T'ing Wei	B
Ho Mao Ch'ün	A	Lo Tsung Shih	L
Ho Tsung Yi	M	Lu Ch'ing Te	AS
Hsieh Wei Chieh	C	Ma Chen Yü	P
Hsieh Yuan	AS	Ma Chia Chi	PM
Hsü Chao Liang	PM	Ma Chih Fang	L
Hsü Chih T'ung	PM	Ma Wan Shen	PM
Hsü Pao Lu	F	Mao Ying Tou	B
Hsü Teng Wen	C	Meng T'ing Hsiu	B
Hsü Ying K'uei	PM	Min Hung Chih	AS
Hsueh Cho Jung	F	Pai Shou Ch'ang	LS
Hu T'ing Yin	F	Pan Shih Yi	PM
Huang Ch'ao Pai	PM	Pien Mei Nien	B
Huang Chen Hsiang	PM	Po T'ien En	B
Huang Chen Hsün		Shen Chia Mo	AS
Shih Ch'ing Wen	LS	Chiang Yueh Ch'ün	B
Su Chen	LS	Ching Sheng Jan	PM
Sun Hsueh Wu	F	Chou Shu Ch'un	B

Tai Chen Ch'un	F	Ch'ü Chi Ying	PNS
T'an Chen Mou	F	Ch'ü Shu Yü	PNS
T'an Shu Chün	LS	Chukajeff, Mary	Au
T'an Yün En	F	Chung Wen Hui	HE
T'ang Chin	P	Fu Mei	F
T'ang Ch'ung Chi	F	Ho Chen Yi	HE
Teng Chin Hsi	F	Ho Ch'i Chieh	HE
T'ien Chih Tseng	L	Hsü Hsiang Lien	PM
Ts'ai Fang Hsien	P	Hu Meng Yü	PNS
Ts'ui Chih I	PM	Huang Ch'ing Hou	M
Ts'ui Hsiang Ch'i	P	Huang Hsiao Yün	F
Ts-ui Yü P'u	L	Huang Yi Hsuan	HE
Tu Hung Hsiu	PM	Kozloff, Mary	Au
Tung Chao Lung	LS	Kuan Sung Shan	F
T'ung Ts'un	PM	Kuei Yü Te	PNS
Wang Chia Chi	PM	Kuo P'ei Ch'eng	PN
Wang Chung Hui	PM		
Wang Hsin	L	Kung Ti Chen	PNS
Wang K'ai Hsi	PM	Li Ch'ung Chen	PN
Wang Lung Hsiang	LS	Li Pi Hsia	PM
Wang Peng Chü	PM	Liao Su Ch'ün	HE
Wang Shih Ch'ing	M	Lin Ai Ch'ün	PM
Wang Shih Chün	PM	Lin T'ung Ch'iao	PNS
Wang Shih Hao	AS	Liu Chin I	HE
Wang Shih Tsün	F	Liu Hsi Chen	C
Wang Ssu I	M	Liu Ta Chien	PM
Wang Tsu Shun	C	Lu Ch'i Ying	B
Wang Yü Ch'en	LS	Lu Jui P'ing	F
Weng Hsi Kuang	PM	Lu Shu Ch'ün	C
Wu Ch'i Tse	PM	She Hui Chen	PN
Wu Pi Cheng	LS	Su Shu Yuan	PN
Wu Shih To	PM	T'ao Ch'iang	F
Wu Tsu Chün	PM	Ting Ju Nan	B
Wu Ying Hua	AS	Wang Ai Yi	PM
Yang Chien Pang	PM	Wang Ch'eng Shih	P
Yang Ch'eng An	AS	Wang Chien	PNS
Yang En Fu	C	Wang Chien Ch'en	Sp
Yen Chao Yin	C	Wang Han Chieh	G
Yin Chien Chang	PM	Wang Kuei Chen	HE
Yin Chih Hsiang	LS	Wang Ming Chen	P
Yü Jih Sen	PM	Wei Ch'eng Chih	HE
<i>Women Students.</i>		Wei Wen Chen	PNS
Chang Fang Hsiu	PN	Wu Liang Ju	PM
Chang P'in Hui	B	Wu Mu Hsien	PM

Chang Tz'u	F	Wu Shu Ying	PNS
Chao Shu Ying	PM	Wu Shun Ch'ang	PNS
Ch'en Mei Hua	PM	Wu Sung Chen	HE
Ch'en Mei Po	PM	Wu Yü Hsin	F
Ch'en Pen Chen	PN	Yang Shih Chao	PM
Ch'en Shu Yü	C	Yang Yu Lien	C
Ch'eng Yü Ho	PM	Yang Yueh Ying	PM
Chiang Chao Ai	PM	Yuan Yung Hsi	F

- A — Agriculture
- AS — Agriculture Short Course
- Au — Auditor
- B — Biology
- C — Chemistry
- F — Freshman Science Student
- G — Geography and Geology
- HE — Home Economics
- L — Leather
- LS — Leather Short Course
- M — Mathematics
- P — Physics
- PM — Pre-medical
- PN — Pre-nursing
- PNS — Pre-nursing Short Course
- Sp — Special

M 2 5 1 5 0 1 0

0306

THE LEADER PRESS

0307 1 5 00 1 0

0307

CHINA UNION UNIVERSITIES
CENTRAL OFFICE

Free copy

私立燕京大學
YENCHING UNIVERSITY

自然科學院
課程一覽
The College of Natural Sciences
Announcement of Courses



民國十八年
1929-1930

1929-30

Yenching University
The College of Natural Sciences
Announcement of Courses

0308

0308

燕京大學佈告種類

本校各項佈告，每年按時出版，分贈國內外各學校，以備參考。其餘欲得此項佈告者，請函本大學註冊部，並附入應納價額，當即奉寄。

燕京大學一覽	編印中
燕京大學畢業研究院一覽	一角五分
宗教學院一覽	編印中
燕京大學本科簡章	不索費
燕京大學本科課程一覽	一角五分
燕京大學本科附設專修科簡章	不索費
燕京大學本科暑期學校課程一覽	不索費
教職員學生名錄	一角五分

0309

0309

校 曆

(十八年至十九年)

民國十八年秋季

九月三日(星期二)	宿舍開放
九月五日(星期四)至九月六日(星期五)	教職員全體大會
九月九日(星期一)至九月十四日(星期六)	一年級指導週
九月九日(星期一)至九月十日(星期二)	新生報到
九月十一日(星期三)至九月十三日(星期五)	秋季始業註冊補考報名
九月十四日(星期六)	開學式
九月十七日(星期二)	上課
九月十七日(星期二)至九月三十日(星期一)	遲註冊收費
九月十七日(星期二)至九月二十三日(星期一)	改課免費
九月二十一日(星期六)	補考重考最遲期限
九月二十四日(星期二)至九月三十日(星期一)	改課收費
九月二十七日(星期五)至十月一日(星期二)	開幕典禮
十月十五日(星期二)	學士論文題目交主修學系
十一月十八日(星期一)至十一月二十三日(星期六)	新生季中考試
十一月三十日(星期六)	學士論文綱目交主修學系
一月二十日(星期一)至一月二十五日(星期六)	秋季季考
一月二十六日(星期日)至二月九日(星期日)	寒假

民國十九年春季

二月十日(星期一)至二月十一日(星期二)	春季始業註冊
二月十三日(星期四)	上課
二月十三日(星期四)至二月二十六日(星期三)	遲註冊收費
二月十三日(星期四)至二月十九日(星期三)	改課免費
二月十九日(星期三)	補考重考最遲期限
二月二十日(星期四)至二月二十六日(星期三)	改課收費
四月一日(星期二)	碩士論文交主修學系

0310 1 5 1 5 00 1 0

四月七日(星期一)至四月十三日(星期日)	春假
五月一日(星期四)	碩士論文交研究院委員會
五月一日(星期四)	學士論文交主修學系
五月十五日(星期四)	學士論文交本科學院院長
六月十六日(星期一)至六月二十一日(星期六)	春季季考
六月二十二日(星期日)	訓言典禮
六月二十三日(星期一)	畢業班日
六月二十四日(星期二)	畢業典禮

本校休假日，除已載明本簡章外，其餘凡為政府法令所規定之學校休假日，本校皆一律遵守。

私立燕京大學 自然科學院

現任職員

吳雷川 翰林	校長
司徒雷登 神學博士	校務長
韋爾巽 哲學博士	院長
費賓閏臣 神學士 文學博士	女部主任

通訊請寄註冊部主任梅貽寶博士

本學院執行委員

章爾巽	文學碩士，哲學博士	院長，化學系主任
費賓閏臣	神學士，文學博士	女部主任
蘇路得	音樂學士	女部代理主任
胡經甫	文學碩士，哲學博士	生物學系主任
達偉德	理學碩士	地理地質學系主任
謝玉銘	文學碩士，哲學博士	物理學系主任
宓樂施	理學士，文學碩士	家事學系主任
陳在新	文學碩士，哲學博士	數學系主任

醫預科護士預科顧問

博愛理	文學碩士，哲學博士	醫預科
宓樂施	理學士，文學碩士	護士預科

專修科主任

宓樂施	理學士，文學碩士	護士專修科
劉和	理學碩士，哲學博士	農學專修科
衛爾遜	理學士，理學碩士	製革專修科

0311

私立燕京大學 自然科學院學則

- 一 入 學 本學院入學資格須在高級中學或同等學校畢業經入學試驗及格者
- 二 主修學系 本學院正式生得任選下列各學系之一為主修學系
化學系 生物學系 地理地質學系 物理學系 家政學系 數學系
- 三 畢 業 本學院正式生修畢一主修學系所規定之課程經試驗及格者給予學士證書

四 必修科目 本學院必修科目分兩種

(甲)共同必修科目 下列之共同必修科目須在第一學年修畢

- 國文.....四學分
- 英文.....八學分
- 自然科學.....十六學分

(須於下列各學科中任選其二每科八學分 化學 生物 地理 地質 物理 數學)

- 數學.....四學分

(凡得本學院常務委員會之特許者或已於上項自然科學科目中選修數學八學分者得免修此四學分之數學但須任選他項科目四學分代之)

- 社會科學.....四學分

以上共.....三十六學分

(第一年級女生須於第二學期加修衛生學一學分全年共修三十七學分)

(乙)主修學系必修科目

- (一)除共同必修科目外各主修學系得自行規定主修之必修科目
本學院正式生應於第二年級開始時選定主修學系如有特殊理由不能選定者須得院長許可
- (二)本學院正式生除第一年級不計外至少須選

主修科目.....三十二至六十八學分
 相關科目(由主修學系規定).....十六至二十四學分

五 學分與績點

(甲)本學院正式生至少須修畢一百三十六學分總績點在一·〇〇以上始能畢業

(乙)第一二年級生每學期得修十八學分但女生加修衛生學時得修十九學分第三四年級生每學期得修十六學分

(丙)每學期所修科目不得少於十二學分

(丁)第一年級生升入第二年級時如尚缺少八以下之學分時得按下列規定之一辦理

(一)經主修學系及院長之許可每學期所修科目可增至二十二學分

(二)每學期限修十二學分如該學年之成績平均達一績點得於第三學年修完其第二年級之科目

(戊)凡學生任何學年之平均績點不及〇·八者本學院即令其休學

(己)凡學生連續兩年每年平均績點不及一·〇〇者本學院即令其休學

六 專修科 本院得附設各種專修科 凡修業完畢經試驗及格者給予各該專修科修業證書但專修科不給大學學分

生物學系

教職員

- 胡經甫 文學碩士，哲學博士.....教授兼系主任
- 博愛理女士 文學碩士，哲學博士.....教授
- 李汝祺 文學碩士，哲學博士.....副教授
- 陳子英 文學碩士，哲學博士.....副教授
- 劉承詔 理學士，理學碩士.....助教
- 林紹文 理學士.....助理
- 周淑純 理學士.....助理

本系之設為(一)教授醫學看護學製革學家事學及其他職業專科所必須之生物科目(二)依照本學院之學則規定本學系之主修課程(三)訓練普通科學及生物學之師資(四)訓練主修生為研究生物學之預備(五)指導畢業生為生物學之研究工作

本學系學則

(一)本學系之主修生須修畢下列規定之課程始能畢業

- 國文.....四學分
- 英文.....十六學分
- 化學.....八學分
- 數學.....四學分
- 社會科學(心理教育經濟或社會學).....八學分
- 主修科目.....四十八學分

其中包括下列各項科目

- 生物 1—2.....八學分
- 生物 51, 52.....八學分
- 生物101, 102.....六學分

- 生物103, 104.....六學分
- 生物151, 152.....四學分
- 生物153, 154.....四學分

- 相關科目(物理化學或地質學).....十六學分
- 選修科目.....三十二學分
- 總數.....一百三十六學分

(二)本學系之主修生修習生物151—152時須在本學系教授指導之下選定一題潛心研究撰成論文

(三)本學系之主修生須完成本學院學則之一切規定

3145010

生物學系主修課程

	秋季學期	春季學期
第一學年		
國文7—8	二學分	二學分
英文1—2	四學分	四學分
自然科學(生物1—2)	四學分	四學分
自然科學(化學3—4)	四學分	四學分
數學	二學分	二學分
社會科學(心理教育經濟或社會學)	二學分	二學分
衛生學(女生必修)		一學分
第二學年		
英文5—6	四學分	四學分
主修(生物51—52)	四學分	四學分
相關科目(物理化學或地質學)	四學分	四學分
社會科學(心理教育經濟或社會學)	二學分	二學分
選修科目	四學分	四學分
第三學年		
主修(生物101—102)	三學分	三學分
主修(生物103—104)	二學分	二學分
相關科目(物理化學或地質學)	四學分	四學分
選修科目	七學分	七學分
第四學年		
主修(生物151—152)	二學分	二學分
主修(生物153—154)	一學分	一學分
主修(生物)	四學分	四學分
主修(生物)	四學分	四學分
選修科目	五學分	五學分

生物學系授課時刻表

日 時 間	星 期 一	星 期 二	星 期 三	星 期 四	星 期 五	星 期 六
八 時 至 九 時	生物106	生物1—2A 生物53—54 生 物 155, 156	生物1—2B 生物1a—2a 生物106	生物1—2A 生物53—54 生 物 155, 156	生物1—2B 生物1a—2a	
九 時 半 至 十 時		生物51, 52 生物105		生物51, 52 生物105		
十 時 半 至 十一 時		生 物 101, 102	生物158	生 物 101, 102		
十一 時 半 至 十二 時						
一 時 半 至 四 時 半	生物1—2X 生物53, 54 生 物 103, 104	生物1—2Y 生物51—52 生 物 105, 106 生 物 155, 156	生物1—2X 生物53, 54 生 物 103, 104 生物158	生物1—2Y 生物51—52 生 物 105, 106 生 物 155, 156	生 物 101—102	

生物 1—2 普通生物學 學分 4—4

專研動植物構造及其生理上之重要原則，兼研進化論及遺傳學之原理，特別注重其實驗方法，及其實施於日常生活之效果。每星期講授兩小時，實驗六小時。

一二年級主修生及醫預生必修

一二年級選修

講授：甲組：三，五 8:00

乙組：三，五 9:00

實驗：子組：一，三 1:30—4:30

丑組：二，四 1:30—4:30

博愛理

生物 3 生物學大綱 學分 4

專研生物學之重要原則，特別注重其有關於人類社會之要點。專為應用社會科學主修生之選修而設，每星期講授三小時，實驗三小時。

應用社會科學院主修生選修

講授：

實驗：

李汝祺

生物 51 無脊椎動物學 學分 4

專研無脊椎動物之形態，及生理，特別注重寄生動物之生活史，各門動物進化上之關係，及生物學之重要原理。每星期講授兩小時，實驗六小時。

預習：生物 1—2

二年級主修生及醫預生必修

二，三年級選修

講授：二，四 9:30

實驗：二，四 1:30—4:30

胡經甫

生物 52 脊椎動物比較解剖學 學分 4

專研各種脊椎動物之比較解剖，特別注重簡單脊椎動物與哺乳類動物及人類有關係之形性。每星期講授兩小時，實驗六小時。

預習：生物 1—2

二年級主修生及醫預生必修

二，三年級選修

講授：二，四 9:30

實驗：二，四 1:30—4:30

博愛理

生物 53—54 普通植物學 學分 4—4

專研植物之形態與生理，植物與環境之關係，各類植物進化上之關係，及植物分類之大意。每星期講授兩小時，實驗六小時。

預習：生物 1—2

二，三年級選修

講授：二，四 8:00

實驗：一，三 1:30—4:30

十八年度不開班

生物 101 普通胚胎學 學分 3

專研胚胎學之原理，細胞之間接分裂，生發細胞之形性及其成熟，受孕乃細胞之分裂，最近實驗胚胎學之成績，脊椎動物之早期發育，胚葉胚膜及器官之起源與發生。每星期講授兩小時，實驗三小時。

預習：生物 51, 52

三，四年級主修生必修

三，四年級選修

講授：二，四 10:30

實驗：五 1:30—4:30

李汝祺

生物 102 實驗遺傳學 學分 3

專研進化論及生物測定學之原理，特別注重孟德爾氏定律，聯鎖遺傳，交錯失傳，染體遺傳及兩性決定之媒介。實驗時專習單位形性，蜀黍之遺傳，果蠅之培育及生物測定學之試驗。每星期講授兩小時，實驗三小時。

預習： 生物51, 52

三，四年級主修生必修

三，四年級選修

講授： 二，四 10:30

實驗： 五 1:30—4:30

李汝祺

生物 103 生物標本製作法 學分 2

專習生物玻片，及生物切片之製作法。每星期實驗六小時。

預習： 生物51, 52

三，四年級主修生必修

三，四年級選修

實驗： 一，三 1:30—4:30

胡經甫

生物 104 生物標本製作法 學分 2

專習生物教材之採集法，製作法，及保存法。每星期實驗六小時。

預習： 生物103

三，四年級主修生必修

三，四年級選修

實驗： 一，三 1:30—4:30

胡經甫

生物 105 動物組織學 學分 4

專研動物細胞組織與器官之構造，及其對於各種化學試藥染料之反

應。每星期講授兩小時，實驗六小時。

預習： 生物51, 52

三，四年級選修

講授： 二，四 9:30

實驗： 二，四 1:30—4:30

博愛理

生物 106 普通昆蟲學 學分 4

專研昆蟲之形態與分類，特別注重各目昆蟲進化上之關係，昆蟲之生活史，經濟昆蟲學，及害虫治除法。每星期講授兩小時，實驗六小時。

預習： 生物51

三，四年級選修

講授： 一，三 8:00

實驗： 二，四 1:30—4:30

胡經甫

生物 151 生物研究 學分 2

主修生須各選定一題，由一教授隨時指導，潛心研究，作成論文，以表現其獨立研究之精神。每星期實驗六小時。

預習： 生物學兩年

四年級主修生必修

三，四年級選修

實驗： 時間： 另定

生物系各教授

生物 152 生物研究 學分 2

主修生須各選定一題，由一教授隨時指導，潛心研究，作成論文，以表現其獨立研究之精神。每星期實驗六小時。

預習： 生物學兩年

四年級主修生必修

三，四年級選修

實驗：時間：另定

生物系各教授

生物 153

生物學雜誌研究會

學分 1

教授與學生更迭報告各種生物學雜誌中近著之要點。每星期會集一小時。

預習：生物學兩年
三，四年級主修生必修
三，四年級選修
會集：時間：另定

李汝祺

生物 154

生物學雜誌研究會

學分 1

教授與學生更迭報告各種生物學雜誌中近著之要點。每星期會集一小時。

預習：生物學兩年
三，四年級主修生必修
三，四年級選修
會集：時間：另定

李汝祺

生物 155

動物生理學

學分 4

專研動物體之生理，特別注重人體各部之功用，凡專修家政學及科學教育者，尤應選修此課。每星期講授兩小時，實驗六小時。

預習：生物51, 52 化學3—4
三，四年級選修
講授：二，四 8:00
實驗：二，四 1:30—4:30

陳子英

生物 156

微生物學

學分 4

專研各種微菌酵母及微菌之形性，及其培植與染色法。每星期講授兩小時，實驗六小時。

預習：生物51, 52 化學3—4
三，四年級選修
講授：二，四 8:00
實驗：二，四 1:30—4:30

陳子英

生物 158

原生動物學

學分 2

專研原生動物之形態，生理，分類及其與人類疾病之關係，並研原生動物之再生，接合及內變之實驗成績，每星期講授一小時，實驗三小時。

預習：生物51
三，四年級選修
講授：三 10:30
實驗：三 1:30—4:30

李汝祺

化 學 系
教 職 員

韋爾巽	文學碩士，哲學博士	教授兼系主任
竇維廉	文學士，哲學博士	教授
衛爾遜	理學士，理學碩士	教授工業及應用化學主任
曹敬盤	文學士	助教
王贊卿	文學士	助教
王宗瑤	理學碩士	助教
張 銓	理學士	工業化學助教
*蔡錕生	理學士，理學碩士	助教
*王譽傳	理學士	助理
于一峯	理學士	助理
張文德	理學士	工業化學助理

*一九二九至一九三〇休假

本系之設爲(一)教授醫學看護學製革學及家政學所必須之主要科目(二)依照本學院之學則規定本學系之主修課程(三)訓練化學之師資(四)訓練學生爲化學專家及製革學家(五)指導他學系之主修生俾能諳悉化學上之知識(六)指導畢業生爲化學之研究工作

本 學 系 學 則

本學系之主修生須修畢下列甲組所規定之課程始能畢業如於主修化學外欲以製革學爲選修者須修畢下列乙組所規定之課程始能畢業

(甲) 一 國文	四學分
英文	十六學分
物理學或生物學	八學分
數學	四學分

社會科學(經濟，社會，歷史，心理， 宗教，或政治學)	八學分
衛生學(女生必修)	一學分
主修科目	四十八學分

下列各項科目必須修畢以完成主修科目之四十八學分

化學3—4	八學分
化學5—6	八學分
化學9—10	八學分
化學125	二學分
化學131—132	八學分

相關科目(生物學，地質學，教育學，
家政學，數學或物理學)

十六學分	
選修科目	三十二學分
總數	一百三十六學分
女生必修總數	一百三十七學分

二 本學系之主修生修習化學 125 時須在本學系教授指導之下選定
一化學題目潛心研究撰成完善論文

三 本學系之主修生須完成本學院學則之一切規定

(乙) 一 國文	四學分
英文	十六學分
社會科學(經濟學)	十二學分
數學25—26	四學分
生物學1—2	八學分
生物學105	四學分
生物學156	四學分
生物學5—6	八學分
製革學71—72	四學分
製革學73—74	八學分
製革學75—76	八學分

0318

化學3—4.....	八學分
化學5—6.....	八學分
化學9—10.....	八學分
化學119—120.....	八學分
化學121—122.....	八學分
化學131—132.....	八學分
化學125.....	二學分
選修科目.....	六學分
總數.....	一百三十六學分

二 本學系之主修生修習化學 125 時須在本學系教授指導之下選一關於製革學之題目撰成完善論文

三 本學系之主修生須完成本學院學則之一切規定

化 學 系 主 修 課 程

	第一學期	第二學期
第一學年		
國文7—8	二學分	二學分
英文1—2	四學分	四學分
主修化學3—4	四學分	四學分
物理學5—6或生物1—2	四學分	四學分
數學1—2	二學分	二學分
社會科學(經濟, 社會, 歷史, 心理, 宗教, 或政治學)	二學分	二學分
衛生學(女生習)		一學分
第二學年		
英文5—6	四學分	四學分
主修(化學5—6)	四學分	四學分
相關科目(生物, 地質, 家政, 教育, 數學, 或物理學)	四學分	四學分
社會科學(經濟, 社會, 歷史, 心理, 宗教, 或政治學)	二學分	二學分
選修科目	四學分	四學分
第三學年		
主修(化學9—10)	四學分	四學分
主修(化學——)	四學分	四學分
相關科目(生物, 地質, 家政, 教育, 數學, 或物理學)	四學分	四學分
選修科目	四學分	四學分
第四學年		
主修(化學131—132)	四學分	四學分
主修(化學125)(化學一)	二學分	四學分

