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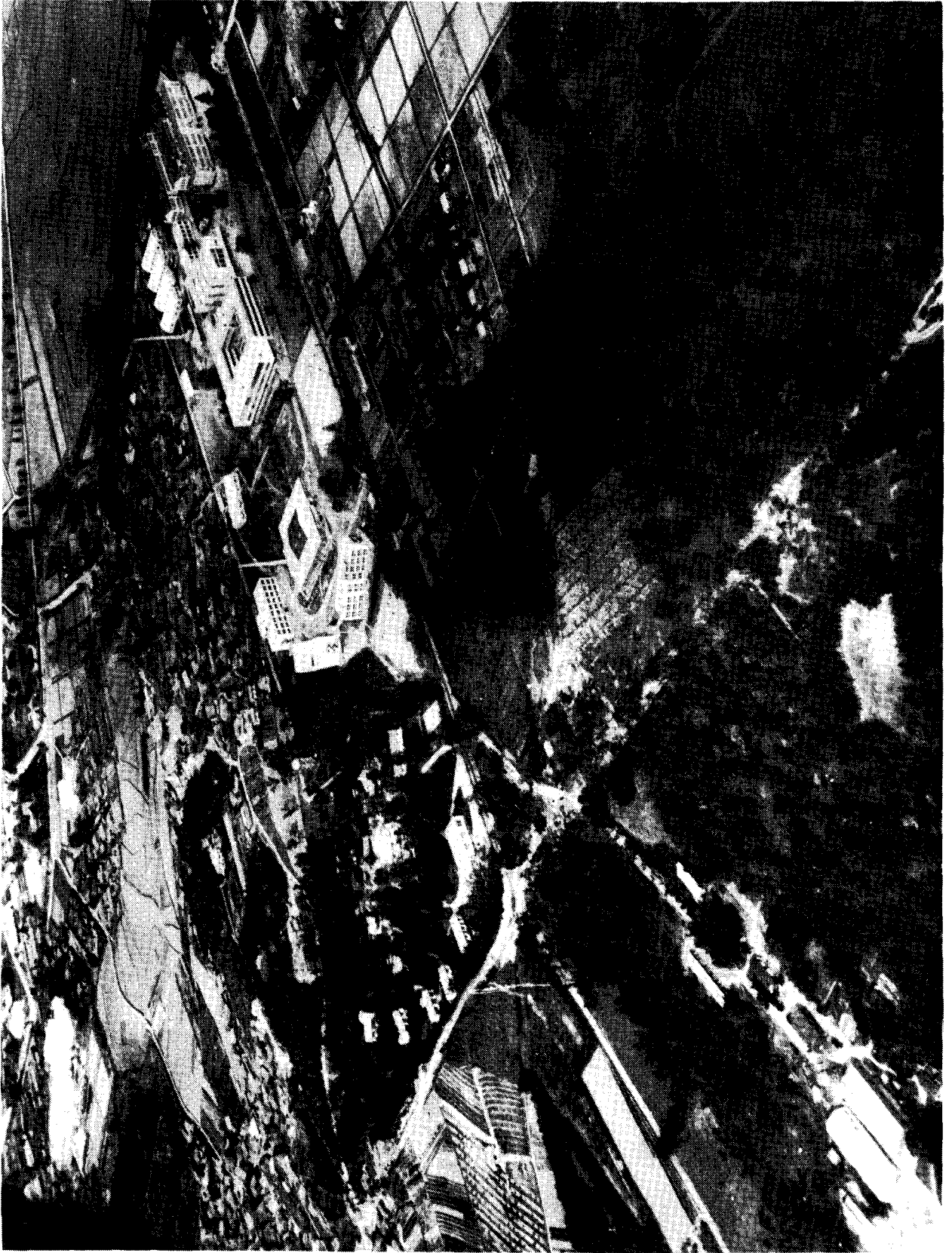
# COLLEGE OF AGRICULTURE