主修(化學——)
選修科目

二學分
八學分

八學分

主修化學專研製革學之課程

秋季學期

春季學期

第一學年

中文7—8

英文1—2

主修(化學3—4)

生物1—2

數學1—2

社會科學(經濟學)

第二學年

英文5—6

主修(化學5—6)

主修(製革學71—72)

相關科目(物理5—6)

經濟學

第三學年

主修(化學9—10)

主修(製革學73—74)

主修(化學119—120)

相關科目(生物學105)(生物學156)

第四學年

主修(製革學75—76)

主修(化學121—122)

主修(化學131—132)

主修(化學125)

選修科目

二學分
四學分
四學分
四學分
二學分
二學分

二學分
四學分
四學分
四學分
二學分
二學分

四學分
四學分
二學分
四學分
四學分

四學分
四學分
二學分
四學分
四學分

四學分
四學分
四學分
四學分

四學分
四學分
四學分
四學分

四學分
四學分
四學分

四學分
四學分
四學分

四學分

二學分

化學系授課時刻表

日 時 間	星 期 一	星 期 二	星 期 三	星 期 四	星 期 五	星 期 六
八 時 至		化學1—2 化學3—4乙	化 學 133—134	化學1—2 化學3—4乙	化 學 133—134	
九 時 至	化學5—6 化學12 製革71—72		化學5—6 化學12		製革71—72	化學7—8 實驗
十 時 至		化學7—8 化學119 化學120 化 學 131—132	化學9—10	化學119 化學120 化 學 131—132	化學9—10	化學7—8 實驗
十 一 時 至						化學7—8 實驗
十 二 時 至						
下 午 一 時 至	化學3—4 講授 化學3—4 化學5—6 製革73—74 實驗	化學3—4 化學7—8 化學12 製革75—76 實驗	化學3—4 講授 化學3—4 化學5—6 化學9—10	化學3—4 化學12 製革73—74 實驗 製革75—76 實驗	化學7—8 化學8—10	
二 時 至	化學3—4 化學5—6	化學3—4 化學7—8 化學12	化學3—4 化學5—6 化學9—10	化學3—4 化學12	化學7—8 化學9—10	
三 時 至	化學3—4 化學5—6	化學1—2 化學3—4 化學7—8 化學12	化學3—4 化學5—6 化學9—10	化學1—2 化學3—4 化學12	化學7—8 化學9—10	
四 時 至	化學3—4	化學1—2	化學3—4	化學1—2		

未列入本課表之各科上課時間由選讀該科學生會同教師商定之

化學1—2 護 士 化 學 學分4—4

本課程教授普通分析，有機，及生理，化學。並特別注重關於護士應用之一切問題。每週講授二小時。實驗四小時。

護士預科一年級必修

講授：二，四 8:00

實驗：二，四 3:30—5:30

王宗瑤

化學3—4 無 機 化 學 學分4—4

本課程教授普通無機化學。研究非金類及金類。使學生熟諳主要之定律，理論，及化學之應用。至其關於人生及國家之重要尤所注意。以實驗時間之半專習定性分析。每週講授二小時。實驗六小時。

化學主修生及醫預生必修

一，二，三，四年級選修

講授：甲組：一，三 1:30 化學樓103

韋爾巽

乙組：二，四 8:00

曹敬盤

實驗：任選下列二次之時間

助 理

甲組：一，三 2:30—5:30

乙組：二，四 1:30—4:30

化學5—6 大 學 二 年 化 學 學分4—4

本課程使學生專心研究化學之主要定律，及原理。以實驗時間之一半，用簡單之試驗表明物理化學之定律，餘者專習定量分析。（習家政學者選習化學117可得化學105之學分，無須習化學106）。每週講授二小時。實驗六小時。

化學主修生及醫預生必修

二，三，四年級選修

預習化學3—4

講授：一，三 9:30

化學樓213

竇維廉

實驗：一，三 1:30—4:30 化學樓220 助 理

化學7 定 量 分 析 學分2，3或4

本課程教授重量分析之理論並實驗。實驗方面則多趨重各學生之須要。每週講授一小時。實驗三，六或九小時。

三，四年級選修

預習化學5—6

講授：二 10:30 化學樓213 第一學期

實驗：二，五 1:30—4:30 化學樓208

六 9:30—12:30

王贊卿

化學8 定 量 分 析 學分2，3，或4

本課程教授容量分析，顏色分析，電力分析之理論並實驗。實驗方面則多趨重各學生之須要，每組講授一小時。實驗三，六或九小時。

預習化學5—6並宜預習化學7

三四年級選修

講授：二 10:30 化學樓213 第二學期

實驗：二，五 1:30—4:30 化學樓208

六 9:30—12:30

王贊卿

化學9—10 有 機 化 學 學分4—4

本課程教授初級有機化學限於脂肪族類，多注重普通之原理。（習家政學者選修化學117，可得化學9學之學分無須習10）。每週講授二小時。實驗六小時。

化學主修生必修

二，三，四年級選修

預習家政學者化學3—4其他學生化學5—6或同時選習

講授：三，五 10:30 化學樓213

實驗：二，四 1:30—4:30 化學樓216

化學 112 有 機 化 學 學分4

本課程為醫預科學生速習有機化學之緊要科目，注重主要之原理，討論與醫學有關之例證。每週講授二小時。實驗六小時。

預習化學6

醫預生必修

講授：一，三 9:30 化學樓103 韋爾巽

實驗：二，四 1:30—4:30 第二學期 王贊卿

化學 114 化 學 歷 史 學分2

本課程教授自上古至近代化學發展之概要。每週講授二小時。學生須將研究所得在課室報告。

經教授者之允許即可選修

三，四年級選修

講授：時間另定 韋爾巽

十八年度不開班

化學 116 食 物 化 學 學分4

本課程研究食物及營養之化學。每週講授二小時。實驗六小時。

三，四年級選修

預習化學6化學9 第一學期

講授：時間另定 寶維廉

化學 117 生 理 化 學 學分4

本課程包括生理化學之普通科目。注重習家政學及習生物學者之須要。

三，四年級選修

預習化學9 第二學期

講授：時間另定

實驗：

寶維廉

化學 119 製 革 化 學 學分4

根據物理化學研究製革之要理，復習各種製革法並注重化學處理之緊要，實驗工作注重定量，並陳說要緊之理論。每週講授二小時。實驗六小時。

三，四年級選修

講授：二，四，10:30 第一學期

實驗：另定

衛爾遜

化學 120 製 革 化 學 學分4

分析製革所用之材料，分析產品之成色，研究製革適用之速成法。每週討論二小時。實驗六小時。

三，四年級選修

預習化學119

製革主修生必修

講授：二，四 10:30 第二學期

實驗：時間另定

衛爾遜

化學 121—122 工 業 化 學 學分4—4

本課程教授與化學有關係之工業，討論工廠之設備，經濟之影響，多量之出產，一半之時間專習工業化學之量法，學生須解若干之算題。每週講授四小時。並有試問。

三，四年級選修

預習化學6

講授：時間另定

衛爾遜

化學 123 工 業 分 析 學分 4

本課程與化學121 相輔並行，討論氣，水，柴薪之分析法，各學生亦可本其素習素好隨意選擇所欲實驗之工作，研究各種工業產品之敏捷分析法，使用氫電極及熱電偶之學習亦包括在此課程內。每週討論一小時。實驗九小時。

預習化學6 第一學期 衛爾遜
 討論： 時間另定
 實驗：

化學 124 應 用 化 學 中 之 特 別 問 題 學分 4

本課程與工業化學或工業分析並習或習畢二課程後再習，研究一種或數種問題，學者可本其素習素好而選擇之。討論實驗。

三，四年級選修
 預習化學123 第二學期 衛爾遜
 時間： 另定

化學 125 畢 業 論 文 學分 2

本課程使學生搜集關於化學一部之各種論著，精密採擇，運化為文，或作一種創作的實驗，均須先與本系主任商定。

大學四年級化學主科必修
 時間： 另定 第一第二學期均可修習 本系教授

化學 127 定 性 有 機 分 析 學分 3

本課程研究有機化合物有統系之分析法，測定化合物並混合物。每週講授一小時。實驗六小時。

三，四年級選修
 預習化學10
 時間： 另定 王贊卿
 十八年度不開班

化學 129 定 量 有 機 分 析 學分 3

本課程教授按照有機化學分析法，測定炭，氫，氮及他種原質，每週講授一小時。實驗六小時。

三，四年級選修 第一學期 王贊卿
 預習化學10
 時間： 另定

化學 130 定 性 分 析 學分 4

本課程溫習定性分析之原理練習準確之手術與分析法。每週講授一小時。實驗九小時。

三，四年級選修
 預習化學6
 時間： 另定
 十八年度不開班

化學 131—132 物 理 化 學 學分4—4

本課程研究化學之主要定律與原理，實驗注重定量。每週講授二小時。實驗六小時。

四年級選修
 預習化學6—10(學者宜習微積分)
 化學主修生必修
 講授： 二，四 10:30 化學樓213 韋爾巽
 實驗： 時間另定

化學 133—134 高 級 有 機 化 學 學分4—4

講授，選習科學論著及實驗均較化學9—10 高深。每週講授二小時，實驗六小時。

四年級選修

預習化學10

講授：三，五 8:00

實驗：時間另定

十八年度不開班

章爾巽

化學 135—136

膠 體 化 學

學分3—3

本課程研究膠體物質之預備法，性質及其功用。每週講授一小時。實驗六小時。

三，四年級選修

預習化學10

講授：二， 11:30

實驗：另定

十八年度不開班

章爾巽

製革 71—72

鞣 皮 法

學分2—2

本課程教授鞣皮之各種簡要法

製革主修生必修

講授：一，五 9:30

實驗：

張 銓

製革 73—74

製 革 法

學分4—4

本課程教授鉻，油，鉍，鐵等鞣皮法之要理，染皮革之各種法則，特別注重鉻鞣法，實驗練習浸水，浸灰，脫毛，去灰，浸酸，鞣鞣諸法。

預習：

製革主修生必修

講授：一，四 1:30

實驗：時間另定

張 銓

製革 75—76

製 革 法

學分4—4

本課程講授各種皮革之修飾法，如加脂，揉軟，磨裡軋光等等。並討論毛皮硝製之原理。實習工作為植物，阿地海，暨鉍鞣鞣皮等法亦習毛革硝製法。

預習：

製革主修生必修

講授：二，五 1:30

實驗：時間另定

張 銓

地理地質學系

達偉德	理學碩士.....	教授兼系主任
巴爾博	文學碩士，哲學博士.....	教授
黃玉蓉	文學碩士.....	助教

本系之目的(一)依照本學院之學則規定本學系之主修課程

(二)訓練地理學之師資

(三)訓練學生為應用地質學專家

(四)指導他學系之主修生俾能諳悉大地與人類之關係

本學系學則

本學系之主修生須修畢下列規定之課程始能畢業

(一)國文.....	4學分
英文.....	16學分
地理1—2或地質1—2.....	8學分
自然科學(生物，化學，數學，或物理學).....	8學分
主修科目.....	36學分
相關科目(生物，化學，物理，數學，家事，歷史，教育，經濟，政治或社會學)....	16—24學分
選修科目.....	36—44學分
總數.....	一百三十六學分

(二)本學系之主修生須在本學系教授指導之下選定地理或地質學之問題撰成論文一篇

(三)本學系之主修生須完成本學院學則之一切規定

主修科目

本學系之主修生可於下列三種科目中任擇其一為主修科目

(一)地理

(二)地質

(三)地理與地質

(一)地理學主修課程

	第一學期 學分	第二學期 學分
第一學年		
國文7—8	2	2
英文1—2	4	4
地理1—2	4	4
自然科學(生物1—2，化學3—4，物理5—6，或數學)	2	2
數學2—2	2	2
社會科學	2	2
衛生(女生必修)		1
共	18	18或19
第二學年		
英文5—6	4	4
主修科目(地質1—2)	4	4
主修科目	2或4	2或4
相關科目	4	4
選修科目	2或4	2或4
共	18	18
第三學年		
主修科目	6	6
相關科目	4	4
選修科目	6	6
共	16	16
第四學年		
主修科目(地理193—194)	2	2
主修科目	2或4	2或4
相關科目及選修科目	12或10	12或10

共	16	16
(二)地質學主修課程		
第一學年		
國文7—8	2	2
英文1—2	4	4
地質1—2	4	4
生物1—2	4	4
數學	2	2
社會科學	2	2
共	18	18
第二學年		
英文5—6		
主修科目(化學3—4)	4	4
主修科目	2或4	2或4
相關科目	4	4
選修科目	4或2	4或2
共	18	18
第三學年		
主修科目	6	6
相關關相	4	4
選修科目	6	6
共	16	16
第四學年		
主修科目(地質193—194)	2	2
主修科目	2或4	2或4
相關科目及選修科目	12或10	12或10
共	16	16

(三)地理與地質學主修課程

本科之必修課程與地理科相似惟有下列諸點之不同

- (一)修習第一學年之自然科學時須習生物1—2或化學3—4
 (二)在第二,三,四學年中除修習地質1—2之外須習地質學六至十二學分

地理地質學系授課時刻表

時間	一	二	三	四	五	六
8:00至9:00	地理1—2 甲及乙	地理110*	地理1—2 甲及乙	地理110	地理1—2 甲及乙	
9:30至10:30	地理(5或6)* 地質107—108	地理57 (或58)* 地質107—108	地理5(或6)* 地質107—108	地理57 (或58)* 地質107—108	地理5(或6)*	
10:30至11:30	地理(3或4)* 地質9	地理113 (或114)* 地質112*	地理3(或4)* 地質9	地理113 (或114)* 地質112*	地理3(或4)*	
10:30至12:30	地質1—2		地質1—2		地質1—2	
1:30至2:30	地理1—2** 實驗		地質1—2 實驗	地理1—2** 實驗		
2:30至3:30	實驗		實驗	實驗		
3:30至4:30	實驗		實驗	實驗		

*第二學期開班如遇必要時可分兩組

下列各課時間另定

地質5, 地質6, 地質109—110

地理3(或4)之實驗, 地理5(或6)之實驗

地理 1—2 地 理 原 則 學分 4—4

研究環境中之地理學原則及其對於人生之關係。

地理學主修生必修

一二或三四年級選修

講授：一，三，五，8:00 甲組

乙組

黃玉蓉

達偉德

實驗：一 1:30—4:30 或四，1:30—4:30

地理 3 農 業 地 理 學分 4

研究農學上之地理學原則。

地理學主修生必修

二，三，四年級選修

講授：一，三，五，10:30

實驗：時間另定

黃玉蓉

地理 4 工 業 地 理 學分 4

研究重要工業上之地理學原則。

地理學主修生必修

二，三，四年級選修

講授：一，三，五，10:30

實驗：時間另定

黃玉蓉

地理 5 中 國 學分 4

研究中國之地文，人文，及經濟地理學。

地理學主修生必修

二，三，四年級選修

講授：一，三，五 9:30

實驗：時間另定

達偉德

地理 6 亞 細 亞 洲 學分 4

研究亞洲之地文，人文及經濟地理學。

地理學主修生必修

二，三，四年級選修

講授：一，三，五 9:30

實驗：時間另定

達偉德

地理 55 河 北 省 學分 2

研究河北省之地文及經濟地理學。

地理學主修生得選為必修科目

三，四年級選修

講授：二，四 9:30 十九年度開班，每兩年開班一次

達偉德

地理 56 東 三 省 學分 2

研究遼寧，吉林，黑龍江三省之地文及經濟地理學。

地理學主修生得選為必修科目

三，四年級選修

講授：二，四，9:30 十九年度開班，每兩年開班一次

達偉德

地理 57 印 度 學分 2

研究印度之地文，人文，及經濟地理學。

地理學主修生得選為必修科目

三，四年級選修

講授：二，四 9:30 十八年度開班，每兩年開班一次

達偉德

- 地地 58 西 比 利 亞 學分 2
 研究西伯利亞之地文及經濟地理學
 地理學主修生得選為必修科目
 三，四年級選修
 講授：二，四 9:30 十八年度開班，每二年開班一次
 達偉德
- 地理 107 歐 羅 巴 洲 學分 2
 研究歐洲之自然區域及構成該洲各種利源及可能性之地理學地質學
 原則。
 地理學主修生得選為必修科目
 三，四，年級選修
 講授：二，四 10:30 十七年度開班，每兩年開班一次
 達偉德
- 地理 108 北 美 洲 學分 2
 研究北美洲之自然區域及構成該洲各種利源及可能性之地理學地質
 學原則。
 地理學主修生得選為必修科目
 三，四年級選修
 講授：二，四 10:30 十七年度開班，每兩年開班一次
 達偉德
- 地理 109 地理學對於歷史之關係 學分 2
 研究對於歷史有關係之重要地理學原則如沙漠，海，平原，森林，
 草原，洋，河及煤等。
 地理學主修生得選為主修科目
 三，四年級選修
 講授：二，四 8:00 十九年度開班，每兩年開班一次

- 地理 110 氣 候 學 學分 2
 研究各地之氣候及氣候之原理
 地理學主修生得選為主修科目
 三，四年級選修
 講授：二，四 8:00 十八年度開班，每兩年開班一次
 達偉德
- 地理 113 日 本 學分 2
 研究日本之地文人文及經濟地理學
 地理主修生得選為必修科目
 三，四年級選修
 講授：二，四 10:30 十八年度開班，每兩年開班一次
 達偉德
- 地理 114 馬 來 羣 島 學分 2
 研究馬來羣島之地文，人文及經濟地理學。
 地理學主修生得選為必修科目
 三，四年級選修
 講授：二，四 10:30 十八年度開班，每兩年開班一次
 達偉德
- 地理 119 歐 洲 政 治 地 理 學分 2
 研究歐洲之政治地理學。
 地理學主修生得選為必修科目
 三，四年級選修
 講授：二，四 11:30 十七年度開班，每兩年開班一次
 達偉德

地理 120 南北美洲政治地理 學分 2

研究南北美洲之政治地理。

地理學主修生得選為必修科目

三，四年級選修

講授： 二，四 11:30 十七年度開班，每兩年開班一次

達偉德

地理 191 地 理 研 究 學分1—2

本課對於地理專題由教授指導選讀各種論著或作專門研究學分以工作之多寡為定。

預習： 地理1—2及地理學至少二十學分

地理學主修生必修

四年級選修

講授：

實驗：

達偉德

地理 192 地 理 研 究 學分1或2

同地理191

預習： 地理1—2及地理學至少二十學分

地理學主修生必修

四年級選修

講授：

實驗：

達偉德

地理193—194 畢 業 論 文 學分2—2

主修生在第四年級須選定一地理專題作成論文。

預習： 地理1—2及地理學至少二十四學分

地理學主修生必修

四年級選修

講授：

實驗：

達偉德

地質1—2 普 通 地 質 學 學分4—4

研究普通地質學如空氣，地下水，流水，雪，冰，湖，海洋等之工作及普通岩石，礦物，火山，地殼之運動及地質學之畧史。

地質學或地理學主修生必修

一，二，三，四年級選修

講授： 一，三，五 11:30

實驗： 三 1:30—4:30

巴爾博

地質 5 地質學調查及實試法 學分 2

解釋地質圖表，繪畫地質，地形諸圖及他種實習。

預習： 地質 1—2

地質學主修生必修

二，三，四年級選修

講授：

實驗： 每星期兩次下午實驗

巴爾博

地質 6 地 質 學 調 查 學分 2

地質學之實地調查。

預習： 地質1—2及地質5

地質學主修生必修

二，三，四年級選修

講授：

實驗： 每星期一次下午實驗或星期六

巴爾博

地質 9 地 質 學 略 史 學分 2

研究地質學略史為從文化方面研究地質學者而設。

二，三，四年級選修

講授：一，五 10:30

巴爾博

地質107—108

地質學史

學分4—4

地質學之詳細歷史特別注重中國。

預習：地質1—2

地質學主修生必修

三，四年級選修

講授：一，二，三，四 9:30

實驗：

巴爾博

地質109—110

高級地質學

學分4—4

本課對於地質學作較深之研究，其性質年各不同。

預習：地質 1—2

地質學主修生必修

三，四年級選修

講授：時間另定

實驗：時間另定

巴爾博

地質 112

中國礦源

學分 2

討論中國之礦源及其分佈。

三，四年級選修

講授：二，四 10:30

實驗：

巴爾博

地質 191

地質研究

學分1或2

本課對於地質專題由教授指導選讀各種論著或作專門研究。

預習：地質 1—2及地質學至少二十學分

地質學主修生必修

四年級選修

講授：

實驗：

巴爾博

地質 192

地質研究

學分1或2

同地質191

預習：地質1—2及地質學至少二十學分

地理學主修生必修

四年級選修

講授：

實驗：

巴爾博

地質193—194

畢業論文

學分2—2

主修生在第四年級須選定一地質專題作成論文。

預習：地質1—2及地質學至少二十四學分

地質學主修生必修

四年級選修

講授：

實驗：

巴爾博

家事學系

宓樂施 家事學碩士.....助教兼系主任
陳 意 家事學碩士.....助教

本系之設為(一)使家事學列入大學課程為女子教育之一部分(二)訓練中學校家事學之師資(三)依照本學院之學則規定本系之主修課程(四)教授護士預科所必須之家事學科目(五)教授初級食料學各課為學生研究醫院食料學之準備

本學系學則

(一)本系主修生須修畢下列規定之課程始能畢業

國文.....	四學分
英文.....	十六學分
化學.....	十六學分
生理學.....	八學分
數學.....	四學分
社會學.....	八學分
主修科目.....	三十三學分
在主修科目三十三學分內下列各課為必修科目	
家事三.....	三學分
家事五.....	四學分
家事二十三.....	三學分
家事二十六.....	三學分
家事二十七.....	四學分
家事三十.....	三學分
家事四十五—四十六.....	四學分
相關科目.....	十六學分
選修科目.....	三十一學分

(二)本系主修生須在下列各學系中選定一相關科目：生理學，化學，經濟學，教育學，社會學
(三)本系主修生須完成本學院學則之一切規定

家事學系主修課程

	第一學期 學分	第二學期 學分
第一學年		
國文7—8	2	2
英文1—2	4	4
自然科學(生物1—2)	4	4
自然科學(化學3—4)	4	4
數學	2	2
社會科學(社會學1—2或經濟學11—12)	2	2
衛生學		1
共	18	19
第二學年		
英文5—6	4	4
相關科目	4	4
化學109, 116	1	4
社會科學(社會學1—2或經濟學11—12)	2	2
選修科目	4	4
共	18	18
第三學年		
主修科目(家事3 26)	3	3
主修科目(家事)	3	3
相關科目	4	4
選修科目	6	6
共	16	16
第四學年		

主修科目(家事5 27)	4	4
主修科目(家事45—46)	2	2
主修科目(家事23 30)	3	3
主修科目(家事)	3	
選修科目	4	7
共	16	16

家事學系授課時刻表

時間	星期一	星期二	星期三	星期四	星期五	星期六
八至九	家事26	家事15 家事23	家事3 家事26	家事15 家事23	家事3 家事26	
九時半 至 十時半	家事27	家事27		家事27	家事27	
十時半 至 十一時半	家事11 家事14	家事5		家事11 家事14	家事5	
十一時半 至 十二時半	家事42		家事42		家事42	
一時半 至 四時	家事5	家事15 家事23	家事5	家事3	家事11 家事14	

家事3 食物學 學分3

研究及實習各種食品之選擇法，適宜之儲藏法及烹飪法，食物之經濟與衛生，及營養學之基本原理。

本系主修生，看護預科二年生必修

二，三，四年級選修

講授：三，五 8:00—9:00

實驗：四 1:30—4:30

陳意

家事5 營養學 學分4

研究營養學與健康之關係，各種食品之營養價值，食品之選擇法並研營養學原理對於個人及家庭之應用法。

預習：家事3，化學109，116

本系主修生必修

講授：二，四 10:30—11:30

實驗：一，三 1:30—4:30

施樂必

陳意

家事11 衣服學 學分3

研究衣料之來源，製衣之原理，衣料選購法，保藏法，洗染，及衣服之衛生經濟諸問題。

二，三，四年級選修

講授：一，三 10:30—11:30

實驗：五 1:30—4:30

陳意

家事14 家庭佈置學 學分3

研究美術原理，及其應用於選擇及佈置家庭內之一切器物。

二，三，四年級選修

講授：一，三 10:30—11:30

家事 15 實驗： 五 1:30—4:30 陳意
應 用 美 術 學分3

研究衣料美術及顏色配合之原理，及其應用於衣飾及室內佈置等各種問題。

二，三，四年級選修

講授： 二，四 8:00—9:00

實驗： 二 1:30—4:30

家事 23 家 事 管 理 學分3 陳意

研究及實習日常治家之方法，及一切關於家庭衛生公共衛生之常識。

本系主修生必修

二，三，四年級生選修

講授： 二，四 8:00—9:00

實驗： 二 1:30

家事 26 家 政 學 學分3 必樂施

研究家庭之組織，家庭與社會之關係，家庭濟經學，及一切理家法。

本系主修生必修

二，三，四年級選修

講授： 一，三，五 8:00—9:00

家事 27 兒 童 撫 育 學 學分4 必樂施

研究兒童先天，後天，及青春時期之發育及保育法，兒童健康之要因，習慣之養成法，兒童之食物，及一切關於兒童幸福之問題。

本系主修生必修

三，四年級選修

家事 30 講授： 一，二，四，五 9:30—10:30 必樂施
家 政 實 習 學分3

學生寄寓於家政實習室，以便實習一切治家之法，室中一切工作，由學生輪流充任

預習： 家事3，5，23，26

本系主修生必修

講授：

實驗：

家事 42 家 事 學 教 授 法 學分3 陳意

研究家事學之教材及教授法，編制中學家事課程，遇有相當之機會即由學生實地試驗教授方法。

預習： 家事學至少十六學分

講授： 一，三，五 11:30—12:30

實驗：

家事45—46 論 文 學分2—2 必樂施

由教授指導撰成論文一篇

本系主修生必修

講授：

實驗：

必樂施

數 學 系

陳化民 文學碩士，哲學博士.....教授兼系主任
 克恩慈女士 文學碩士.....教授
 韓懿德女士 理科學士.....教授

本 學 系 學 則

(一)本學系主修生須修畢下列規定之課程始能畢業

國文	4學分
英文	16學分
物理5—6	8學分
社會科學	8學分
主修科目	40學分

其中包括下列各項科目

數學21—22	8學分
數學23—24	8學分
數學27—28	8學分
數學35—36	8學分
數學(任選)	8學分

相關科目(物理，化學或生物)	16學分
----------------	------

選修科目	44學分
------	------

總數	百三十六學分
----	--------

(二)在本系教授指導下作論文一篇

(三)完成本學院學則之一切規定

數 學 系 主 修 科 課 程

	上學期 學 分	下學期 學 分
第一學年		
國文七，八	2	2
英文一，二	4	4
數學21—22	4	4
自然科學(物理)	4	4
選修科目	2	2
社會科學	2	2
衛生(女生)		1
共	18	19或18
第二學年		
英文五，六	4	4
數學23—24	4	4
相關科目	4	4
社會科學	2	2
選修科目	4	4
共	18	18
第三學年		
數學27—28	4	4
數學	3或2	3或2
相關科目	4	4
選修科目	5或6	5或6
共	16	16
第四學年		
數學55—56	4	4
數學	3或2	3或2
選修科目	9或10	9或10
共	16	16

(註) (一)相關科目 本系雖不願指定物理學為唯一之相關科目，然極願主修生修習之，蓋物理學最能輔助學者了解高深數學之意義也。

(二)社會科學須自下列之學系選修：經濟，教育，歷史，政治，心理，宗教，社會，

(三)凡欲於畢業後擔任教務者宜選修教育學及心理學。

數學系授課時刻表

時 間	星期一	星期二	星期三	星期四	星期五	星期六
8—9	31—32	21—22	31—32	21—22	31—32	21—22
9:30—10:30	23—24 29—30	23—24 53	29—20	23—24 53	23—24 29—30	53
10:30—11:30	27—28	27—28		27—28	27—28	
11:30—12:30	3—4 35—36	1—2(甲)	1—2(乙)	1—2(甲) 35—36	1—2(乙) 3—4 35—36	
1:30—2:30	21—22					
2:30—3:30						
3:30—4:30						

數學 1—2 初 等 分 析 學分2—2

混合高級代數三角解析幾何並微積分，多注意與科學直接有關係之部分，以便理科學生未暇專功數學者。

本學院主修生不以數學為主修者必修

一，二，三年級選修

講授： 甲組 二，四 11:30 乙組 三，五 11:30 每班限
二十八 韓懿德

數學 3—4 數 學 分 析 初 級 學分2—2

本課學分專為本學院主修生不以數學為主修者而設

預習： 數學1—2

本學院主修生不以數學為主修者選修

講授： 一，五 11:30

數學 21—22 高 級 混 合 數 學 學分4—4

高等代數三角等。

本系主修生必修

一，二，(或三，四)年級選修

講授： 一 1:30 二，四，六 800

數學 23—24 解 析 幾 何 學分4—4

平面解析幾何，平面位標制錐線及高次曲線。

立體幾何，三進空間位標制，二次曲面等等並位標通義。

預習： 數學21—22

本系主修生必修

二，三，四年級選修

講授： 一，二，四，五 9:30

克恩慈女士

數學 27—28 微 積 分 學分4—4

上 學 期 微 分 學

各種初等函數並求微分之法則，戴氏定例，並求級數法，定級數為歸為歧，中量定理，及無定式等等。

下 學 期 積 分 學

各種初等基礎積分式及於幾何並物理上之應用。

預習23—24或1—2

本系主修生必修

講授：一，二，四，五 10:30

克恩慈女士

數學 29—30 純 粹 幾 何 學 學分3—3

純粹幾何學並幾何圖畫。為近代幾何學初級課程，預備高級基礎。

一，二，三年級生選修

講授：一，三，五 9:30

韓懿德女士

* 數學 51 微 分 方 程 學分3

非只專為數學系學生而設，其習理化科者亦所必需。課程乃取微分方程常用之式，說明其解法，並其應用。

預習數學系27—28

三，四年級選修

限二十人

陳化民

數學 52 方 程 式 理 論 學分3

方程式根與係數之關係，三次及四次方程之解法，實根之區劃，數係數多次方程之解法，並對稱函數等等可與微分積分同時學習。

三，四年級選修

預習高級代數解析幾何

陳化民

* 數學 53 高 等 幾 何 學分3

繼續數學29—30 射影幾何學

預習：數學 29—30

三，四年級選修

講授：二，四，六 9:30

韓懿德女士

不每年開班

* 數學 54 高 等 立 體 幾 何 學分3

本科教授初級立體解析幾何

預習：23—24

三，四年級生選修

講授：

韓懿德女士

不每年開班

數學 55—56 高 級 微 積 分 學分4—4

繼續數學27—28講授積分各種求法，重積分，三重積分，及應用線積分，格式定理，及應用，多重積分換變數公式，偏導微分，全微分及相關定理，幾何上力學上之應用戴氏公式，極大極小，拉氏乘數，無定積分，J函數，B函數，微分方程式大意。

三，四年級選修

預習數學 27—28

講授：

陳化民

數學 113—114 數 學 教 授 法 學分2—2

特別注重初中並高中數學的教授方法。

四年級選修

講授：二，五 2:30

韓懿德女士

* 數學 115 數 學 史 學分3

論數學之原起並其發展。

預習： 數學 23—24
3—4 選修

講授： 二，四 11:30 並不每年開班 克女士

數學 119—120 中 國 數 學 史 學分2—2

今日習數學者於本國數學多未暇講求，不知於西學未來中國之前，元宋以上，中國數學發達已頗有可觀。本課程就中國古代數學之發展比較希臘等國，並討論中西學術之流傳。

四年級生選修
講授：

陳化民

數學 151—152 函 數 理 論 學分2—2

注重積分並無窮級數，為高等分析之基礎。

四年級(或研究生)選修
講授：

陳化民

物 理 學 系

謝玉銘	文學碩士，哲學博士.....	副教授兼系主任
楊蓋卿	理學士 理學碩士.....	副教授
班威廉	(William Band) 理學士 理學碩士.....	助教
吳敬寰	理學士 理學碩士.....	助教
孟昭英	理學士.....	助理
王思義	理學士.....	助理
褚聖麟	理學士.....	助理

本學系教授工作之目的約有四端

- 一 為教練醫學預科生及工科預科生
- 二 為訓練各學系學生，使能了解科學方法，及物理學在近代科學界所居之位置
- 三 為培植物理學師資，使能以最新學理實施於教育工作
- 四 為養成物理學研究者，使其在學術界能有相當之供獻

本 學 系 學 則

本學系主修生必須完成下列之規定始能畢業：

(甲) 國文.....	四學分
英文.....	十六學分
化學(第二年級化學).....	八學分
數學.....	十六學分
社會科學.....	四學分
主修科目.....	四十學分

主修生在所選課程內，須包括下列各科目：

物理567.....	十二學分
物理101.....	四學分
物理111.....	四學分

物理131.....	四學分
物理141, 142.....	六學分
物理151.....	四學分
物理161, 162.....	二學分
物理171, 172.....	四學分
	四十學分

相關科目(生物, 化學, 地質或數學).....十六學分
 選修科目.....三十二學分
 總共.....一百三十六學分

(乙) 選修物理171, 172, 時須於本系教授指導之下, 潛心研究, 作成論文。

(丙) 完成本學院學則之一切規定

物理學系主修課程

	秋學期 學 分	春學期 學 分
第一年級		
國文7—8	2	2
英文1—2	4	4
自然科學(物理3—4或物理5—6)	4	4
自然科學(數學23—27或24—28)	4	4
自然科學(化學3—4)	4	4
衛生學(女生必修)		1
共	18	18或19
第二年級		
英文5—6	4	4
主修(物理5—6或7—其他高深科目)	4	4
化學5—6	4	4
數學27—28或31—32	4	4
社會科學	2	2

共	18	18
第三年級		
主修科目	4	4
主修科目	4	4
相關科目	4	4
選修科目	4	4
共	16	16
第四年級		
主修科目	1	1
主修科目	2	2
主修科目	3	3
主修科目	4	4
選修科目	6	6
共	16	16

(註) 數學與物理學有密切關係故凡本系主修生必須選習兩學年之數學。凡在第一年級未曾選修微積分學者, 務於第二年級選修之, 蓋本系科目數在一百以上者皆須用微積分學輔助其理論上之研究。

茲將與物理學主修生有重要關係之數學化學科目臚列如下:

數學1—2	初等分析
數學21—22	高等代數三角等
數學23—24	解析幾何
數學27—28	微積分
數學31	微分方程
數學32	方程式理論
數學35—36	高級微積分
化學3—4	無機化學
化學5—6	大學二年化學
化學131—132	物理化學

物理學系授課時刻表

時 間	星期一	星期二	星期三	星期四	星期五	星期六
8:00至9:00	物理3—4 物理101	物理5—6 物理115 物理145	物理3—4 物理101	物理5—6 物理115 物理145	物理3—4 物理101 物理115	物理5—6 物理145
9:30 至 10:30	物理103		物理103		物理103	
10:30 至 11:30	物理7 物理111	物理115	物理7 物理111	物理131 物理115	物理7 物理111	物理115
11:30 至 12:30	物理141		物理141 物理144		物理141	
1:30至4:30	物理3—4 A 物理7A 物理145 A	物理5—6 A 物理131 物理142 物理144 物理151	物理5—6 B 物理111 物理145 B	物理3—4 B 物理7B 物理101 物理142 物理144 物理151	物理5—6 C 物理7C 物理131	
4:30至5:30		物理151		物理151		

物理 1 物 理 學 概 要 學分4

本課程與生物學系一門相類似課程專為應用社會科學院學生而設。目的在教練學生使其領略科學辦事法及自然科學在近代所居之位置。講授多注重幾個精選之題目以實驗方法表演其歷史上之沿革及其發展。自然科學院學生選修本課程者不能得學分。

應用社會科學院主修生必修

講授：一，三，五 8:00 B115

實驗：甲組 一 1:30—4:30 B120

乙組 四 1:30—4:30 B120

楊蓋卿

物理 3—4 物 理 學 原 理 學分4—4

本課程解釋物理學之原理定律及其應用。凡未習過高中物理學者可以選修之。

一，二年級選修

預習代數幾何

限四十名

講授：每週三小時 一，三，五 上午八時 B203 吳敬寰

實驗：每週三小時 A組 星期一 一時半至四時半 B122

B組 星期四 一時半至四時半 B122

物理 5—6 力 學 熱 學 聲 學 及 光 學 學分4—4

本學程與物理學七，組成普通物理學之學程，對於物理學之基本原理，用演講討論習題及試驗法，作審慎之研究。凡習醫學預科者必選讀本學程。

一，二，三，四年級選修

預習物理學或高中物理學

限四十五名

講授：每週三小時 二，四，六 早八時 B 203

楊蓋卿，班威廉

實驗： 每週三小時 A 組 星期二 一時半至四時半 B120
 B 組 星期五 一時半至四時半 B120
 C 組 星期三 一時半至四時半 B120

物理 7

電 學 及 磁 學

學分 4

本學程之性質與物理學5—6相同。凡習醫學預科者必選讀之。

二，三，四年級選修

預習物理學五，六，

限四十五名

講授： 每週三小時 MWF 10:30 B 203

楊蓋卿

實驗： 每週三小時 A 1:30—4:30 M

B 1:30—4:30 F } B103

C 1:30—4:30 Th.

物理 101

分 析 力 學

學分 4

本學程講授質點與剛體之靜動力學，試驗，習題，兼工程上之應用。

三，四年級選修

預習物理學5—6；微積分學

限十五名

講授： 每週三小時 一，三，五 早八時 B115

謝玉銘

實驗： 每週三小時 星期三 一時半至四時半

物理 103

理 論 物 理 學 大 綱

學分 3

本學程講授數學在物理學之應用，輔以表演及問題解決，使學者有切實之了解。

三，四，五年級選修並為化學與算學系之選修學程

預習物理學五，六，七，微積分學

限二十人

講授： 每週三小時 一，三，五 9:30 B115

班威廉

物理 105

有 向 量 分 析 Vector Analysis

學分 3

本課程研究有向量之代數學及微積分學及其在物理學上之應用。

預習： 物理五，六，七及微積分學

講授： 每星期三小時

時間另定

班威廉

物理 107

相 對 論 (甲)

學分 3

本課程教授相對論的 restricted theory 與 general theory 及其應用於吸力，光學的現象 凡經教授者之允許即可選修

預習： 兩年物理學及微積分學

三，四，年級生選修

講授： 每星期三小時

時間另定

班威廉

物理 111

分 子 物 理 學 與 熱 學

學分 4

本學程講授滯性毛管現象，氣體液體之擴散傳導率，物態之變化，單簡之氣體分子動說以及熱力學之要領。

三，四年級選修

預習物理學五，六，微積分學

限十五人

講授： 每週三小時 一，三，五 10:30 B115

謝玉銘

實驗： 每週三小時

物理 115

熱 力 學

學分 3

本學程講授熱力學之定律，及其在物理學與化學上之應用。

四，五年級選修

預習物理學五，六，微積分學若已習過物理學103更好
限二十人

講授： 每週三小時 二，四，六： 10:30 B115 楊蓋卿

物理 131 高級光學 學分 4

本學程講授物理光學與幾何光學之撮要，並試驗所討論之原理與定律。

三，四年級選修

預修物理學5—6，微積分學

講授： 星期四 10:30 A.M. B115

實驗： 星期二 1:30—4:30 B114

星期五 1:30—4:30 B114

謝玉銘

物理 141 高級電學及磁學 學分 3

本學程講授靜電學動電學與磁學。凡選修本學程者，必選修物理學108。

二，三，四年級主修生必修

預習物理學五，六，七，及微積分學

限八人

講授： 每週三小時

實驗： 一，三，五 11:30—12:30

楊蓋卿

物理 142 直流電學度量 學分 3

本課程實驗物理學所講授討論之原理與定律。

二，三，四年級選修

預習與物理學106相同

限八人

實驗： 二，四 1:30—4:30 B103

楊蓋卿

物理 145

無線電報及無線電話

學分 4

本課程研究近世無線電報與電話之定律及其應用

預習： 物理 5, 6, 7 及微積分學

三，四年級選修

講授： 二，四，六 8:00 B115

實驗： 一 1:30—4:30 B105

五 1:30—4:30 B105

吳敬寰

物理 151

近代物理學

學分 4

本學程講演氣體之導電射性學光電學X光線及原子構造等。

三，四，五年級選修兼為化學系之選修學程

預習物理學五，六，七，微積分學

限八人

講授： 二，四， 1:30

謝玉銘

實驗： 二，四， 2:30—4:30 B114

物理 161

物理學雜誌研究會

學分 1

教授與學生更迭報告各種物理學雜誌中近著之要點， 每星期會集

一小時

預習： 物理學二年

三，四年主修科生必修

時間另定

本系教授

物理 162

物理學雜誌研究會

學分 1

說明同物理161

預習： 物理學二年

三，四年級主修生必修

時間另定

本系教授

物理 163 物 理 學 史 略 學分 2

本課程討論物理學歷來發展之概要，學生須將其所研究者在課室報告，凡經教授者之允許即可選修。

講授： 每星期二小時，
時間另定

物理 171 物 理 學 問 題 研 究 學分 2

凡以物理學為專修科者，必修本學程，並將研究所得之結果，作成論文，送交本學系指導員評閱。

三，四年級主修生必修
預習過二年物理學
時間：臨時酌定

本系教授

物理 172 物 理 學 問 題 研 究 學分 2

說明同物理171

預習： 物理學兩年
三，四年級主修生必修
時間另定

上列課程其中數門不能每年教授，但本系教授於分配課程時，務使學生在四年修業期內得選修所欲讀之課程。

醫 學 預 科

醫學預科顧問.....博愛理女士 哲學博士

醫 預 生 必 修 課 程

凡學生欲於本校自然科學院研究醫預科工作者，其入學手續，與本校其他學系之主修生相同。

醫預科設顧問一人，學生註冊時，可向其諮問一切。

醫預科第一二三年級所應修之各項科目，均詳列於下列課程中。

學生修畢三學年之課程後，可投考北平協和醫學校為正式醫科學生。

學生修畢本校醫預科之必修課程後，復於北平協和醫學校修畢第一年醫學課程時得受本校理學士之證書。

學生於中學肄業時，已修畢適當之物理學科目者，須完成下列甲組之必修課程；其未修畢適當之物理學科目者，須完成下列乙組之必修課程。

(甲 組)

中文.....	十學分
英文.....	十六學分
數學1—2.....	四學分
生物學1—2.....	八學分
生物學51—52.....	八學分
化學3—4.....	八學分
化學5—6.....	八學分
化學12.....	四學分
物理5—6.....	八學分
物理7.....	四學分
社會科學(教育，經濟，社會，歷史，心理，宗教 或政治學).....	八學分
德文或法文(或物質化學，高級數學，心理，教育 ，社會學，經濟，或政治學).....	十學分

選修科目.....	八學分
衛生學(女生必修).....	一學分
必修總數.....	一百零四學分
女生必修總數.....	一百零五學分

(乙 組)

中文.....	十學分
英文.....	十六學分
數學1—2.....	四學分
生物1—2.....	八學分
生物51—52.....	八學分
化學3—4.....	八學分
化學5—6.....	八學分
化學12.....	四學分
物理3—4.....	八學分
物理5—6.....	八學分
物理7.....	四學分
社會科學(教育, 經濟, 社會, 歷史, 心理, 宗教, 或政治學).....	八學分
德文(或法文, 物質化學, 數學, 心理, 教育, 社會, 經濟, 或政治學).....	十學分
衛生學(女生必修).....	一學分
必修總數.....	一百零四學分
女生必修總數.....	一百零五學分

(甲) 醫預生(已修畢適當之中學物理學者)必修課程

	秋季學期 學分	春季學期 學分
第一學年		
中文7—8	2	2
英文1—2	4	4
數學1—2	2	2
生物學1—2	4	4
化學3—4	4	4
社會科學(教育, 經濟, 社會, 歷史, 心理, 宗教, 或政治學)	2	2
衛生學(女生必修)		1
第二學年		
生物學51—52	4	4
化學5—5	4	4
英文5—6	4	4
物理5—6	4	4
經濟, 政治或社會學	2	2
第三學年		
中文	2	2
中文	2	
物理7	4	
化學12		4
德文或代替科目	5	5
選修科目	3	5

(乙)醫預生(未修畢適當之中學物理學者)必修課程

	秋季學期 學分	春季學期 學分
第一學年		
中文7—8	2	2
英文1—2	4	4
數學1—2	2	2
物理3—4	4	4
化學3—4	4	4
社會科學(教育, 經濟, 社會, 歷史, 心理, 宗教, 或政治學)	2	2
衛生學(女生必修)		1
第二學年		
生物學1—2	4	4
化學5—6	4	4
英文5—6	4	4
物理學5—6	4	4
經濟, 政治或社會學	2	2
第三學年		
生物學51—52	4	4
中文	2	2
中文	2	
化學12		4
物理學7	4	
經濟, 政治或社會學	4	2
選修科目		4

護士預科專修科

本校設立護士專修科一年，為學生轉入北平協和醫學校護士科之預備，欲知其中詳情者，可向北平協和醫學校護士科主任，或燕京大學註冊部，索取此科簡章。

護士預科

學生修習此科五年之後，得受本校理學士之證書，及北平協和醫學校之護士證書；第一第二兩年在本校修畢一切，必修科目；及規定之自然科學社會科學各項科目；第三第四兩學年在協和醫校修習護士學之科目；第五學年第一學期在協和醫院實習；第二學期則由學生自行選定，或在本校，或在協和醫校，作專門之研究。

學生欲修習此科者，其入學程度及入學手續，與第一年級生相同。

護士預科課程

科目	第一年級			第二年級		
	秋季	春季	總學分	秋季	春季	總學分
生理學	4	4	8			
化學	4	4	8			
國文	4	4	8	4	4	8
英文	4	4	8	4	4	8
家事學26					3	3
家事學3				3		3
衛生學		1	1	4	4	8
物理						
心理學	2	2	4	2	2	4
社會學				2	2	4
政治學						
總數	18	19	37	19	19	38

製革專修科

本科之工作，純屬專門性質，學生除修習普通化學及製革化學外，專研究皮革製造法，及製皮廠實習；凡四年制之中學畢業生，均可投考本專修科。

學生修畢兩學年之規定課程者，得受本專修科畢業證書，惟不能得大學學分。本科詳細章程，可向註冊部函索。

私立燕京大學自然科學院

農事試驗場

本試驗場原名燕京大學農學系，近因應付農業社會之需求，特將大學課程取消，專事增進試驗及推廣之工作，適值大學部改組為各學院，為向國民政府教育部請求立案之準備，本系遂改名為自然科學院農事試驗場。

本場職員

劉和	農學博士	主任
于振周	文學士 理學士	農場管理兼畜牧技士
沈壽銓	理學士	作物技士
姜彝長	理學士	園藝技士
陳舜耘	獸醫博士 化學碩士	獸醫

試驗工作

本場之試驗工作，共分為畜牧作物與園藝三部，本場現有由美國運來之純種豬羊家禽乳牛等多種，其發售與農民為交種試驗者，已屬不少，本場亦自行各種飼養之實驗，其中尤以中西交種之豬為飼養實驗之最佳材料。

作物試驗，分土壤肥料及作物選種兩項，本場之人工肥料試驗，進行已有五年之久，所得成績極佳，至於選種工作，則專重華北之重要作物，如麥高粱小穀黃豆及稻等，至於外國種之玉蜀黍，及棉花之選種，已推行於華北各處，頗為農民所歡迎。

園藝試驗，以果樹之培植為主，蔬菜之選種次之，本場現有外國種蘋果及中西果品各十餘種，每年所產小樹，出售頗多。

推 廣 工 作

本場之推廣工作共分五部如下：

- (一) 燕大農訊——此項出版物為月刊，其目的為推廣本場所得之試驗結果，報告各種農業調查，及討論農業上之各種問題，本刊概係贈閱，並不收費，每月索閱者約八百餘人。
- (二) 推廣部問訊處——農民遇有疑問，可逕寄函本處諮詢一切，目下本處所收信件，平均每日三起。
- (三) 農產展覽會——每年秋季，本場舉行農產展覽會一次，其目的為聯絡農民，及陳列各種農產競賽物品，另在各處舉行同樣之展覽會，年必數起。
- (四) 農事講習所——本場與清華大學及香山慈幼院合辦農事講習所，使農民之子弟，得受農業推廣及農業開墾之訓練。
- (五) 冬季速成科——本場創辦冬季速成科，使年長農民，農村領袖，及在農村傳道者，得藉以研究各種農業問題，及村中之教育社會經濟宗教等等問題。

0346

00151

一果
，不
處
給必
農
在教

北 平

京華印書局代印

0347.5810

0347

RECEIVED
UNIVERSITIES
NOV 18 1929
JOINT OFFICE

0348

0348

office copy

燕京大學
YENCHING UNIVERSITY
BULLETIN

College of Natural Sciences
Announcement of Courses
1930-1931



Volume XII—Number 25
Peiping, China
July, 1930

0349

0349



0350

M 2 3 1 3 00 1 0

燕京大學
YENCHING UNIVERSITY
BULLETIN

College of Natural Sciences
Announcement of Courses
1930-1931



Volume XII—Number 25
Peiping, China
July, 1930

3
1
5
1
5
00
1
0

0351

YENCHING UNIVERSITY BULLETINS

The regular bulletins of the University are issued at stated times during the year. Other special bulletins are issued from time to time as the need arises. All applications for bulletins should be made to the Registrar's office or the Dean's office of the College or School concerned.

Yenching University	
General Catalogue.....	In preparation
Graduate Division	
Announcement of Courses.....	Postage
School of Religion	
Announcement of Courses.....	Postage
College of Arts and Letters	
Announcement of Courses.....	Postage
College of Natural Sciences	
Announcement of Courses.....	Postage
College of Applied Social Sciences	
Announcement of Courses.....	Postage
Undergraduate College	
Bulletin of Entrance Information.....	Free
Short Courses	
Bulletin of General Information.....	Free
Yenching University	
Directory of Faculty and Students.....	15 cents
Special Departmental bulletins will be supplied by the Registrar and the departments concerned upon receipt of postage.	

Address communications for

College of Natural Sciences	General Information	Women's College
to	to	to
Dean, A. M. Boring Yenching University Peiping	Registrar, Y. P. Mei Yenching University Peiping	Dean, A. B. Frame Yenching University Peiping

MAJOR CURRICULUM IN BIOLOGY.

FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Biol. 1)	4	Nat. Sc. (Biol. 2)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Mathematics 1	2	Mathematics 2	2
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
		Hygiene (for women)	1
	18		19
<i>Second Year</i>			
English 5	4	English 6	4
Major (Biol. 51)	4	Major (Biol. 52)	4
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
Electives	4	Electives	4
	18		18
<i>Third Year</i>			
Major (Biol. 101)	3	Major (Biol. 102)	3
Major (Biol. 103)	2	Major (Biol. 104)	2
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Electives	7	Electives	7
	16		16
<i>Fourth Year</i>			
Major (Biol. 151)	2	Major (Biol. 152)	2
Major (Biol. 153)	1	Major (Biol. 154)	1
Major (Biol. —)	4	Major (Biol. —)	4
Electives	9	Electives	9
	16		16
11			

YENCHING UNIVERSITY BULLETINS

The regular bulletins of the University are issued at stated times during the year. Other special bulletins are issued from time to time as the need arises. All applications for bulletins should be made to the Registrar's office or the Dean's office of the College or School concerned.

Yenching University	
General Catalogue.....	In preparation
Graduate Division	
Announcement of Courses.....	Postage
School of Religion	
Announcement of Courses.....	Postage
College of Arts and Letters	
Announcement of Courses.....	Postage
College of Natural Sciences	
Announcement of Courses.....	Postage
College of Applied Social Sciences	
Announcement of Courses.....	Postage
Undergraduate College	
Bulletin of Entrance Information.....	Free
Short Courses	
Bulletin of General Information.....	Free
Yenching University	
Directory of Faculty and Students.....	15 cents
Special Departmental bulletins will be supplied by the Registrar and the departments concerned upon receipt of postage.	

Address communications for

College of Natural Sciences	General Information	Women's College
to	to	to
Dean, A. M. Boring Yenching University Peiping	Registrar, Y. P. Mei Yenching University Peiping	Dean, A. B. Frame Yenching University Peiping

ACADEMIC CALENDAR

1930-1931

Fall Semester

Fall Semester begins.. .. .	Sept. 1 (Mon.)
Dormitories open to students.. .. .	Sept. 1 (Mon.)
Placement examinations for transfer students.. .. .	Sept. 3 (Wed.)
Faculty preessional conference	Sept. 5 (Fri.)-Sept. 6 (Sat.)
Registration.. .. .	Sept. 10 (Wed.)-Sept. 12 (Fri.)
Classwork begins.. .. .	Sept. 16 (Tues.)
Late registration with fine.	Sept. 16 (Tues.)-Sept. 29 (Mon.)
Change of courses without fine.	Sept. 16 (Tues.)-Sept. 22 (Mon.)
Last day for taking make-up examinations.	Sept. 22 (Mon.)
Change of courses with fine	Sept. 23 (Tues.)-Sept. 29 (Mon.)
National holiday.. .. .	Oct. 10 (Fri.)
Senior thesis topic due	Oct. 15 (Wed.)
Sun Yat Sen's birthday anniversary	Nov. 12 (Wed.)
Freshman mid-semester examinations	Nov. 17 (Mon.)-Nov. 22 (Sat.)
Senior thesis outline due	Dec. 1 (Mon.)
New Year holiday	Dec. 21 (Sun.)-Jan. 10 (Sat.)
University anniversary	Dec. 25 (Thurs.)-Dec. 26 (Fri.)
Founding of the Republic of China anniversary	Jan. 1 (Thurs.)
Fall semester examinations	Jan. 22 (Thurs.)-Jan. 31 (Sat.)

Spring Semester

Spring semester begins	Feb. 1 (Sun.)
Registration	Feb. 9 (Mon.)-Feb. 10 (Tues.)

0353

Classwork begins.. .. Feb. 12 (Thurs.)
 Late registration with fine. .. Feb. 12 (Thurs.)-Feb. 25(Wed.)
 Change of courses without fine. .. Feb. 12 (Thurs.)-Feb. 18(Wed.)
 Last day for taking make-up examina-
 tions. .. Feb. 18 (Wed.)
 Change of courses with fine .. Feb. 19 (Thurs.)-Feb. 25(Wed.)
 Sun Yat Sen's memorial day .. Mar. 12 (Thurs.)
 Huang Hua Kang memorial day .. Mar. 29 (Sun.)
 Master's thesis due to major department. Apr. 1 (Wed.)
 Spring recess.. .. Apr. 4 (Sat.)-Apr. 6(Mon.)
 Master's thesis due to graduate com-
 mittee .. May 1 (Fri.)
 Senior thesis due to major department.. May 1 (Fri.)
 Alumni home coming day.. .. May 2 (Sat.)
 Senior thesis due to dean of college. .. May 15 (Fri.)
 Spring semester examinations.. .. June 11 (Thurs.)-June 20 (Sat.)
 Baccalaureate. .. June 21 (Sun.)
 Class day. .. June 22 (Mon.)
 Commencement .. June 23 (Tues.)

University Officers of Administration.

Wu Lei-ch'uan, Hanlin Academy .. *Chancellor*
 J. Leighton Stuart, D. D... .. *President*
 Shuhsi Hsu, Ph. D. *Chairman of the Committee of the
Graduate Division*
 Ch'en Yuan *Director of the Research School of
Chinese Studies*
 Chao Tsu-ch'en, M.A., B.D., D. Litt. *Dean of the School of Religion*
 Chou Hsüeh-Chang H., M.A., Ph.D. *Dean of the College of Arts and
Letters*
 *Stanley D. Wilson. Ph. D. *Dean of the College of Natural
Sciences*
 Miss Alice M. Boring, Ph. D. *Acting Dean of the College of
Natural Sciences*
 Shuhsi Hsu, Ph. D. *Dean of the College of Applied
Social Sciences*
 Mrs. M. S. Frame, B. D., D. Litt .. *Dean of the College for Women*

Wu Lei-ch'uan, Hanlin Academy .. *Chairman of the Committee on
Student Welfare*
 Ch'üan Shao-wen, J., B.A. *Comptroller*
 Howard S. Galt, Ed.D., D.D. *Acting Treasurer*
 Mei Yi-pao, Ph.D. *Registrar*
 Ts'ai I-o, S., B.A. *Associate Treasurer*
 Miss Mary Cookingham, B. A. *Assistant Registrar*
 *Tien Hung-tu, B.A. *Acting Librarian*
 Miss Chung Hui-ying, M.A. *Acting Assistant Librarian*
 Basil L. L. Learmonth, M. D. *Medical Officer*
 Miss Yao Mei-hua, M.D. *Medical Officer, College for Women*

Address communications to Mei Yi-pao, Ph. D., Registrar.

*Absent on leave, 1930-31.

The College of Natural Sciences.

The Faculty.¹

- *Stanley D. Wilson, Ph. D. *Dean of the College and Professor of Chemistry.*
- Miss Alice M. Boring, Ph. D. *Acting Dean of the College of Natural Sciences and Professor of Biology.*
- Ch'en Tsai-hsin, M.A., Ph.D. *Professor and Chairman of the Department of Mathematics.*
- Walter W. Davis, M.S. *Professor of Geography and Chairman of the Department of Geography and Geology.*
- Lew T'ing-fang, T., Ph. D., D.D., S.T.D. *Professor of Psychology.*
- George B. Barbour, Ph. D. *Professor of Geology.*
- Earl O. Wilson, B.S., M.S. *Professor and Chairman of the Department of Chemistry.*
- Miss Emma L. Konantz, M.A. *Professor of Mathematics.*
- Hsieh Yü-ming, M.A., Ph. D. *Professor and Chairman of the Department of Physics.*
- Miss Ethel M. Hancock, B. Sc. *Professor of Mathematics.*
- Wu Chen-fu, F., M.A., Ph. D. *Professor and Chairman of the Department of Biology.*
- Luh Chih-wei, Ph. D. *Professor and Chairman of the Department of Psychology.*
- William H. Adolph, Ph. D. *Professor of Chemistry.*
-
- Yang Chin-ch'ing, B. S., M. S., *Assistant Professor of Physics.*
- Li Ju-ch'i, M. A., Ph. D. *Assistant Professor of Biology.*
- Randolph C. Sailer, Ph. D. *Assistant Professor of Psychology.*
- Liu Ju-ch'iang, B. S., M. A. *Assistant Professor of Psychology.*
-

1. With the exception of the dean and the acting dean the list is arranged in the order of seniority according to rank.

* Absent on leave, 1930-31.

- Miss Camilla Mills, B. S., M. A. *Lecturer and Chairman of the Department of Home Economics.*
- William Band, B. Sc., M. Sc. *Lecturer in Physics.*
- Chang Yin-t'ang, M. Sc. *Lecturer in Geography.*
- Mrs. Lennig Sweet, M. A. *Honorary Lecturer in Psychology.*
-

- Wang Tsan-ch'ing, B. A. *Instructor in Chemistry.*
- Ts'ao Ching-p'an, B. A. *Instructor in Chemistry.*
- Yü Chen-chou, B. A. B. S. *Instructor and Acting Director of the Agricultural Experiment Station.*
- Chang Ch'uan, P., B. S. *Instructor in Industrial Chemistry.*
- *Ts'ai Liu-sheng, B. S., M. S. *Instructor in Chemistry.*
- Miss Ch'en I, C., B. A., M. A. *Instructor in Home Economics.*
- Liu Ch'eng-chao, B. S., M. S. *Instructor in Biology.*
- Miss Myrtilla M. Haskin, B. A. *Instructor in Biology.*
- Meng Chao-ying, B. S. *Instructor in Physics.*
-

- Chang Wen-te, B. S. *Assistant in Industrial Chemistry.*
- Shen Shou-ch'üan, B. A., B. S. *Assistant in Agriculture.*
- Hsia Yün, B. A. *Assistant in Psychology.*
- Ch'en Kuo-chieh, B. S. *Assistant in Biology.*
- Ch'u Sheng-lin, B. S. *Assistant in Physics.*
- Miss Ch'en Shen-chao, B. S., M. S. *Assistant in Chemistry.*
- Meng Ting-hsiu, B. S. *Assistant in Biology.*
- Miss Wang Ming-chen, B. S. *Assistant in Physics.*
- Lo Tsung-shih, B. S. *Assistant in Chemistry.*
- Kao Hsueh-tsung, B. S. *Assistant in Chemistry.*
- Hsieh Wei-chieh, B. S. *Assistant in Chemistry.*
- Ho Wei-fah, B. S. *Assistant in Chemistry.*
- Chang Wen-Yü *Student Assistant in Physics.*

Executive Committee of the College.

Miss Alice M. Boring, Ph. D. *Acting Dean.*
 Mrs. Murray S. Frame, B.D., D. Litt. *Dean of the College for Women.*
 Wu Chen-fu, F., M.A., Ph. D. *Biology.*
 Earl O. Wilson, B.S., S.M. *Chemistry.*
 Walter W. Davis, M. S. *Geography and Geology.*
 Miss Camilla Mills, B.S., M.A. *Home Economics.*
 Chen Tsai-hsin, M.A., Ph. D. *Mathematics.*
 Hsieh Yü-ming, M.A., Ph. D. *Physics.*
 Luh Chih-wei, Ph. D. *Psychology.*

Advisors in Special Courses.

Miss Alice M. Boring, M.A., Ph. D. *Pre-medical.*
 Miss Camilla Mills, B.S., M.A. *Pre-nursing.*

Directors of Short Courses.

Yü Chen-chou, B.A., B.S. *Agriculture.*
 Earl O. Wilson, B.S., S.M., *Leather.*

COLLEGE OF NATURAL SCIENCES

Academic Regulations.

1. *Entrance.* Students graduating from government or registered private Senior Middle Schools or other schools of similar standing may be admitted into the College by successfully passing the Entrance Examination.
2. *Major Departments.* A regular student in this College must elect one of the following Departments as his or her Major Department: Biology, Chemistry, Geography and Geology, Home Economics, Mathematics, Physics and Psychology.
3. *Graduation.* A regular student on fulfilling the prescribed curriculum of one of the Major Departments in this College and passing all examinations will receive the diploma of Bachelor of Science.
4. *Required Courses.* The College offers the following types of required courses.

A. *General Requirements.* A regular Freshman student must fulfill the following requirements during the First-Year.

Subject	Year Credits
* Chinese.	4 Credits
English.	8 Credits
Natural Sciences.	16 Credits

This requirement must be fulfilled by electing courses from any two of the following: Biology, Chemistry, Geography, Geology, Mathematics, Physics.

Mathematics. 4 Credits

A student who takes 8 credits in Mathematics as one of the Natural Sciences will be excused from this requirement.

Social Science 4 Credits

Total Credits for the First Year 36 Credits

A woman student must take one credit in Hygiene in the second semester of the first year, making a total of 37 credits for the year.

DEPARTMENT OF BIOLOGY.

Wu Chen-fu, F., M.A., Ph.D.	Professor and Chairman
Alice M. Boring, M.A., Ph.D.	Professor
Li Ju-ch'i, M.A., Ph.D.	Assistant Professor
Liu Ju-ch'iang, B.S., M.S.	Assistant Professor
Liu Ch'eng-chao, B.S., M.S.	Instructor
Myrtilla M. Haskins, B.A., M.A.	Instructor
Ch'en Kou-chieh, B.S.	Assistant
Meng Ting-hsiu, B.S.	Assistant

The functions of the Department are (1) to provide the necessary courses which are fundamental to the curricula in Pre-medicine, Pre-nursing, Leather Tanning and Home Economics and other professional and technical work in Biology, (2) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Science, (3) to train students for teaching general Science and Biology, (4) to prepare students for research work in Biology, and (5) to offer opportunities to graduates for carrying on research work in Biology.

DEPARTMENTAL REGULATIONS

A major student in this Department must fulfill the following requirements for graduation:

(1) Chinese	4 credits
English	16 credits
Chemistry	8 credits
Mathematics	4 credits
Social Sciences (Psy., Educ., Econ., or Soc.)	8 credits
Major	40 credits

Of the 40 credits of major the following courses are required:

Biology 1-2	8 credits
Biology 51, 52	8 credits
Biology 101, 120	6 credits
Biology 103, 104	4 credits
Biology 151, 152	4 credits
Biology 153, 154	2 credits

Correlated subjects (Physics, Chemistry, or Geology)	16 credits
Electives	40 credits
Total	136 credits

- (2) In Biology 151 and 152 the student must satisfactorily complete a thesis on a biological problem under the supervision of a Professor in this Department.
- (3) The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJOR CURRICULUM IN BIOLOGY.

FIRST SEMESTER

SECOND SEMESTER

<i>First Year</i>	<i>Credits</i>	<i>Credits</i>	
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Biol. 1)	4	Nat. Sc. (Biol. 2)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Mathematics 1	2	Mathematics 2	2
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
		Hygiene (for women)	1
	<hr/>		<hr/>
	18		19

Second Year

English 5	4	English 6	4
Major (Biol. 51)	4	Major (Biol. 52)	4
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Social Science (Psy., Educ., Econ., Soc.)	2	Social Science (Psy., Educ., Econ., Soc.)	2
Electives	4	Electives	4
	<hr/>		<hr/>
	18		18

Third Year

Major (Biol. 101)	3	Major (Biol. 102)	3
Major (Biol. 103)	2	Major (Biol. 104)	2
Cor. Subj. (Physics, Chem., Geol.)	4	Cor. Subj. (Physics, Chem., Geol.)	4
Electives	7	Electives	7
	<hr/>		<hr/>
	16		16

Fourth Year

Major (Biol. 151)	2	Major (Biol. 152)	2
Major (Biol. 153)	1	Major (Biol. 154)	1
Major (Biol. —)	4	Major (Biol. —)	4
Electives	9	Electives	9
	<hr/>		<hr/>
	16		16

DEPARTMENT OF BIOLOGY
Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	Biol. 3 Biol. 106	Biol. 53-54	Biol. 1-2A Biol. 3 Biol. 106	Biol. 53-54	Biol. 1-2A Biol. 3	Biol. 3 Lab.
9:30 to 10:30		Biol. 51,52 Biol. 105 Biol. 156	Biol. 1-2B	Biol. 51,52 Biol. 105 Biol. 156	Biol. 1-2B	Biol. 3 Lab.
10:30 to 11:30		Biol. 101, 102	Biol. 158	Biol. 101, 102		Biol. 3 Lab.
11:30 to 12:30						
1:30 to 4:30	Biol. 1-2X Biol. 51, 52A Biol. 103, 104 Biol. 105 Biol. 156	Biol. 1-2Y Biol. 51- 52B Biol. 53,54 Biol. 106	Biol. 1-2 X Biol. 51, 52A Biol. 103, 104 Biol. 105 Biol. 156 Biol. 158	Biol. 1-2 Y Biol. 51- 52B Biol. 53,54 Biol. 106	Biol. 101, 102	

Biology 1-2 General Biology 4-4 Credits

A course in the fundamental principles of structure and function in both animals and plants. Emphasis is placed on laboratory methods and on practical applications to everyday life whenever possible. The principles of evolution and inheritance are discussed. Two lectures and six laboratory hours.

Required: Major and Pre-medical students

Elective: 1,2.

Lecture: Section A—WF 8:00.

Section B—WF 9:30.

Laboratory: Section X—MW 1:30—4:30.

Section Y—TTh 1:30—4:30.

Miss Boring and Mr. Liu

Biology 3 Principles of Biology. 4 Credits

A course in the fundamental principles of Biology, dealing with topics of immediate human interest. Offered only to students majoring in Applied Social Sciences. Three lectures and three laboratory hours a week.

Elective. Students majoring in Applied Social Sciences.

Lecture: MWF 8:00

Laboratory: S. 8:00—11:30

Mr. Li

Biology 51 Invertebrate Zoology 4 Credits

This is a course on the morphology and physiology of the invertebrate groups with special emphasis on the life histories of the pathogenic forms, the evolutionary relationships between the different phyla, and the more important biological principles. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.

Required: Major and Pre-medical students

Elective: 2,3.

Lecture: T. Th. 9:30 offered in the first semester

Laboratory: Section A—MW 1:30—4:30

Section B—TTh 1:30—4:30

Mr. Wu

Biology 52 Comparative Anatomy of the Vertebrates 4 Credits

A study of comparative anatomy of the different classes of vertebrates with emphasis on those features in lower vertebrates which throw light on similar features in mammals and man. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.

Required: Major and Pre-medical students

Elective: 2,3.

Lecture: T. Th. 9:30 offered in the second semester

Laboratory: Section A—MW 1:30—4:30

Section B—TTh 1:30—4:30

Biology 53 General Botany 4 Credits

This course consists of the study of the structure and function of the plant body, the relation of plants to their environments and the evolutionary relationships between the different groups of plants. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.

Elective: 2,3,4.

Lecture: TTh 8:00, offered in the first semester.

Laboratory: TTh 1:30—4:30.

Mr. Liu

Biology 54 Local Flora. 4 Credits

This is a practical and systematic study of the characters of the various families and genera of the local plants. The students will receive training in field collecting, preparation of herbarium mounts, and the use of keys for the determination of the specimens in the collection. Two lectures and six laboratory hours.

Prerequisite: Biol. 1-2.
Elective: 2,3,4.
Lecture: TTh 8:00, offered in the second semester.
Laboratory: TTh 1:30-4:30.

Mr. Liu

Biology 101 General Embryology 3 Credits

The course is designed to acquaint the students with all the fundamental principles of embryology. The cell and mitosis are taken up first; then the descriptive and analytical aspects of germ cells, maturation, fertilization, and cleavage phenomena are treated with more or less detail. The most important facts of recent experimental embryology are outlined. The latter part of the semester is devoted to a comparative study of the early development of the vertebrates, particularly frog and chick; the origin and development of the germinal layers, organogenesis and the formation of embryonic membranes are emphasized. Two lectures and three laboratory hours.

Prerequisite: Biology 51,52.
Required: Major students in Biology
Elective: 3,4,5
Lecture: TTh 10:30 offered in the first semester
Laboratory: F 1:30-4:30

Mr. Li

Biology 102 Genetics 3 Credits

The object of the course is to give the students an idea of the theories of organic evolution, Mendelism and biometry. The main emphasis is laid on Mendelism. The study of linkage and crossing-over, chromosome theory of heredity and mechanism of sex determination are critically discussed. The work is rounded up by the study of biometry and its applications. The first two weeks of laboratory work are devoted to the study of unit characters and method of handling experimental material. The study of the inheritance in corn is taken up, followed by a number of breeding experiments on *Drosophila*. Two lectures and three laboratory hours.

Prerequisite: Biology 51,52.
Required: Major students in Biology.
Elective: 3,4,5
Lecture: TTh 10:30, offered in the second semester
Laboratory: F 1:30-4:30

Mr. Li

Biology 103 Biological Technique 2 Credits

Principles and practice of making microscopic preparations. Guyer's Animal Micrology will be followed. Six laboratory hours.

Prerequisite: Biol. 51, 52
Required: Major students in Biology
Elective: 3, 4, 5
Offered in the first semester
Laboratory: MW 1:30-4:30

Mr. Wu

Biology 104 Biological Technique 2 Credits

A practical study of various laboratory methods in collecting, preserving and preparing biological specimens for class and laboratory work. Six laboratory hours.

Prerequisite: Biol. 103
Required: Major students in Biology
Elective: 3, 4, 5
Offered in the second semester
Laboratory: MW 1:30-4:30

Mr. Wu

Biology 105 Animal Histology 4 Credits

A general study of animal cells and tissues and some typical organs. Fresh material will be studied where possible, and its reaction to various chemicals, which constitutes a foundation for the study of microscopic technique. Two lectures and six laboratory hours.

Prerequisite: Biol. 51, 52
Elective: 3, 4, 5
Lecture: TTh 9:30 offered in the first semester
Laboratory: MW 1:30-4:30

Miss Boring

Biology 106 General Entomology 4 Credits

A study of the morphological characters of insects and the representatives of the different orders, with emphasis on their evolutionary relationships, life histories, economic importance and methods of control. Two lectures and six laboratory hours.

Prerequisite: Biol. 51
Elective: 3, 4, 5
Lecture: MW 8:00 offered in the second semester
Laboratory: TTh 1:30-4:30

Mr. Wu

Biology 151 Senior Thesis 2 Credits

Each Major student is expected to show the ability of working out independently a simple problem in Biology under the supervision of one of the Professors who is best trained in the special line. Work equivalent to at least six laboratory hours

Prerequisite: Two years of Biology
Required: Major students in Biology
Elective: 3, 4 Offered in the first semester
Laboratory: Time to be arranged

Biology Staff

Biology 152 Senior Thesis 2 Credits

Each Major student is expected to show the ability of working out independently a simple problem in Biology under the supervision of one of the Professors who is best trained in the special line. Work equivalent to at least six laboratory hours.

Prerequisite: Two years of Biology
Required: Major students in Biology
Elective: 3, 4 Offered in the second semester
Laboratory: Time to be arranged

Biology staff

Biology 153 Journal Club 1 Credit

In this course the faculty and students will give reports on articles in current biological journals. One conference hour.

Prerequisite: Two years of Biology
Required: Major students in Biology
Elective: 3, 4, 5 offered in the first semester
Conference: Time to be arranged

Mr. Li

Biology 154 Journal Club 1 Credit
 In this course the faculty and students will give reports on articles in current biological journals. One conference hour.
 Prerequisite: Two years of Biology
 Required: Major students in Biology
 Elective: 3,4,5 Offered in the second semester
 Conference: Time to be arranged
 Mr. Li

Biology 156 General Bacteriology 4 Credits
 A general study of the action of bacteria, yeasts and molds, with emphasis on cultural and staining methods. Two lectures and six laboratory hours.
 Prerequisite: Biol. 51,52. Chem. 3-4
 Elective: 3,4,5
 Lecture: TTh 9:30 Offered in the second semester
 Laboratory: MW 1:30-4:30
 Mr. Liu

Biology 158 Protozoology 2 Credits
 The course deals with an intensive study of the protozoons. Morphological, physical and systematic survey of the unicellular animals are to be taken up in succession. Recent experimental works on the problems of regeneration, conjugation and endomixis are discussed. Emphasis is also laid upon the relation of the protozoon to disease and human welfare. One lecture and three laboratory hours.
 Prerequisite: Biol. 51
 Elective: 3, 4, 5
 Lecture: W 10:30 Offered in the second semester
 Laboratory: W 1:30-4:30
 Mr. Li

DEPARTMENT OF CHEMISTRY.

E. O. Wilson, B.S., S.M., Professor and Chairman.
 Wm. H. Adolph, A.B., Ph. D., .. Professor.
 *Stanley D. Wilson, M. A., Ph. D., Professor.
 Tsao Ching-pan, B. A., Instructor.
 Wang Tsan-ch'ing, B. A., Instructor.
 Chang Chuan, P., B. S., Instructor in Industrial Chemistry.
 *Ts'ai Liu-sheng, B.S., M.S., Instructor.
 Chang Wen-teh, B.S., Assistant in Industrial Chemistry.
 Lo Tsung Shih, B.S., Assistant.
 Kao Hsueh-tung, B.S., Assistant.
 Hsieh Wei-chieh, B.S., Assistant.
 Miss Ch'en Shen-chao, B.S., M.S.,... Assistant.
 Ho Wei-fah, B.S., Assistant.

The functions of the Department are (1) to provide the fundamental courses necessary in the curricula in Pre-medicine, Pre-nursing, Leather Tanning and Home Economics; (2) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Sciences; (3) to train students for teaching chemistry; (4) to train students as practical chemists and tanners; (5) to offer students specializing in other lines an opportunity to become acquainted with the science of chemistry; and (6) to offer opportunities for graduates to carry on research in Chemistry.

DEPARTMENTAL REGULATIONS.

Students in this Department who take a major in the general field of Chemistry must fulfill the requirements for graduation listed in section A below. Students who take a major in Chemistry with an option in Leather Tanning must fulfill the requirements for graduation listed in section B below.

A. I.	Chinese	.. .. .	4 credits
	English	.. .. .	16 credits
	Physics	.. .. .	8 credits
	Mathematics	.. .. .	4 credits
	Social Sciences (Econ, Soc., Hist., Psy., Rel., or Pol. Sc.)	.. .. .	8 credits
	Hygiene (for Women)	.. .. .	1 credits
	Major	.. .. .	40 credits

The following courses must be taken in making up the 40 credits in the Major.

* Absent on leave 1930—1931.

0361

Chemistry 3-4.. .. .	8 credits
Chemistry 5-6.. .. .	8 credits
Chemistry 9-10	8 credits
Chemistry 125 and or 126	4 or 2 credits
Chemistry 131-132.. .. .	8 credits
Correlated subjects (Biology, Geology, Education, Home Economics, Mathematics or Physics.)	16 credits
Electives	30 or 32 credits
Total 136 credits	

Total (for Women) 137 credits

- In Chemistry 125 and 126 the student must complete in a satisfactory manner a thesis on a chemical problem, under the direction of a member of the staff of the Department.
- The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

B. 1.

Chinese	4 credits
English.. .. .	16 credits
Social Sciences (Econ.)	12 credits
Mathematics 1-2.. .. .	4 credits
Biology 1-2	8 credits
Biology 105	4 credits
Biology 156	4 credits
Physics 5-6	8 credits
Leather 71-72.	4 credits
Leather 73-74.	8 credits
Leather 75-76.	8 credits
Chemistry 3-4.	8 credits
Chemistry 5-6.	8 credits
Chemistry 9-10	8 credits
Chemistry 119-120	8 credits
Chemistry 9-10	8 credits
Chemistry 119-120.	8 credits
Chemistry 121-122.	8 credits
Chemistry 131-132.	8 credits
Chemistry 125 and or 126.. .. .	4 or 2 credits
Electives.	4 or 6 credits
Total 136 credits.	

- In Chemistry 125 and 126 the student must complete in a satisfactory manner a thesis on a problem relating to leather, under the direction of some member of the staff of the Department.
- The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJOR CURRICULUM IN THE GENERAL FIELD OF CHEMISTRY.

FIRST SEMESTER		SECOND SEMESTER	
<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Major (Chemistry 3)	4	Major (Chemistry 4)	4
Physics 5 or Biology 1	4	Physics 6 or Biology 2	4
Mathematics 1	2	Mathematics 2	2
Social Science (Econ. Soc., Hist., Psy., Rel., or Pol., Sc.	2	Social Science (Econ., Soc., Hist., Psy., Rel., or Pol., Sc.)	2
		Hygiene (for women)	1
	18		18
<i>Second Year</i>			
English 5	4	English 6	4
Major (Chemistry 5)	4	Major (Chemistry 6)	4
Cor. Subj. (Biol., Geol., Home Ec., Math., Phys. or Educ.)	4	Cor. Subj. (Biol., Geol., Home Ec., Math., Phys. or Educ.)	4
Social Science (Econ., Soc., Hist., Psy., Rel. or Pol. Sc.	2	Social Science (Econ., Soc., Hist., Psy., Rel., or Pol., Sc.)	2
Elective (Econ. or History)	4	Elective (Econ. or History)	4
	18		18
<i>Third Year</i>			
Major (Chemistry 9)	4	Major (Chemistry 10)	4
Major (Chemistry)	4	Major (Chemistry)	4
Cor. Subj., (Biol., Geol., Home Ec., Math., Phys. or Educ.)	4	Cor. Subj. (Biol., Geol., Home Ec., Math., Phys. or Educ.)	4
Elective	4	Elective	4
	16		16
<i>Fourth Year</i>			
Major (Chemistry 131)	4	Major (Chemistry 132)	4
Major (Chemistry 125)	2	Major (Chemistry)	4
Major (Chemistry)	2	Elective	8
Elective	8		
	16		16
	19		

MAJOR CURRICULUM IN CHEMISTRY WITH
AN OPTION IN LEATHER TANNING.

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credit
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English I	4	English 2	4
Major (Chemistry 3)	4	Major (Chemistry 4)	4
Biology I	4	Biology	4
Mathematics I	2	Mathematics 2.. .. .	2
Social Science	2	Social Science	2
	<u>18</u>		<u>18</u>
<i>Second Year</i>			
English 5	4	English 6	4
Major (Chemistry 5)	4	Major (Chemistry 6)	4
Major (Leather 71)	2	Major (Leather 72)	2
Cor. Subj. (Physics 5)	4	Cor. Subj. (Physics 6)	4
Economics II	4	Economics I2,	4
	<u>18</u>		<u>18</u>
<i>Third Year</i>			
Major (Chemistry 9)	4	Major (Chemistry 10)	4
Major (Leather 73)	4	Major (Leather 74)	4
Major (Chemistry 119)	4	Major (Chemistry 120)	4
Cor. Subj. (Biology 105)	4	Cor. Subj. (Biology 156)	4
	<u>16</u>		<u>16</u>
<i>Fourth Year</i>			
Major (Leather 75)	4	Major (Leather 76)	4
Major (Chemistry 121)	4	Major (Chemistry 122)	4
Major (Chemistry 131)	4	Major (Chemistry 132)	2
Elective	4	Major (Chemistry 125)	2
	<u>16</u>	Elective	2
			<u>16</u>

DEPARTMENT OF CHEMISTRY.

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00		Chem. 3-4 B Chem. 119-120		Chem. 3-4 B Chem. 119-120		
9:30 to 10:30	Chem. 5A Chem. 131-132 Leather 73-74 (Lab)	Chem. 116 Chem. 117 (Lab)	Chem. 5A Chem. 6A Chem. 131-132	Chem. 116 Chem. 117 (Lab)	Chem. 5B Chem. 6B	Chem 5B Chem 5C (Lab) Chem 6B (Lab) Chem 131-132 Chem 7-8 (Lab) Leather 73-74 (Lab)
10:30 to 11:30	Leather 73-74 (Lab)	Chem. 5C Chem. 7-8 Chem. 123 Leather 75-76 Chem. 117.	Chem. 9-10	Chem. 5C Chem. 117 (Lab)	Chem. 9-10	Chem 5C (Lab) Chem 6B (Lab) Chem 7-8 (Lab) Leather 73-74 (Lab)
11:30 to 12:30	Leather 73-74 (Lab)	Chem. 121-122 Chem. 117 (Lab)	Leather 73-74	Chem. 121-122 Chem. 117 (Lab)	Chem. 121-122 Leather 73-74	Chem 5C (Lab) Chem 6B (Lab) Chem 7-8 (Lab) Leather 73-74 (Lab)
1:30 to 2:30	Chem. 3-4 A Lect.	Chem. 3-4 B Recitation	Chem. 3-4 A Lect.			
4:30	Chem. 3-4 A Chem. 131-132 Chem. 7-8 Chem. 5 A Chem. 6 A	Chem. 9-10 Chem. 3-4 B Chem. 5 B Chem. 6 B Leather 75-76	Chem. 5A Chem. 6A Chem. 3-4 A Chem. 119-120	Chem. 3-4B Chem. 5 B Chem. 6 B Chem. 9-10	Chem. 5C Chem. 6A Chem. 119-120 Chem. 75-76	

The time at which other courses meet will be arranged by conference between the instructors and the students who elect such courses.

Chemistry 2 Chemistry for Nurses 4 Credits

A study of organic, and physiological chemistry with special emphasis on problems connected with nursing. Two lectures and four hours of laboratory.

Required : Freshman in prenursing course

Lecture : TTh 8:00.

Laboratory : TTh 3:30-5:30.

Chemistry 3-4 Inorganic Chemistry 4-4 Credits

A course in general inorganic chemistry covering both the non-metals and the metals, one half of the laboratory time is devoted to qualitative analysis. The course acquaints the student with the important laws, theories and applications of chemistry. The bearing of upon the life of the community and nation is emphasized. Two lectures and six hours of laboratory.

Required : Major in Chemistry and Premedical.

Elective : 1, 2, (also 3, 4).

Lecture :

Section A—MW 1:30, C103.

Section B—TTh 8:00, C103.

Laboratory : Any two of the following periods

M. W. 2:30-5:30 T. Th. 1:30-4:30.

Mr. C.P. Tsao and
assistant

Chemistry 5. Second Year College Chemistry 4 Credits

An intensive study of the fundamental laws and principles of chemistry. The laboratory work consists of simple experiments illustrating the laws of physical chemistry. Two lectures and six hours of laboratory.

Prerequisite : Chemistry 3-4.

Required : Major in Chemistry and Premedical.

Elective : 2, 3, 4.

Lectures :

Section 5A—M. W. 9:30.

" 5B—F. S. 9:30.

" 5C—T. Th. 10:30.

Laboratory :

Section 5A—M. W. 1:30-4:30.

" 5B—T. Th. 1:30-4:30.

" 5C—F. 1:30-4:30 ; S. 9:30-12:30.

Mr. Adolph and
assistant.

Chemistry 6. Quantitative Analysis. 4 Credits.

Elementary gravimetric and volumetric analysis. One conference and nine laboratory hours.

Prerequisite : Chemistry 5.

Required : Major in Chemistry and Premedical.

Elective : 2, 3, 4.

Conference : 6A—W 6:30

6B—F 9:30

Laboratory : 6A—MWF 1:30-4:30

6B—TTh 1:30-4:30, S. 9:30-12:30

Mr. Adolph.

Chemistry 7 X. Quantitative Analysis. 3 Credits.

Chemistry 7 Y. Quantitative Analysis 4 Credits.

A study of the theory and practice of quantitative analysis. As far as possible the laboratory work will be adapted to the needs of the individual students. One hour lecture and six or nine hours laboratory.

Prerequisite : Chemistry 5-6.

Required :

Elective : 3-4.

Lecture : T 10:30 C 213, MF 1:30-4:30, C 208 First Semester.

Laboratory : S 9:30-12:30 C 208.

Mr. E. O. Wilson.

Chemistry 8 X. Quantitative Analysis. 3 Credits.

Chemistry 8 Y. Quantitative Analysis. 4 Credits

A study of theory and practice of volumetric, colorimetric, and electrolytic analysis. As far as possible the laboratory work will be adapted to the needs of the individual students. One hour lecture and six, or nine hours of laboratory.

Prerequisite : Chemistry 5-6, advisable to have 7.

Elective : 3-4.

Lecture : T 10:30 C213.

Laboratory : S 9:30 C298 TF 1:30-4:30 C208

Mr. E. O. Wilson

Chemistry 9-10 Organic Chemistry 4-4 Credits

A course in the elements of organic chemistry for those beginning the subject. The aliphatic series. The emphasis is placed on general principles. (Students in Home Economics who elect Chemistry 117 may receive credit for Chemistry 9 without taking Chemistry 10.) 2 lectures and 6 laboratory hours.

Prerequisite : For Home Economics students Chemistry 3-4. For all other either the completion of Chemistry 5-6 or the election of Chemistry 5-6 at the same time. Premedical students may receive credit for 9, without taking 10.

Required : Major in Chemistry

Elective ; 2, 3, 4.

Lecture : WF 10:30 C213.

Laboratory : TTh 1:30-4:30 C216.

Mr. T. C. Wang.

Chemistry 116. Chemistry of Food and Nutrition 2. Credits

Physiological chemistry as applied to human metabolism and nutrition. Lectures and conferences. Readings in recent journal contributions.

Prerequisite : Chemistry 117.

Lectures and Conferences : TTh 9:00.

Mr. Adolph,

Chemistry 117. General Bio-chemistry 3. Credits

An introductory course including a study of carbohydrates, fats and proteins, —with the fundamental conceptions of bio-chemistry as applied to life processes and metabolism.

Prerequisites: Chemistry 5, 6, 9.
Laboratory: TTh 9:00-12:30
Lecture and Conference: To be arranged.

Mr. Adolph.

Chemistry 119 Leather Chemistry 4 Credits

A study of the chemistry of leather manufacture. The subject is taken up from the viewpoint of physical chemistry. The various tanning operations are reviewed and the importance of chemical control emphasized. The laboratory work illustrates in a quantitative manner some of the most important of the theories presented. Two lectures and six laboratory hours.

Prerequisite: Chem. 6, and if Chem. 9 has not been completed, it must be taken at the same time.

Required: Major in Leather
Lecture: TTh 8:00 First Semester.
Laboratory: WF 1.30-4:30

Mr. E. O. Wilson

Chemistry 120 Leather Chemistry 4 Credits

The analysis of materials and products used in the leather industry. Rapid methods suitable for actual use in the tannery are studied. 2 conferences and 6 laboratory hours.

Prerequisite: Chemistry 119
Required: Majors in leather
Elective:
Conference: TTh 8:00 Second Semester.
Laboratory: WF 1.30-4:30

Mr. E. O. Wilson

Chemistry 121-122 Industrial Chemistry 3-3 Credits

The most important of the industries in which chemical reactions play a major part are considered. Plant equipment is described in some detail and the factors which influence economic large-scale production are discussed. One half of the time in this course is devoted to the subject of industrial stoichiometry. A large number of numerical problems will be solved by the students. Four lectures and recitations.

Prerequisite; Chemistry 6 and 9
Lecture; TThF 11:30

Mr. E. O. Wilson

Chemistry 123 Technical Analysis 4 Credits

This course is designed to accompany Course 121. Instruction will be given in gas, fuel and water analysis. Considerable range of choice will be allowed the individual student, depending upon his interests and previous training. Rapid methods for the analysis of various commercial products, training in the use of the hydrogen electrode, and the practical use of the thermocouple will also be included. One conference and nine laboratory hours.

Prerequisite; Chemistry 6
Conference; To be arranged First Semester.
Laboratory; To be arranged

Mr. E. O. Wilson

24

Chemistry 124 Special Problems in Applied Chemistry 4 Credits

This course should accompany or follow the courses in industrial chemistry and technical analysis. Individual or group investigations will be conducted, the particular nature of the problems will depend upon the interests and previous training of the students. Laboratory and informal conferences.

Prerequisite; Chemistry 123
Lecture; To be arranged second semester
Laboratory; To be arranged

Mr. E. O. Wilson

Chemistry 125 Senior Thesis 2 Credits

This course involves either a critical study of the literature of some field in Chemistry or a simple original investigation. Each case is decided in conference with the head of the department.
Time to be arranged.

Staff

Chemistry 126 Senior Thesis 2 Credits

See Chemistry 125 for description of this course.
Required. Seniors who major in Chemistry must elect either one or both of Chemistry 125 and 126.

Staff.

Chemistry 127 Qualitative Organic Analysis 3 Credits

This course includes the systematic qualitative analysis of organic compounds and the determinations of unknowns including mixtures. 1 lecture and 6 laboratory hours.

Prerequisite: Chemistry 10.
Elective; 3,4,5
Lecture: To be arranged. Not offered 1929-30.
Laboratory: To be arranged

Mr. T. C. Wang

Chemistry 129 Quantitative Organic Analysis 3 Credits

This course consists of the determination of carbon, hydrogen, nitrogen and other elements by the methods usually employed in elementary organic analysis. 1 lecture and 6 laboratory hours.

Prerequisite, Chemistry 10.
Elective: 3,4,5.
Lecture: to be arranged. First Semester.
Laboratory; To be arranged
Not offered 1930-31

Mr. T. C. Wang

Chemistry 130 Qualitative Analysis 4 Credits

This course includes a review of the principles of qualitative analysis, and a drill in careful manipulation and exact qualitative procedure. 1 lecture and 9 hours laboratory.

Prerequisite: Chemistry 6.
Elective: 3, 4.
Lecture: To be arranged.
Laboratory: To be arranged.
Not offered 1930-31.

25

0365

Chemistry 131-132 Physical Chemistry 4-4 Credits

A careful study of the fundamental laws and principles of chemistry. The laboratory exercises are all of a quantitative nature. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 6 and 10. and a knowledge of Calculus.
Required: Majors in Chemistry
Elective: 4
Lecture MW 9:30 c213.
Laboratory: To be arranged

Mr. E. O. Wilson

Chemistry 133-134 Advanced Organic Chemistry 4-4 Credits

Lectures, reports on literature and laboratory work in organic chemistry of a more advanced nature than that given in Chemistry 9-10. 2 lectures and 6 laboratory hours.

Prerequisite: Chemistry 10.
Elective: 4.
Lecture: WF 8:00. Not offered 1930-31.
Laboratory: To be arranged.

Mr. S. D. Wilson

Chemistry 139. Seminar in Biochemistry 1 Credit.

For students specializing in Biochemistry.
Prerequisite: Chemistry 116.
One hour to be arranged.

Mr. Adolph

Chemistry 140. Seminar in Biochemistry 1 Credit.

For students specializing in Biochemistry.
Prerequisite: Chemistry 139.
One hour to be arranged.

Mr. Adolph

Chemistry 142. Metabolism 2 Credits.

Laboratory study of metabolic processes. Simple feeding experiments and problems in metabolism.

Prerequisite: Chemistry 117; chemistry 116 is also prerequisite or should follow or be accompanied by chemistry 116.

Laboratory: Six hours to be arranged.

Mr. Adolph

Chemistry 144. Biophysics 3 Credits.

A study of the laws of physics and chemistry applied to biological processes; osmosis, surface tension, colloids, enzyme action.

Prerequisites: Biology 2, Physics 5, Chemistry 5.
Laboratory: Three hours to be arranged.
Lecture: Two hours to be arranged.

Mr. Adolph

Chemistry 152. Advanced Physical Chemistry 2 Credits.

A Seminar Course.
Prerequisite: Chemistry 132.
Not offered 1930-31.

Mr. S. D. Wilson

Leather 71-72 Elements of Tanning 2-2 Credits

A general descriptive course, covering in an elementary way, the entire field of Leather Tanning.

Required: Major students in Leather.
Lecture: MF 9:30
Laboratory:

Mr. P. Chang.

Leather 73-74 Leather Manufacture 4-4 Credits

The lectures deal with the principles of Chrome, Alum, Iron, and Oil Tannage. Chrome tannage is studied in great detail. The methods of dyeing leather will also be presented.

Laboratory practice is given in the technic of soaking, liming, unhairing, bating, pickling, and in Chrome Tanning.

Required: Major students in Leather.
Lecture: WF 11:30.
Laboratory: MS 9:30-11:30

Mr. P. Chang

Leather 75-76 Leather Manufacture 4-4 Credits

The lectures include a discussion of the finishing of the various kinds of leather, including the methods of currying, lubricating, staking, and glazing. The principles of fur tanning are also presented.

Laboratory practice in vegetable, aldehyde, and alum tannage. Laboratory practice in fur dressing.

Required: Major students in Leather.
Lecture: T 10:30.
Laboratory: Hours to be arranged.

Mr. P. Chang.

DEPARTMENT OF GEOGRAPHY and GEOLOGY.

W. W. Davis, M. S. Professor and Chairman.
 George B. Barbour, M. A., Ph. D. . . . Professor.
 Chang Yin-t'ang, M. Sc. Lecturer.

The functions of the Department are (1) to provide a sequence of courses which will fulfill the requirements for graduation prescribed in the Academic Regulations of the College of Natural Sciences, (2) to train students for teaching work in Geography, (3) to train students as practical Geologists, and (4) to offer to students specializing in other lines of study a chance to become better acquainted with our Earth.

DEPARTMENTAL REGULATIONS.

A major student in this department must fulfill the following requirements for graduation:

(1) Chinese.. . . .	4	Credits
English	16	Credits
Geography 1-2 or Geology 1-2,	8	Credits
A Second Natural Science (Biology, Chemistry, Mathematics or Physics)	8	Credits
Social Sciences.. . . .	4	Credits
Major	36	Credits

Correlated Subjects (One of the following:
 Biology, Chemistry, Physics, Mathematics, Home Economics, History, Education, Economics, Political Science, Sociology, English, or European Languages. 16-24 Credits
 Electives 44-36 Credits

Total 136 Credits

- (2) A Student must under the supervision of a professor in this Department satisfactorily complete a thesis on a geographical or geological problem.
 (3) A student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJORS.

A student majoring in the Department has a choice between three lines of work.

- (a) Geography.
 (b) Geology.
 (c) Geography, and Geology combined.

MAJOR CURRICULUM IN GEOGRAPHY
 FIRST SEMESTER SECOND SEMESTER

First Year	Credits	Second Semester	Credits.
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Geography 1	4	Geography 2	4
Natural Science (Biology 1, Chemistry 3, Physics 5 or Mathematics)	4	Natural Science (Biology 2, Chemistry 4, Physics 6 or Mathematics)	4
Mathematics	2	Mathematics	2
Social Science	2	Social Sciences	2
		(Hygiene for women)	1
		18	18 or 19
Second Year			
English 5	4	English 6	4
Major (Geol. 1)	4	Major (Geol. 2)	4
Major	2 or 4	Major	2 or 4
Correlated Subject	4	Correlated Subject	4
Electives	4 or 2	Electives	4 or 2
	18		18
Third Year			
Major	6	Major	6
Correlated Subject	4	Correlated Subject	4
Electives	6	Electives	6
	16		16
Fourth Year			
Major (Geog. 193)	2	Major (Geog. 194)	2
Major	2 or 4	Major	2 or 4
Correlated Subject and Electives	12 or 10	Correlated Subject and Electives	12 or 10
	16		16

MAJOR CURRICULUM IN GEOLOGY,

First Year

Chinese 7 2	Chinese 8 2
English 1 4	English 2 4
Geol. 1 4	Geol. 2 4
Biol. 1 4	Biol. 2 4
Mathematics 2	Mathematics 2
Social Science 2	Social Science 2

18

18

Second Year

English 5 4	English 6 4
Major (Chem. 3) 4	Major (Chem. 4) 4
Major 2 or 4	Major 2 or 4
Correlated Subject 4	Correlated Subject 4
Electives 4 or 2	Electives 4 or 2

18

18

Third Year

Major 6	Major 6
Correlated Subject 4	Correlated Subject 4
Electives 6	Electives 6

16

16

Fourth Year

Major (Geol. 193) 2	Major Geol. (194) 2
Major 2 or 4	Major 2 or 4
Correlated Subject and Electives 2 or 10	Correlated Subject and Electives 12 or 10

16

16

MAJOR CURRICULUM IN GEOGRAPHY AND GEOLOGY

This is like the major curriculum in Geography with the following modifications:

In the First Year the Second Natural Science must be either Biol. 1-2 or Chem. 3-4.

In the Second, Third and Fourth Years the student may include in his major a total of from 6 to 12 credits in Geology in addition to Geology 1-2

DEPARTMENT OF GEOGRAPHY and GEOLOGY

Schedule

Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	Geog. 1-2 A & B		Geog. 1-2 A & B		Geog. 1-2 A & B	
9:30 to 10:30	Geog. 5 (or 6)* Geol. 1-2 Geol. 107-108	Geol. 107-108	Geog. 5 (or 6)* Geol. 1-2 Geol. 107-108	Geol. 107-108	Geog. 5 (or 6)* Geol. 1-2	
10:30 to 11:30	Geog. 3 (or 4)* Geol. 9	Geol. 112*	Geog. 3 (or 4)* Geol. 9	Geol. 112*	Geog. 3 (or 4)*	
11:30 to 12:30	Geol. 1-2		Geol. 142		Geol. 1-2	
1:30 to 2:30	Geog. 1-2 Lab. **		Geol. 1-2 Lab.	Geog. 1-2 Lab. **		
2:30 to 3:30	Geog. 1-2 Lab. **		Geol. 1-2 Lab.	Geog. 1-2 Lab. **		
3:30 to 4:30	Geog. 1-2 Lab. **		Geol. 1-2 Lab.	Geog. 1-2 Lab. **		

*Second Semester Courses.

**Two Sections if necessary.

0368

Time left to be arranged, Geol. 5, Geol. 6, Geol. 109-110, Advanced Courses, in Geog.

Laboratory in Geog, 3 (or 4) and Geog. 5 (or 6).

Geography 1-2 Fundamentals of Geography 4-4 Credits

A study of the geographical factors of environment and how they affect life.
Required: Major Students in Geography,
Elective: 1,2, (also 3,4.)
Lecture: MWF 8:00 Section A Mr. Chang
Section B Mr. Davis.
Laboratory: M. 1:30-4:30. or Th 1:30-4:30.

Geography 3 Agricultural Economic Geography 4 Credits

A study of the geographical factors underlying Agriculture.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: MWF 10:30 First Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 4 Industrial Economic Geography 4 Credits

A study of the Geographical factors underlying some of the leading industries.

Required: Major students in Geography.
Elective 2,3,4.
Lecture: MWF 10:30 Second Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 5 China 4 Credits

The physical, human and economic geography of China.
Required: Major students in Geography.
Elective: 2,3,4.
Lecture: MWF 9:30 First Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 6 Asia 4 Credits

The physical, human and economic geography of Asia.
Required; Major students in Geography.
Elective; 2,3,4.
Lecture: MWF 9:30 Second Semester.
Laboratory: 3 hours to be arranged

Mr. Davis.

Geography 31-32 Physical Geography, 2-2 Credits

The principles of Physical Geography
Prerequisite: Geog. 1-2.
Elective, 2,3,4.
Lecture: TTh 10:30

Mr. Chang.

Geography 53. Hopei 2 Credits

The physical and economic geography of the Province of Hopei.
Required: May be included as part of the requirements of students majoring in Geography.

Elective 3,4.
Lecture: TTh 9:30 Offered 1931-32 and alternate years. First Semester.
Laboratory: None Mr. Chang.

Geography 55 Inner Mongolia 2 Credits

The physical and economic geography of Inner Mongolia
Elective, 2,3,4.
Lecture: TTh. 9:30

Mr. Chang.

Geography 56 Manchuria 2 Credits

The physical and economic geography of the Three Manchurian Provinces.
Required: May be included as part of the requirements of students majoring in Geography.

Elective: 3,4.
Lecture: TTh 9:30 Offered 1930-31 and alternate years. Second Semester.
Laboratory: None Mr. Chang

Geography 57 India 2 Credits

The physical, human and economic geography of India.
Required: May be included as part of the requirements of a student majoring in Geography:

Elective: 3,4.
Lecture: TTh 9:30 Offered 1931-32 and alternate years. First Semester.
Laboratory: None Mr. Davis.

Geography 58 Russia 2 Credits

The physical and economic geography of Russia.
Required: May be included as part of the requirements of a student majoring in Geography.

Elective: 3,4.
Lecture: Offered 1931-32 and alternate years. Second Semester.
Laboratory: None Mr. Davis.

Geography 107 Europe 2 Credits

The natural regions of Europe, the geographic and geologic factors which have made, Europe, its resources and possibilities.

Required: May be included as part of the requirements of students majoring in Geography.

Elective: 3,4.
Lecture: TTh 10:30 Offered 1930-31 and alternate years. First Semester.
Laboratory: None Mr. Davis.

Geography 108 North America 2 Credits

The natural regions of North America, the geographic and geologic factors that have made North America, its resources and possibilities.

Required: May be included as part of the requirements of students majoring in Geography.

Elective: 3,4.
Lecture. TTh 10:30 Offered 1930-31 and alternate years. Second Semester.

- Geography 109 Some Geographic Factors in History 2 Credits
 A study of a few of the leading geographic factors that have helped to control history, namely, the desert, the sea, the plain, the forest, the steppe, the ocean, rivers and coal.
 Required: May be included in the requirements of students majoring in Geography.
 Elective: 3,4.
 Lecture: Time to be arranged. Given 1930-31 and alternate years. First Semester.
 Laboratory: None. Mr. Davis.
- Geography 110 Climate 2 Credits
 A study of climate.
 Required: May be included as part of the requirements of students majoring in Geography.
 Elective: 3,4.
 Lecture: TTh 8:00 Offered 1931-32 and alternate years. Second Semester.
 Laboratory: None. Mr. Davis.
- Geography 113 Japan 2 Credits
 The physical, economic and human geography of Japan.
 Required: May be included as part of the requirements of a student majoring in Geography.
 Elective: 3,4.
 Lecture: TTh 10:30 Offered 1931-32 and alternate years. First Semester.
 Laboratory: None Mr. Davis.
- Geography 114 Malaya 2 Credits
 The physical, economic and human geography of Malaya.
 Required: May be included in the requirements of a student majoring in Geography.
 Elective: 3,4.
 Lecture: TTh 10:30 Offered 1931-32 and alternate years. Second Semester.
 Laboratory: None Mr. Davis.
- Geography 119 Political Geography of Europe 2 Credits
 A study of Europe from the angle of Political Geography.
 Required: May be included in the requirements of a student majoring in Geography.
 Elective: 3,4.
 Lecture: TTh 11:30 Offered 1931-32 and alternate years. First Semester.
 Laboratory: None Mr. Davis.
- Geography 120 Political Geography of North and South America 2 Credits
 A study of the two Americas from the angle of Political Geography.
 Required: May be included in the requirements of a student majoring in Geography.
 Elective: 3,4.
 Lecture: TTh 11:30 Offered 1931-32 and alternate years. Second Semester.
 Laboratory: None Mr. Davis.

- Geography 191 X Research Course 1 Credit
 Geography 191 Y Research Course 2 Credits
 An advanced reading or research course in some special geographical problem under supervision. Credit depending on the amount of work done.
 Prerequisite: At least 20 hours of work in Geography in addition to Geog. 1-2.
 Required: May be included by students majoring in Geography.
 Elective: 4.
 Laboratory: Mr. Davis.
- Geography 192 X Research Course 1 Credit
 Geography 192 Y Research Course 2 Credits
 Like 191:
 Prerequisite: Geog. 1-2 and at least 20 hours additional work in Geography.
 Required: May be included in the requirements of a student majoring in Geography.
 Elective: 4.
 Laboratory: Mr. Davis.
- Geography 193-194 Thesis 2-2 Credits
 Senior Thesis in some geographical problem.
 Prerequisite: Geog. 1-2 and at least 24 other credits in Geography.
 Required: Major students in Geography.
 Elective: 4.
 Laboratory: Mr. Davis.
- Geology 1-2 General Geology 4-4 Credits
 An introduction to the Earth Science. The work of the atmosphere, ground-water, running water, snow and ice, lakes, and oceans. Study of the common rocks and minerals; volcanism, crustal movements etc; brief outline of Earth History.
 Required: Students majoring in either Geology or Geography.
 Elective: 1,2,3,4.
 Lecture: MWF 9:30
 Laboratory: W 1:30-4:30 Mr. Barbour.
- Geology 5 Field and Laboratory Methods 2 Credits
 Interpretation of geologic maps. Elementary map drawing with training in the field, sketching, stratigraphic and other field work.
 Prerequisite: Geol. 1-2
 Required: Students majoring in Geology.
 Elective: 2,3,4.
 Laboratory: 2 afternoons a week. Mr. Barbour.
- Geology 6 Field Work. 2 Credits
 Field work in geology.
 Prerequisite: Geol. 1-2 and Geol. 5.
 Required: Students majoring in Geology
 Elective: 2,3,4.
 Lecture: One afternoon a week and
 Laboratory: occasional Saturdays. Mr. Barbour.

Geology 9 Introduction to Historical Geology 2 Credits
 A brief outline of geologic history for those who wish to study geology from the cultural point of view.

Elective: 2, 3, 4.
 Lecture: 10:30 MF
 Laboratory: None

Mr. Barbour.

Geology 107-108 Historical Geology 4-4 Credits

Detailed work in Historical Geology with special reference to that of China

Prerequisite: Geol 1-2.

Required: Students majoring in Geology

Elective: 3-4.

Lecture: 11:30 MTWTh

Laboratory:

Mr. Barbour.

Geology 109-110 Advanced Geology. 4-4 Credits

An advanced course in geology. The nature of the course will vary from year to year.

Prerequisite: Geol 1-2

Required: Students majoring in Geology

Elective: 3-4

Lecture: To be arranged

Laboratory: To be arranged

Mr. Barbour.

Geology 112 Mineral Resources of China 2 Credits

A discussion of China's mineral resources.

Elective: 3, 4.

Lecture: 10:30 TTh

Laboratory:

Mr. Barbour.

Geology 191 X Research Course 1 Credit

Geology 191 Y Research Course 2 Credits

Advanced reading or research in special geological problems under supervision.

Prerequisite: Geol. 1-2 and at least 20 additional hours in Geology

Required: May be taken by students majoring in Geology

Elective: 4.

Laboratory:

Mr. Barbour.

Geology 192 X Research Course 1 Credit

Geology 192 Y Research Course 2 Credits

Like Geol, 191

Prerequisite: Geol. 1-2 and at least 20 additional hours in Geology.

Required: May be taken by students majoring in Geology

Elective: 4.

Laboratory:

Mr. Barbour.

Geology 193,194 Thesis 2-2 Credits

Senior Thesis in some geological problem.

Prerequisite: Geol. 1-2 and at least 24 other credits in Geology

Required: Major students in Geology.

Elective: 4.

Laboratory:

Mr. Barbour.

DEPARTMENT OF HOME ECONOMICS

Miss Camilla Mills, B. S., M. A. *Lecturer and Chairman*
 Miss Caroline I. Ch'en, B. A., M. A. *Instructor*

The functions of the Department are (1) To offer education for homemaking as a part of the general University education of women. (2) To offer training for teaching Home Economics in Secondary Schools (3) To provide a sequence of courses which will fulfill the requirements for graduation prescribed in the academic regulations of the College of Natural Sciences. (4) To provide the Home Economics courses which are necessary to the curriculum in Pre-nursing. (5) To provide foundation courses for those interested in hospital dietetics.

DEPARTMENTAL REGULATIONS

A major student in this Department must fulfill the following requirements for graduation:

(1) Chinese	4	Credits
English	16	Credits
Chemistry.. .. .	16	Credits
Biology	8	Credits
Mathematics	4	Credits
Social Sciences	8	Credits
Major.. .. .	36	Credits
Correlated Subjects* (Biology, Chemistry, Economics, Education, Psychology, Sociology)	16	Credits
Electives	28	Credits

(2) A student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

MAJOR CURRICULUM

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
<i>First Year</i>			
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Biol. 1)	4	Nat. Sc. (Biol. 2)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
Mathematics 1	2	Mathematics 2	2
Soc. Sc. (Soc. 1 or Ec. 1)	2	Soc. Sc. (Soc. 2 or Ec. 2)	2
		Hygiene	1
	<u>18</u>		<u>19</u>
<i>Second Year</i>			
English 5	4	English 6	4
Cor. Subj	4	Cor. Subj	4
Chem. 9	4	Chem. 117	4
Soc. Sc. (Soc. 1 or Ec. 11)	2	Soc. Sc. (Soc. 2 or Ec. 12)	2
Electives	4	Electives	4
	<u>18</u>		<u>18</u>
<i>Third Year</i>			
Major (H. Ec. 3)	3	Major (H. Ec. 26)	3
Major (H. Ec.)	3	Major (H. Ec.)	3
Cor. Subj	4	Cor. Subj	4
Electives	6	Electives	6
	<u>16</u>		<u>16</u>
<i>Fourth Year</i>			
Major (H. Ec. 5)	4	Major (H. Ec.)	4
Major (H. Ec.)	2	Major (H. Ec. 45)	2
Major (H. Ec. 23)	3	Major (H. Ec. 30)	3
Major (H. Ec. 27)	3	Major (H. Ec. 28)	3
Electives	4	Electives	4
	<u>16</u>		<u>16</u>

DEPARTMENT OF HOME ECONOMICS
Schedule

Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	H.Ec.42 H.Ec.3	H.Ec.14 H.Ec.15	H.Ec.42 H.Ec.5	H.Ec.14 H.Ec.15	H.Ec.42 H.Ec.5	
9:30 to 10:30	H.Ec.11 H.Ec.26	H.Ec.5	H.Ec.11 H.Ec.26	H.Ec.5 H.Ec.6	H.Ec.11 H.Ec.26	
10:30 to 11:30	H.Ec.6	H.Ec.5	H.Ec.23 H.Ec.24	H.Ec.5	H.Ec.23 H.Ec.24	
11:30 to 12:30	H.Ec.27 H.Ec.28	H.Ec.5	H.Ec.27 H.Ec.28	H.Ec.5	H.Ec.27 H.Ec.28	
1:30 to 2:30	H.Ec.29 H.Ec.23	H.Ec.14 H.Ec.15	H.Ec.29 H.Ec.15		H.Ec.29	
2:30 to 3:30	H.Ec.23		H.Ec.3. H.Ec.15		H.Ec.3	
3:30 to 4:30	H.Ec.23		H.Ec.3 H.Ec.15		H.Ec.3	
4:30 to 5:30			H.Ec.3		H.Ec.3	

0372

Home Economics 3. Food Selection and Preparation 3 Credits

An introduction to the subject of foods, selection, marketing, preparation, and service; and the fundamental principles of nutrition.

Required: Major students in Home Economics, Pre-nursing Course II.
Elective: 2, 3, 4.
Lecture: 8:00-9:00.
Laboratory: WF 2:30-5:30.

Miss Ch'en

Home Economics 5. Nutrition and Dietetics 4 Credits

A study of nutrition with application of the principles to everyday feeding problems of individuals and groups; food values in relation to cost: combination of foods in meals.

Prerequisite: H. Ec. 3, Chem. 109, 117.
Required: Major students in Home Economics.
Lecture: TTh 9:30-10:30.
Laboratory: TTh 9:30-12:30.

Miss Mills and Miss Ch'en

Home Economics 6. Problems in Child Feeding 2 Credits

This course will deal with the special nutritional problems of children with particular emphasis on the adaption of Chinese foods to children's diets.

Prerequisite: H. Ec. 5.
Lecture: M 10:30-11:30.
Laboratory: Th 9:30-10:30.

Miss Mills and Miss Ch'en

Home Economics 11. Clothing Problems 3 Credits

A study of the principles underlying the selection, cost, care, and use of clothing.

Elective: 2, 3, 4.
Lecture: MWF 9:30-10:30.

Miss Ch'en

Home Economics 14. Home Decoration 3 Credits

A study of art principles and their application to the choices and arrangement of furnishings and decorations of the moderate sized home.

Home Economics 15. Applied Design 3 Credits

A study of the principles of design and color developed and applied to clothing and decorative articles in the home.

Elective: 2, 3, 4.
Lecture: TTh 8:30-9:00
Laboratory: W 1:30-4:30

Miss Ch'en

Home Economics 23. Household Technology 3 Credits

A study of the technical processes of housekeeping, selection of equipment, methods of cleaning, laundering, etc.; a study of the sanitary aspects of the home and their relation to the health of the home and community.

Required: Major students in Home Economics.
Elective: 2, 3, 4.
Lecture: WF 10:30-11:30
Laboratory: M 1:30-4:30.

Miss Mills

Home Economics 24. Home Care of the Sick 2 Credits

A study of the care of the patient in the home with demonstrations of simple nursing procedure; management of communicable diseases.

Elective: 2, 3, 4.
Lectures: WF 10:30-11:30

Miss Mills

Home Economics 26. Household Management 3 Credits

A study of the organization and management of household operation and finances; family and community relationships.

Required: Major students in Home Economics; Pre-Nursing Course II.
Elective: 2, 3, 4.
Lecture: MWF 9:30-10:30.

Miss Mills

Home Economics 27-28. Child Care and Development 3-3 Credits

A study of the growth and development of the child through the Pre-Natal period; infancy, and childhood; factors influencing the health and behaviours of children; habit formation; proper feeding.

Required: Major students in Home Economics.
Elective: 3, 4.
Lecture: MWF 11:30-12:30

Miss Mills

Home Economics 29 (Same as Soc. 143) Child Welfare 3 Credits

A Study of the principles of child welfare and of the problems involved in meeting social obligations to childhood; child mortality, child health, child labor, etc.

Elective: 2, 3, 4.
Lectures: MWF 1:30-2:30

Miss Mill

Home Economics 30. Home Management House 3 Credits

A course dealing with the problems of the homemaker. Students live in the Home management House for one semester each student in turn being responsible for the various duties in the house.

Prerequisite: H. Ec. 3, 5, 23, 26.
Required: Major Students in Home Economics.
Laboratory:

Miss Ch'en

Home Economics 42. Methods of Teaching Home Economics 3 Credits

A study of the materials and methods of teaching Home Economics with supervised practice teaching by the students whenever possible. Emphasis will be placed on organization of courses of study.

Prerequisite: At least 16 credits of Home Economics.
Lecture: MWF 8:00-9:00

Miss Mills and Miss Chen

Home Economics 45. Senior Thesis 2 Credits

Each Major student is required to take up an individual problem in the Senior year on which she writes a thesis.

Miss Mills and Miss Chen

DEPARTMENT OF MATHEMATICS.

T.H. Ch'en M. A., Ph. D. *Professor and Chairman.*
 Miss E. L. Konantz, M. A. *Professor*
 Miss E. M. Hancock. B. Sc. *Professor*

The functions of the Department are, to provide courses fundamental to the curricula of other Departments of the University, to provide a sequence of courses which will fulfil the requirements for graduation, prescribed in the academic regulations of the College of Natural Sciences, to train students to teach mathematics, and to offer opportunities to graduate students for more advanced study of the subject.

DEPARTMENTAL REGULATIONS.

A major student in this Department must fulfill the following requirements for graduation:

(1) Chinese	4 Credits.
English	16 Credits.
Physics 5-6	8 Credits.
Social Sciences	8 Credits.
Major	40 Credits.
(Of the credits of major) the following courses are required.	
Mathematics 21-22	8 Credits.
Mathematics 23-24	8 Credits.
Mathematics 27-28	8 Credits.
Mathematics 55-56	8 Credits.
Correlated Subjects (Physics, Chemistry or Biology)	16 Credits.
Electives	44
Total	136 Credits.

- (2) The student must, under the supervision of a Professor in this Department, satisfactorily complete a thesis on a Mathematical Subject.
- (3) The student must fulfill all the requirements, prescribed in the academic regulations of the College of Natural Sciences.

MAJOR CURRICULUM

FIRST SEMESTER		SECOND SEMESTER	
<i>First Year</i>	<i>Credits</i>		<i>Credits</i>
Chinese 7	2	Chinese 8	2
English I	4	English 2	4
Nat. Sc. Mathematics 21	4	Nat. Sc. Mathematics 22	4
Nat. Sc. Physics	4	Nat. Sc. Physics	4
Elective	2	Elective	2
Soc. Sc.	2	Soc. Sc.	2
		Hygiene (for women)	1
	<hr/>		<hr/>
	18		19
	43		

Second Year

English 5 4	English 6 4
Major. Mathematics 23.. .. 4	Major Mathematics 24 4
Cor. Subject 4	Cor. Subject 4
Social Science 2	Social Science 2
Electives 4	Electives 4
18	18

Third Year

Major. Mathematics 27.. .. 4	Major. Mathematics 28 4
Major. Mathematics .. 3 or 2	Major. Mathematics. ..3 or 2
Cor. Subj 4	Cor. Subj 4
Electives 5 or 6	Electives 5 or 6
16	16

Fourth Year

Major. Mathematics 55 4	Major Mathematics 56 4
Mathematics 3 or 2	Mathematics .. .. .3 or 2
Electives 9 or 10	Electives .. .. .9 or 10
16	16

Summary:

Credits

Chinese 4	
English 16	
Nat. Sc. (First Year) 16	
Physics 8	(if not included above)
Soc. Sc. 8	
Hygiene (for women) 1	
Major 40	
Cor. Subj 16-44	
Electives 27	
136	

Notes on Curriculum.

1. Correlated Subject.

While the Mathematics Department does not wish to make Physics the correlated subject, that must be taken by all its Major

Students, it would emphasize the special value of the subject in making certain aspects of higher mathematics more easily understood.

2. Social Science Requirement.

Courses to fulfill this requirement must be chosen from one or more of the following Departments.

- Economics
- Education
- History
- Political Science.
- Psychology
- Religion.
- Sociology.

3. Students who are intending to teach are advised to take, as some of their electives, courses in Education, and Psychology.

0375

0375010

DEPARTMENT OF MATHEMATICS
SCHEDULE.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00 to 9:00	29-30 31-32		29-30 31-32		29-30 31-32	
9:30 to 10:30	21-22 23-24	21-22 23-24 53		21-22 23-24 53	21-22 23-24	53
10:30 to 11:30	27-28	I-2 (C) 27-28		I-2 (C) 27-28	27-28	
11:30 to 12:30	3-4 35-36	I-2 (A)	I-2 (B)	I-2 (A) 35-36	I-2 (B) 3-4 35-36	
1:30 to 2:30						
2:30 to 3:30						
3:30 to 4:30						

Mathematics 1-2 Introduction to Mathematical Analysis 2-2 Credits

A unified course in trigonometry, algebra, analytic geometry and calculus. These are all treated in a very elementary way, the course being specially planned for Science Students, and others, not intending to major in mathematics.

Required: of all Science College Students who do not major in Mathematics.

Elective: 1, 2, 3, not majoring in Mathematics.

Lecture: A—TTh 11.30 or B—WF 11.30; C—TTh 10:30 each section not more than 20 students. Miss Hancock

Mathematics 3-4 Elementary Mathematical Analysis 3-3 Credits

A Course mainly for science students and those not majoring in Mathematics.

Prerequisite: 1-2.

Elective: for students not majoring in Mathematics.

Lecture: MF-11:30. Miss Konantz

Mathematics 21-22 Algebra, Trigonometry 4-4 Credits

A course in College Algebra, Trigonometry to De Moirres Theorem & mainly for major students in their Freshman year.

Required: Major Students in Mathematics.

Elective: 1, 2, (also 3, 4.)

Lecture: MTThF 9:30 Miss Hancock

Mathematics 23-24 Analytic Geometry 4-4 Credits

The fundamental principles of plane and Solid Analytic Geometry including some work in homogenous co-ordinates.

Prerequisite: 21-22.

Required: Major Students Mathematics.

Elective: 2, 3, 4.

Lecture: MTThF 9.30.

Laboratory:

Miss Konantz

Mathematics 27-28 Calculus 4-4 Credits

An elementary course in differential and integral calculus.

Prerequisite: 23-24 or 1-2.

Required: Major Students in Mathematics.

Elective: 2, 3, 4.

Lecture: MTThF 10.30.

Miss Konantz

Mathematics 29-30 Pure Geometry 3-3 Credits

Pure Geometry and Mathematical Drawing an introductory course in modern Geometry.

Elective: 1, 2, 3.

Lecture: MWF 8:00.

Laboratory:

Miss Hancock

Mathematics 31 Differential Equations 3 Credits

Formation of a Differential Equation; Equations of First Order of the different Degrees; Singular Solutions; Linear Equations with Constants and Variable Coefficients; Exact Differential Equations and Equations of Particular Forms; Equations of the Second Order; Equations involving more than Two Variable; Partial Differential Equations; And Applications to Geometry, Mechanics, and Physics.

Prerequisite : Math 27-28.
 Elective : 3-4.
 Lecture. MWF 8:00

Mathematics 32 Theory of Equations 3 Credits

Relations between roots and coefficients of equations. Solution of Cubic and Quartic Equations and of those of higher degree.

Prerequisite : 27-28.
 Elective : 3,4.
 Lecture : MWF 8.00.

Mr. T. H. Chen.

*Mathematics 53-54 Higher Pure Geometry 3-3 Credits

A Course on Projective Geometry mainly.

Prerequisite : 29-30.

Elective : 3,4.
 Lecture : Time to be arranged.

Mr. Ch'en

Mathematics 55-56 Advanced Calculus 4-4 Credits

A continuation of Mathematics 27-28 arranged with special reference to the needs of major and more advanced science students.

Prerequisite : 27-28.
 Required : Major Students in Mathematics.
 Elective : 3,4.
 Lecture : MWThF. 11:30

Miss Hancock

Mathematics 113-114 Methods of Teaching Mathematics 2-2 Credits

A course on special methods teaching on Mathematics, mainly for Junior and Senior Middle School.

Elective : 4
 Lecture : TF 2:30-

Mr. Ch'en

Mathematics 115-116 History of Mathematics 2-2 Credits

A course dealing with the rise and development of Western mathematics.

Prerequisite: Math-23-24.

Elective : 3,4
 Lecture : TTh 11:30

Miss Hancock

Mathematics 119-120 History of Chinese Mathematics 2-2 Credits

The origin and history of Chinese Mathematics,

Elective : 4

Mr. Chen.

Mathematics 149-150 Senior Thesis. 2,3 or 4 Credits

Mathematics 151-152 Theory of Function 2-2 Credits

A Course on theory of functions and infinite series.
 Elective: 4

Mr. Ch'en.

*Not given every year.

DEPARTMENT OF PHYSICS.

Y. M. Hsieh, M. A., Ph. D. Professor and Chairman
 D. K. Yang, B. S., M. S. Assistant Professor
 William Band, B. Sc., M. Sc. Lecturer
 C. Y. Meng, B. S. Instructor
 S. L. Ch'u B. S. Assistant
 Miss M. C. Wang, B. S. Assistant
 Chang Wen-yü. Assistant

The instructional work in physics is directed toward the following ends: (1) the training of premedical and pre-engineering students for professional study, (2) the training of general students in scientific methods of work and in the understanding of the place of physical science in the modern world; (3) the training of teachers of physics; (4) the training of research workers in physics.

DEPARTMENTAL REGULATIONS.

A major student in this Department must fulfill the following requirements for graduation:

- | | |
|---|---------------|
| (1) Chinese.. | .. 4 credits |
| English.. | .. 16 credits |
| Chemistry (Second Year College Chemistry) | 8 credits |
| Mathematics.. | .. 16 credits |
| Social Sciences .. | .. 4 credits |
| Major .. | .. 40 credits |

Of the 40 credits of major the following courses are required:

- | | |
|---------------------|---------------|
| Physics 5, 6, 7.. | .. 12 credits |
| Physics 101-2 .. | .. 6 credits |
| Physics 131-2 .. | .. 8 credits |
| Physics 142. .. | .. 3 credits |
| Physics 161, 162 .. | .. 2 credits |
| Physics 171,172. .. | .. 2 credits |

Correlated subjects (Mathematics, Chemistry, Biology, Education, or Geology).. .. 16 credits
 Elective.. .. 32 credits

Total 136 credits

- (2) In registering for Physics 171 and 172 the student must satisfactorily complete a thesis on a physical problem under the supervision of a Professor in this Department.
- (3) The student must fulfill all the requirements prescribed in the Academic Regulations of the College of Natural Sciences.

SUGGESTED MAJOR CURRICULUM IN PHYSICS.
FIRST SEMESTER SECOND SEMESTER

<i>First Year</i>	<i>Credits</i>		<i>Credits.</i>
Chinese 7	2	Chinese 8	2
English 1	4	English 2	4
Nat. Sc. (Phys. 3 or 5)	4	Nat. Sc. (Phys. 4 or 6)	4
Nat. Sc. (Math. 23 or 27)	4	Nat. Sc. (Math. 24 or 28)	4
Nat. Sc. (Chem. 3)	4	Nat. Sc. (Chem. 4)	4
		Hygiene (for women)	1
	18		19
 <i>Second Year</i>			
English 5	4	English 6	4
Major (Physics 5 or 7)	4	Major (Physics 6 or any course numbered above 100)	4
Cor. Subj. (Chem. 5)	4	Cor. Subj. (Chem. 6)	4
Math. 27 or 81	4	Math. 28 or 32	4
Soc. Sc.	2	Soc. Sc.	2
	18		18

Third Year

Major	4	Major	4
Major	4	Major	4
Cor. Subj. (Math., Chem., Education, Biology or Geo- logy	4	Cor. Subj. (Math., Chem., Biology Geology or Educa- tion	4
Electives	4	Electives	4
	16		16

Fourth Year

Major	1	Major	1
Major	2	Major	2
Major	3	Major	3
Major	4	Major	4
Electives	6	Electives	6
	16		16

Note:

In view of the fact that the relations of Mathematics and Physics are very close, the study of two years of mathematics is required of all major student in physics. Those who do not take the course in Differential and Integral Calculus in their freshman year, are strongly advised to take it during their sophomore year as almost every course in physics numbered above 100 requires a knowledge of calculus for the theoretical study of the subject.

The courses in mathematics and chemistry of most value to major students of physics are as follows:—

Mathematics 21-22	Introductory Course.
Mathematics 23-24	Analytic Geometry
Mathematics 27-28	Calculus
Mathematics 31	Elementary Differential Equations
Mathematics 32	Theory of Equations
Mathematics 35-36	Advanced Calculus
Chemistry 3-4	Inorganic Chemistry
Chemistry 5-6	Second Year College Chemistry
Chemistry 131-132	Physical Chemistry

DEPARTMENT OF PHYSICS
SCHEDULE

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00	*Phys. 3-4 *Phys. 7 Phys. 101-2 Phys. 145	*Phys. 5-6 *Phys. 153-4	*Phys. 3-4 *Phys. 7 Phys. 101-2 Phys. 145	*Phys. 5-6 *Phys. 153-4	*Phys. 3-4 *Phys. 7 Phys. 101-2 Phys. 145	*Phys. 5-6
9:30	Phys. 103-4 Phys. 115 Phys. 117	Phys. 141 Phys. 105 Phys. 144	Phys. 103-4 Phys. 115 Phys. 117	Phys. 141 Phys. 105 Phys. 144	Phys. 103-4 Phys. 115 Phys. 117	Phys. 141 Phys. 105 Phys. 144
10:30	Phys. 111 Phys. 131-2 Phys. 151		Phys. 111 Phys. 131-2 Phys. 151		Phys. 111 Phys. 131-2 Phys. 151	
11:30						
1:30 to 4:30	*Phys. 3-4(A) Phys. 145	*Phys. 5-6(A) Phys. 142	*Phys. 3-4(B) *Phys. 5 (X) *Phys. 7 (A) Phys. 111	*Phys. 3-4(X) *Phys. 6 (X) Phys. 131-2 Phys. 142	*Phys. 5-6 B Phys. 7 (B)	
4:30		Phys. 161 Phys. 162				

* Time schedule definitely fixed.

Physics 1. Fundamental Ideas of Physical Science 4 Credits

This course, together with a similar course given by the Biology Department, is especially designed for students in the College of Applied Social Sciences. It has for its object the fixing in mind of the scientific methods of work in the modern world as demonstrated by the historical developments of a few well-selected topics.

No credits will be given to students in the College of Natural Sciences.

Lecture: Three times a week, TThS 10:30 B115
Laboratory M. 1:30-4:30 B120.

Mr. Yang

Physics 3-4 Principles of Physics 4-4 Credits

An introductory course designed for students without adequate middle school preparation. 3 lectures and 3 laboratory hours.

Elective: 1, 2.
Prerequisites: Algebra and Geometry
Lecture: MWF 8:00 B203
Laboratory: Section A—M 1:30-4:30 B122
Section B—W 1:30-4:30 B122
Section X—Th 1:30-4:30 B122 (if necessary)

Mr. Meng.

Physics 5-6 Mechanics, Heat, Sound and Light 4-4 Credits

Forms with Physics 7 a general descriptive course in Physical Principles. Required of Premedical students.

Required: Major students in Physics
Elective: 1, 2, 3, 4.
Prerequisite: Physics 3-4 or evidence of adequate middle school preparation, Algebra, geometry and trigonometry.

Lecture: TTh S 8:00 B 203
Laboratory: Section A—T 1:30-4:30 B120
Section B—F 1:30-4:30 B120
Section X—W 1:30-4:30 B120 (for Phys. 5, if necessary)
Section X—Th 1:30-4:30 B120 (for Phys. 6, " " " ")

Mr. Yang

Physics 7 Electricity and Magnetism 4 Credits

Required of Premedical students. 3 lectures and 3 laboratory hours.
Required: Major students in Physics

Elective: 2, 3, 4.
Lecture: MWF, 8:00 B203
Laboratory: Section A—W 1:30-4:30 B103
Section B—F 1:30-4:30 B103

Mr. Yang.

Physics 101-2 Analytical Mechanics I & II 3-3 Credits

Statics, kinematics and the kinetics of particles and rigid bodies, 3 lectures.

Elective: 2, 3, 4, 5.
Required: Major students in Physics.
Prerequisite: Physics 5-6 and Calculus
Lecture: MWF 8:00 B115

Mr. Band

Physics 103, An Introduction to Mathematical Physics I 3 Credits

Vectors and vectorial Operators used throughout the course.
Kinematics, Dynamics of a particle and General Principles applied to planetary motion.

Statistical Theory of Thermodynamics.
Electrostatic and Magnetostatic Field.
Prerequisite: Physics 5, 6, 7, and Calculus, Physics 101-2 desirable.
Elective: 3, 4, 5.
Time to be arranged.

Mr. Band

Physics 104. An Introduction to Mathematical Physics II 3 Credits

Theory of Wave Functions. Maxwell's Theory of Electromagnetic Field. Solution of Field Equations in Particular cases. Radiation Pressure, Energy and Mass. Restricted Relativity and Lorentz Transformation. Minkowski's 4-Vectors. General Solution of Field Equations. Motion of Electrons. Tensors, Invariant relativity form to Field Equations. Prerequisite: Same as for Physics 103.

Elective: 3, 4, 5.

Mr. Band.

Physics 105 Vector Analysis 3 Credits

Elements of vector algebra and calculus and the linear vector function in three dimensions.

Prerequisite: Physics 5, 6, 7, and Calculus
Lecture: Three times a week,
Elective: 3, 4, 5.
Time to be arranged

Mr. Band.

Physics 111 Kinetic Theory of Gases 4 Credits

Viscosity, capillarity, diffusion, change of state, the distribution of linear velocities among the molecules of a gas, the equipartition of kinetic energy and the theory of specific heats, and Brownian movement and allied phenomena.

Prerequisite: Physics 5-6, and Calculus
Elective: 3, 4, 5.
Required: Major students in Physics.
Lecture: MWF 10:30 B115
Laboratory: W 1:30-4:30 B114

Mr. Hsieh

Physics 115 Thermodynamics 3 Credits

The principles of thermodynamics and their application to physical and chemical processes. 3 lectures and solution of problems.

Prerequisite: Physics 5, 6, and Calculus, Physics 111 desirable.
Elective: 3, 4, 5.
Lecture: MWF 9:30 B115

Mr. Band.

Physics 117 Quantum Theory 3 Credits

Statistical theory of heat, quantum statistics, quantum theory of radiation, statistical mechanics and wave mechanics of the atom. Three lectures.

Prerequisite: Physics 5,6,7, and Calculus, and Physics 115
Elective 4, 5.
Time: MWF 9:30 B115.

Mr. Band.

Physics 131-2 Advanced Optics 4-4 Credits

The course deals with the more important phenomena and their fundamental theory both in geometrical and physical optics.

*Laboratory work with lens system, diffraction phenomena due to single slit, double slit, diffraction grating of reflection and transmission types, photometer, refractometer, interferometer, and polarimeter. 3 lectures and 3 laboratory hours,

Prerequisite: Physics 5,6,7, and Calculus
Elective 3, 4, 5.

Lecture: MWF 10:30 B115
Laboratory: Th 1:30-4:30 B114

Mr. Hsieh

Physics 141 Advanced Electricity and Magnetism 3 Credits

Electrostatics, electrokinetics and magnetism.

Prerequisite: Physics 5, 6, 7, and Calculus
Registration in Physics 142
Lecture: TThS 9:30 B115

Mr. Yang

Physics 142 Direct Current Electrical Measurements 3 Credits

Prerequisite: as for Physics 141 with registration in the latter course.
Laboratory: TTh 1:30-4:30 B103

Mr. Yang

Physics 144 Alternating Current Electrical Measurements 4 Credits

One lecture and 6 laboratory hours
Prerequisite: Physics 5, 6, 7 and Calculus
Laboratory: Time to be arranged

Mr. Yang.

Physics 145 Radio Telegraphy and Telephony 4 Credits

A course of lectures and laboratory work consisting of elementary consideration of the fundamental laws and their applications to the circuits of modern radio telegraph and telephone systems-

Prerequisite: Physics 5, 6, 7, Calculus desirable.
Lecture: MWF 8:00 B115
Laboratory: M 1:30-4:30.

Mr. Yang

Physics 151 Modern Developments in Physics 4 Credits

Conduction of electricity through gases, thermionics, photoelectricity, X-rays and atomic structure. 3 lectures and 3 laboratory hours.

Prerequisite: Physics 5, 6, 7, 141, and Calculus.
Required: Major students in Physics.
Elective: 3, 4, 5.
Lecture: MWF 10:30 B115
Laboratory: Time to be arranged.

Mr. Hsieh

Physics 153-4 The Natural Philosophy of Modern Physics 2-2 Credits

To include the Natural Philosophy of Whitehead, Broad, Russell and Eddington; introduced by a summary of the theories of Relativity, Wave Mechanics of the Atom, and Statistical Mechanics.

This course would be suitable for Graduates from other colleges or subjects, besides giving students and graduates in physics a grasp of the significance of their own subject; it is not intended as exactly elementary in nature, but the physics

included will be as non-technical as possible. There would be sufficient difficulty found in understanding the philosophical part of the subject however to make the course suitable more to mature students than to undergraduates.

To be elected with the permission of the instructor.
Lecture: TTh 8:00 B115

Mr. Band.

Physics 161 Physics Journal Club 1 Credit

This organization, consisting of all instructors and graduate and senior students, meets weekly, for the review and discussion of the current literature in this department of study. (Regular attendance at the meetings of this club is required of graduate and senior students in the Department.)

Required: Major and Graduate students in Physics
Elective 3, 4, 5.
Prerequisite: at least 2 years of Physics
Time: T 4:30 B115

Mr. Hsieh

Physics 162 Physics Journal Club 1 Credit

For description of the course and conditions of election see Physics 161

Mr. Hsieh

Physics 171 Undergraduate Research 1 or 2 Credits

Required of students majoring in Physics. Involves the preparation of a critical resume of some field of research and a simple original investigation as decided in conference with the instructor.

Time to be arranged.

Physics staff.

Physics 172 Undergraduate Research 1 or 2 Credits

For description of the course and condition of election see Physics 171

Physics staff.

NOTE: Some of these course cannot be given every year, but arrangements will be made so that each student may have opportunity to take the required work at some time during his residence at the University.

DEPARTMENT OF PSYCHOLOGY

C. W. Luh, Ph. D. Professor & Chairman
T. T. Lew, M.A., Ph. D., S.T.D., D.D. Professor
R.C. Sailer, A.M., Ph. D. Assistant Professor
Mrs. Lennig Sweet, M.A. Honorary Lecturer
Y. Hsia, B.A. Assistant

Miss Roberta S. White, Ph.D. Lecturer, Department of Sociology.
Miss Myfawny Wood Instructor, Department of Religion.

The aim of the Department of Psychology is twofold:

1. To impart a scientific knowledge of theoretical and experimental psychology so as to prepare students to do independent research work or to teach psychology in colleges and Middle Schools, and
2. To give special training in the various fields of applied psychology. The Department looks forward to the time when training in psychotechnique can be given on a more extensive basis.

Departmental Requirements.

For admission to the Department.

1. The candidate must have fulfilled the general requirements of the College of Natural Sciences except Mathematics for which may be substituted Psychology 117 to be taken in the second year.
2. The candidate must demonstrate the ability to read psychological literature in Chinese and in English. Deficiency in such ability must be made up in the second year by taking more required courses in Chinese or English or both.
3. The candidate must have had Psychology 1-2, or its equivalent in the case of a transfer student.
(Adjustment may be made for students who for special reasons have not fulfilled all these requirements in the first year.)

For graduation with the B. S. degree.

1. The major requirement is from 40-60 credits in which the following courses must be included: Psychology 1-2, 5, 6, 103-104, 105-106, 117, 118, 191 (4 semesters), and 193 (2-6 credits).
2. The candidate must have elected a sequence of 20 credits in Biology or Physics. These courses must be elected under the supervision of the chairman of the major department.
3. The graduating thesis, amounting to not less than four credits of work, must be written on an experimental topic. For this reason, Psychology 111 and 112 are strongly recommended as electives.

For graduation with the B. A. degree.

1. Same as requirement 1 for B. S.
2. Same as requirement 2 for B. S. except that the correlated department must be Philosophy, Education, or Sociology.

Proposed Curriculum

B. S., First year			B. A., First year		
Chinese	7-8,	4 Credits	Chinese,	7-8	4 Credits
English	1-2,	8	English	1-2	8
Biology	1-2, or		Biology	1-2	8
Physics	5-6	8	Psychology	1-2	4
Psychology	1-2	4	*Elective		12
*Elective		12			36 Credits
<hr/>			<hr/>		
36 Credits					
Second year			Second year		
Psychology	103-4	4	Psychology	103-4	4
Psychology	5 & 6	6	Psychology	5 & 6	6
Other Psychology	6-8		Other Psychology	6-8	
Physics	5-6 or		Correlative	.....	8-6
Biology	1-2.....	8	Elective.....		12
Elective.....		12-10			36 Credits
<hr/>			<hr/>		
36 Credits					
Third year			Third year		
Psychology, at least		12	Psychology, at least		12
Correlative..	..	8	Biology 4 ..	..	4
Elective, at most..		12	Physics 7 ..	..	4
<hr/>			<hr/>		
32 Credits			32 Credits		
Fourth year			Fourth year		
Psychology, at least		12	Psychology, at least		12
Correlative ..	..	8	Biolgy or Physics..		8
Elective, at most ..		12	Elective, at most..		12
<hr/>			<hr/>		
36 Credits			36 Credits		

*Mathematics 1-2 and a second foreign language recommended.

DEPARTMENT OF PSYCHOLOGY

Schedule.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:00		Psy. 5, 6.	Psy. 1A-2A Psy. 103-104	Psy. 5, 6.	Psy. 1A-2A Psy. 103-10	
9:30	Psy. 111, 112	Psy. 1B-2B Psy. F 3 Psy. 131, 132	Psy. 111, 112	Psy. 1B-2B Psy. F 3 Psy. 131, 132	Psy. 111, 112	
10:30		Psy. F 141 Psy. S 142 Psy. 155-156	Psy. F 151 Psy. S 154	Psy. F 141 Psy. S 142 Psy. 155-156	Psy. F 151 Psy. S 154 Psy. S 171	
11:30	Psy. F 117 Psy. S 118		Psy. S 118		Psy. S 118	
1:30	Psy. 5, 6. (Lab)		Psy. S 171			
2:30	Psy. 5, 6. (Lab)	Psy. 181-182 Psy. F 117 (Lab)	Psy. S 171	Psy. F 117 (Lab)	Psy. 7, 8.	
3:30	Psy. 5, 6. (Lab)	Psy. F 117 (Lab)	Psy. S 171	Psy. F 117 (Lab)	Psy. 7, 8.	
4:30						
7:30	191 Jour. Club.					

"F" Fall only
"S" Spring only

Psychology 120 Personality 3 Credits

A comprehensive study of the theories of and the experiments on personality. Emphasis on its will-temperament side.

Elective: 3, 4, 5.
Prerequisite: Psychology 118

Mr. Sailer

Psychology 131 Abnormal Psychology 2 Credits

The abnormal in relation to the normal. Emphasis on description of phenomena of hysteria, psychasthenia and neurasthenia. Special attention to theory and methods of Freud, Janet, etc.

Elective: 2, 3, 4.
TTh 9:30
Prerequisite: Psychology 1-2 or special permission of instructor.

Mr. Sailer

Psychology 132 Abnormal Psychology 2 Credits

Continuation of Psychology 131. Special attention to theory and methods of Freud, Jung, Janet, etc.

Elective: 2, 3, 4. TTh 9:30
Prerequisite: Psychology 131.

Mr. Sailer

Psychology 141 Introduction to Social Psychology 2 Credits

This course is organized for Social Science students who do not intend to make an exhaustive study of psychology but at the same time find the knowledge of social psychology important to their own lines of work. Introduction to Psychology 142, no credits given unless taken together with that course.

Elective: 2, 3, 4. Fall, TTh 10:30
(Not open to students who have already taken Psychology 1-2)

Miss White or
Mr. Luh

Psychology 142 Social Psychology 2 Credits

A psychological study of the means of social stimulation and of the development of social habits and attitudes.

Elective: 2, 3, 4. Spring, TTh 10:30
Prerequisite: Psychology 1-2 or 141.

Miss White or Mr. Luh

Psychology 151 (Ed. 123) Psychology of Childhood. 2 Credits

This is an introductory course presenting the main facts concerning the psychology of children. Emphasis will be placed upon the significance of these facts for education and an acquaintance with the literature concerned.

Elective: 2, 3, 4. First semester, WF 10:30
Prerequisite: Psychology 1-2, or Education 15-16 or special permission of the instructor.

Mr. Lew

Psychology 154 Psychology of Adolescence 2 Credits

This is an introductory course presenting the main facts concerning the psychology of adolescents. It will include the reading of a certain amount of literature illustrating experiences of adolescents. Application of the principles to the educational problems of youth, especially middle school students, will be emphasized.

Elective: 2, 3, 4. Second semester, WF 10:30
Prerequisite: Psychology 1-2, or Edu. 15-16 or special permission of the instructor.

Mr. Lew

Psychology 155-156 (Ed. 117-118) Advanced Educational Psychology 2-2 Credits

This course will deal in fact with the theories of learning, laws of learning, and conditions of effective study, and problems of instinct, emotion, individual difference, and certain educational problems from the point of view of educational psychology. Other problems will be introduced from year to year according to the preparation and the need of the students.

Elective: 2, 3, 4. TTh 10:30
Prerequisite: Psychology 1-2 or Education 15-16.

Mr. Lew

Psychology 158 Learning and Memory 3 Credits

A survey of the experimental literature on learning and memory. Some crucial experiments may be performed.

Elective: 3, 4, 5.
Prerequisite: Psychology 5-6, 103 and 117.
(Not given 1930-1931)

Mr. Lew and Mr. Luh

Psychology 161 Animal Psychology 3 Credits

A comparative study of the behavior of the vertebrate, especially in its relation to human behavior.

Elective: 3, 4, 5.
Prerequisite: Psychology 5-6 and Biology 52 (Not given 1930-1931)

Psychology 171 The Neurological Basis of Psychology 3 Credits

Elementary study of the anatomy and physiology of the vertebrate nervous system, emphasizing its bearing on human and animal psychology.

Elective: 3, 4, 5. Second semester, W 1:30, 4:30 F 10:30
Prerequisite: Psychology 5-6 and Biology 52.

Mr. Luh

Psychology 181-2 (Religion 61-62) Psychology of Religion 1-1 Credits

Discussion will center around the nature of religion and of religious processes from the psychological standpoint.

Elective: 2, 3, 4. T 2:30.
Prerequisite: Psychology 1-2 or equivalent

Mr. Lew

Psychology 191 Journal Club 1 Credit for each semester.

The staff and students will give reports on current literature.

Elective: 3, 4, 5. M 7:30 P.M.
Prerequisite: Major students or at least 10 credits or Psychology

Psychology Staff

Psychology 193 Psychology Problems 1 to 3 Credits for each semester

Every major student is required to take up an individual problem on which he writes his graduating thesis. Such work may be started in the second semester of the Junior year.

Hours to be arranged.

Psychology Staff

PREMEDICAL COURSE

Adviser to Premedical student—Miss Alice M. Boring Ph. D.

CURRICULUM FOR PREMEDICAL STUDENTS

Students desiring to do Premedical work in the College of Natural Sciences of the University will enter in the same manner as other regular students in other courses and Departments of the University. There is a Premedical Adviser, with whom all students taking premedical work should consult at the time of registration.

The Premedical curriculum as outlined below covers the Freshman, Sophomore and Junior years.

At the end of three years students are prepared to take the examinations which may admit them to the Peking Union Medical College as regular medical students.

Those students who have fulfilled all of the requirements for the Premedical courses at Yenching will be given the Degree of Bachelor of Science after they have satisfactorily completed the first year's work in the medical school at the Peking Union Medical College.

Those students who have had an adequate course in Physics in Middle school should complete the requirements outlined in section A below, while those who have not had such an adequate course in Physics should fulfill the requirements outlined in Section B.

PREMEDICAL COURSE

A. Chinese	.. .. .	10	credits
English	.. .. .	16	credits
Mathematics 1-2	.. .. .	4	credits
Biology 1-2	.. .. .	8	credits
Biology 51,52	.. .. .	8	credits
Biology 101-2 (recommended)	.. .. .	6	credits
Chemistry 3-4	.. .. .	8	credits
Chemistry 5-6	.. .. .	8	credits
Chemistry 9	.. .. .	4	credits
Physics 5-6	.. .. .	8	credits
Physics 7	.. .. .	4	credits
German or French (or Physical Chemistry and higher Mathematics or Psychology and Education or Economics, Science and Sociology)	.. .. .	10	
Social sciences (Ed., Econ., Hist., Phil., Pol. Sci., Psy., Rel.)	.. .. .	8	
Elective	.. .. .	2	
Hygiene (for women)	.. .. .	1	

Total 104 credits
or for women 105 credits

B. Chinese	.. .. .	10	credits
English	.. .. .	16	credits
Mathematics 1-2	.. .. .	4	credits
Biology 1-2	.. .. .	8	credits
Biology 51,52	.. .. .	8	credits
Chemistry 3-4	.. .. .	8	credits
Chemistry 5-6	.. .. .	8	credits
Chemistry 9	.. .. .	4	credits
Physics 3-4	.. .. .	8	credits
Physics 5-6	.. .. .	8	credits
Physics 7	.. .. .	4	credits

German or French (or Physical Chemistry and higher Mathematics or Psychology and Education or Economics, Political Science and Sociology) 10

Social sciences (Ed., Econ., Hist., Phil., Pol. Sc., Psy., Rel.) 8

Hygiene for women 1

Total 104 credits
or for women 105

PREMEDICAL CURRICULUM A

FIRST SEMESTER

SECOND SEMESTER

Freshman Year

Chinese 7 2	Chinese 8 2
English I 4	English 2 4
Mathematics I 2	Mathematics 2 2
Biology I 4	Biology 2 4
Chemistry 3 4	Chemistry 4 4
Soc. Sci. 2	Soc. Sci. 2
18	18

Sophomore Year

Chin. 9 2	Chin. 10 2
Eng. 5 4	Eng. 6 4
Biol. 51 4	Biol. 52 4
Chem. 5 4	Phys. 6 4
Phys. 5 4	Phys. 7 4
18	18

Junior Year

Chin. 51 or (Elective) 2	(Chin. 52) or Elective 2
Biol. 105 or Elective 3	Biol. 106 or Elective 3
Chem. 9 4	Chem. 6 4
German 131 5	German 132 5
Soc. Sci. 2	Soc. Sci. 2
16	16

PREMEDICAL CURRICULUM B

FIRST SEMESTER

SECOND SEMESTER

Freshman Year

Chinese 7 2	Chinese 8 2
English I 4	English 2 4
Mathematics I 2	Mathematics 2 2
Chemistry 3 4	Chemistry 4 4
Physics 3 4	Physice 4 4
Soc. Sci. 2	Soc. Sci. 2
18	18

Sophomore Year

Chinese 9 2	Chinese 10 2
English 5 4	English 6 4
Biology I 4	Biology 2 4
Chemistry 5 4	Physics 6 4
Physics 5 4	Physics 7 4
18	18

Junior Year

Chinese 51 2	Biology 32 4
Biology 51 4	Chemistry 6 4
Chemistry 9 4	German 132 5
German 131 5	Soc. Sci. 2
Soc. Sci. 2	
17	15

Pre-Nursing Course I.

Yenching University offers a one year Pre-Nursing Course which prepares students to enter Course I. in the School of Nursing of the Peking Union Medical College. Applicants for admission to Pre-Nursing Course I. must meet all requirements for admission as Freshmen to Yenching University.

Pre-Nursing Course I. Curriculum.

<i>First Semester</i>	<i>Credits</i>	<i>Second Semester</i>	<i>Credits.</i>
Biology 1	4	Biology 2	4
Chemistry 1	4	Chemistry 2	4
English 1	4	English 2	4
Chinese 7	2	Chinese 8	2
Home Econ. 3	3	Home Econ. 26	3
Psychology 1	2	Psychology 2	2
	-----		-----
	19		19

For further information regarding Course I. applicants should address the Dean of the School of Nursing, Peking Union Medical College.

Pre-Nursing Course II

Course II of the School of Nursing of the Peking Union Medical College covers a period of five years and leads to the Bachelor of Science degree from Yenching University in addition to the diploma in Nursing. The first two academic years are spent at Yenching, where students take a prescribed course which includes all the University required subjects plus certain physical and social sciences. These form a foundation for the strictly nursing subjects which are given during the third and fourth years at the School of Nursing. The first part of the fifth year is devoted to nursing practice in the Peking Union Medical College Hospital and the latter half to such specialized work at either Yenching University or the Peking Union Medical College as the student may choose to pursue.

Candidates for this course must meet all requirements for admission as Freshmen to Yenching University.

Pre-Nursing Course II. Curriculum.

<i>FIRST SEMESTER</i>		<i>SECOND SEMETER</i>	
<i>First Year</i>	<i>Credits</i>	<i>Credits</i>	<i>Credits</i>
Biology 1	4	Biology 2	4
Chemistry 1	4	Chemistry 2	4
Chinese 7	2	Chinese 8	2
Chinese 9	2	Chinese 10	2
English 1	4	English 2	4
Psychology 1	2	Psychology 2	2
		Hygiene	1
	-----		-----
	18		19
<i>Second Year</i>			
English 5	4	English 6	4
Chinese	4	Chinese	4
Home Econ. 3	3	Home Econ. 26	3
Physics 3	4	Physics 4	4
Soc. 1	2	Soc. 2	2
Pol. Sc. 1	2	Pol. Sc. 2	2
	-----		-----
	19		19

Special Course in Leather Tanning.

(Chuan Hsiu Ke).

Advisor to Short Course Leather Students—Professor E. O. Willson, S. M.

This course is planned to meet the needs of students who wish to become operators or managers of tanneries, but cannot take the complete four year course.

Instruction is given in Chemistry, Physics, English, Chinese, and elementary Economics. A major portion of the time is devoted to instruction in Leather Manufacture and to practice work in the experimental tannery.

Candidates for this course must meet all requirements for admission as Freshmen to Yenching University. Those who satisfactorily complete the two years of work are given a certificate.

Further details may be obtained by application to the Registrar.

Agriculture Experiment Station.

Yu Chen Chou, B. A., B. S. *Acting Director*
Shen Shou Tsuan, B. S. *Agronomist*

Work of college grade in Agriculture has been suspended by Yenching University but experimental and extension work has been increased. With the reorganization of the University into colleges as a preparation for registration with the Minister of Education of the National Government, the former Department of Agriculture was changed to the Agriculture Experiment Station of the College of Natural Sciences.

Experimental Projects.

The Experiment Station carries on three lines of experimental projects, as follows: Animal Husbandry, Agronomy and Horticulture. The Station has a stock of pure-bred hogs, poultry, dairy cattle, sheep, and goats. As fast as these have become acclimated they have been to some extent distributed to farmers and have to some extent been employed in cross-breeding experiments. Feeding experiments are also under way. These have been especially successful with crosses between foreign and Chinese hogs.

For the last five years soil and fertilizer experiments have been under way, and important results have been obtained with the use of commercial fertilizers on the more valuable crops such as rice and garden products. Crop breeding experiment have been confined chiefly to a few more important North China crops, as wheat, corn, millet, rice, and cotton.

In Horticulture the station is confirming its work to the introduction of foreign fruits trees, chiefly apples.

Extension Work.

The extension work of the Station includes several projects as follows:

1. Yenta Agriculture Notes: This is a monthly bulletin discussing general agricultural problems and describing the results of experiments and investigations carried on by the Station. The bulletin is distributed free and has a circulation of over eight hundred copies per month.

2. Extension Advisory office: Farmers who wish advice on rural problems, and who are unable to come to the Station in person may present their problems by letter. At present the Station receives an average of three such inquiries each day.

3. Agricultural Fair: The Station conducts several Annual Agricultural Fairs, one at the Station and others in various centers. These give opportunities for farmers to become acquainted with the work of the station.

4. Agricultural Training School: This school is conducted jointly by Tsing Hua University, Hsiang Shan Orphanage and Yenching University. It trains farmer boys for rural extension work and agricultural Colonization.

5. Winter School Course: Each winter the Station conducts a school open to farmers, rural preachers, and leaders. The instruction is conducted to practical problems in agriculture and rural problems of social, economic, educational and religious nature.

Special Course in Leather Tanning.

(Chuan Hsiu Ke).

Advisor to Short Course Leather Students—Professor E. O. Willson, S. M.

This course is planned to meet the needs of students who wish to become operators or managers of tanneries, but cannot take the complete four year course.

Instruction is given in Chemistry, Physics, English, Chinese, and elementary Economics. A major portion of the time is devoted to instruction in Leather Manufacture and to practice work in the experimental tannery.

Candidates for this course must meet all requirements for admission as Freshmen to Yenching University. Those who satisfactorily complete the two years of work are given a certificate.

Further details may be obtained by application to the Registrar.

Agriculture Experiment Station.

Yu Chen Chou, B. A., B. S. *Acting Director*
Shen Shou Tsuan, B. S. *Agronomist*

Work of college grade in Agriculture has been suspended by Yenching University but experimental and extension work has been increased. With the reorganization of the University into colleges as a preparation for registration with the Minister of Education of the National Government, the former Department of Agriculture was changed to the Agriculture Experiment Station of the College of Natural Sciences.

Experimental Projects.

The Experiment Station carries on three lines of experimental projects, as follows: Animal Husbandry, Agronomy and Horticulture. The Station has a stock of pure-bred hogs, poultry, dairy cattle, sheep, and goats. As fast as these have become acclimated they have been to some extent distributed to farmers and have to some extent been employed in cross-breeding experiments. Feeding experiments are also under way. These have been especially successful with crosses between foreign and Chinese hogs.

For the last five years soil and fertilizer experiments have been under way, and important results have been obtained with the use of commercial fertilizers on the more valuable crops such as rice and garden products. Crop breeding experiment have been confined chiefly to a few more important North China crops, as wheat, corn, millet, rice, and cotton.

In Horticulture the station is confirming its work to the introduction of foreign fruits trees, chiefly apples.

Extension Work.

The extension work of the Station includes several projects as follows:

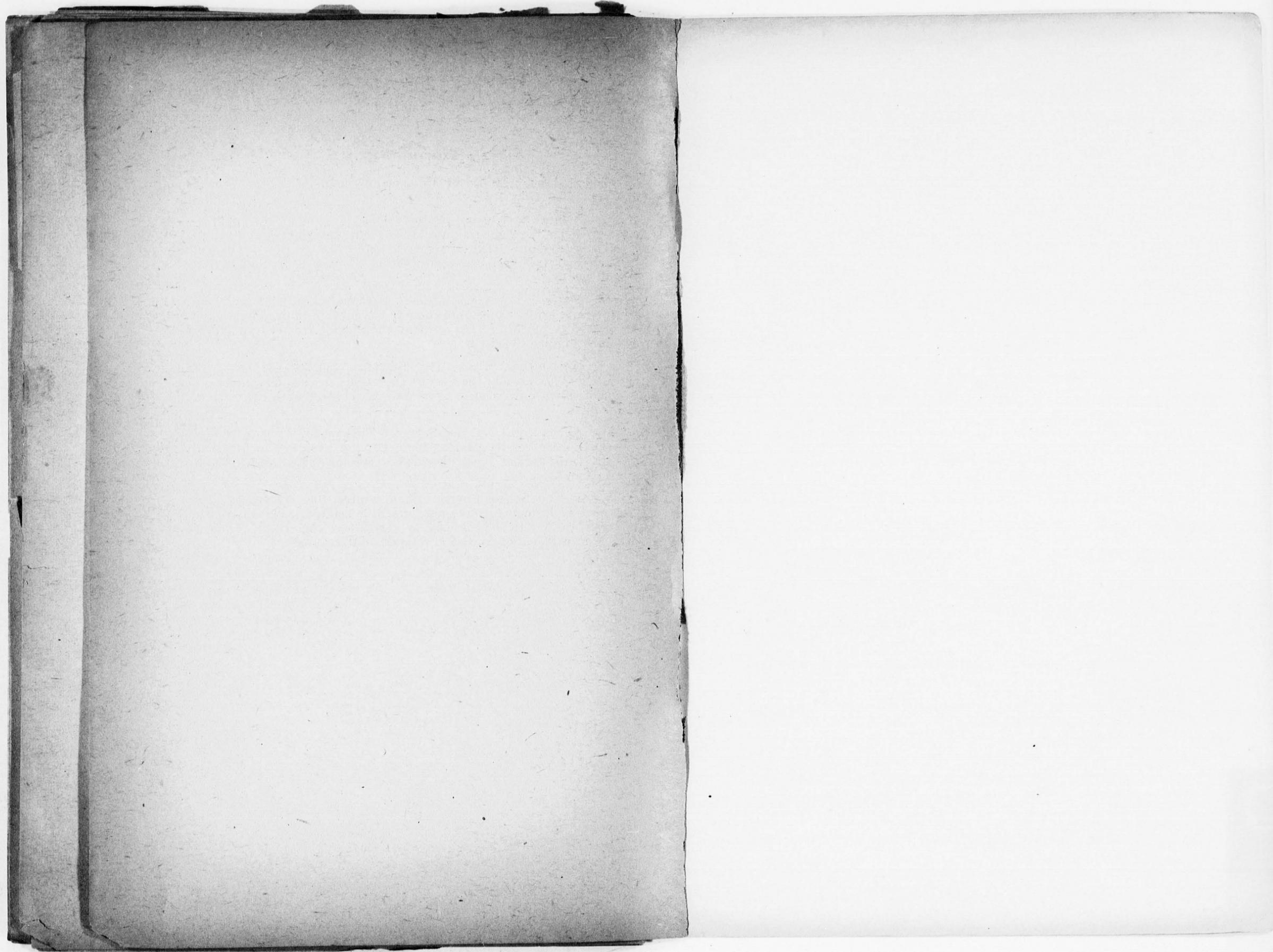
1. Yenta Agriculture Notes: This is a monthly bulletin discussing general agricultural problems and describing the results of experiments and investigations carried on by the Station. The bulletin is distributed free and has a circulation of over eight hundred copies per month.

2. Extension Advisory office: Farmers who wish advice on rural problems, and who are unable to come to the Station in person may present their problems by letter. At present the Station receives an average of three such inquiries each day.

3. Agricultural Fair: The Station conducts several Annual Agricultural Fairs, one at the Station and others in various centers. These give opportunities for farmers to become acquainted with the work of the station.

4. Agricultural Training School: This school is conducted jointly by Tsing Hua University, Hsiang Shan Orphanage and Yenching University. It trains farmer boys for rural extension work and agricultural Colonization.

5. Winter School Course: Each winter the Station conducts a school open to farmers, rural preachers, and leaders. The instruction is conducted to practical problems in agriculture and rural problems of social, economic, educational and religious nature.



0390

0390 1 5 5 5 5 5 5



0391

0391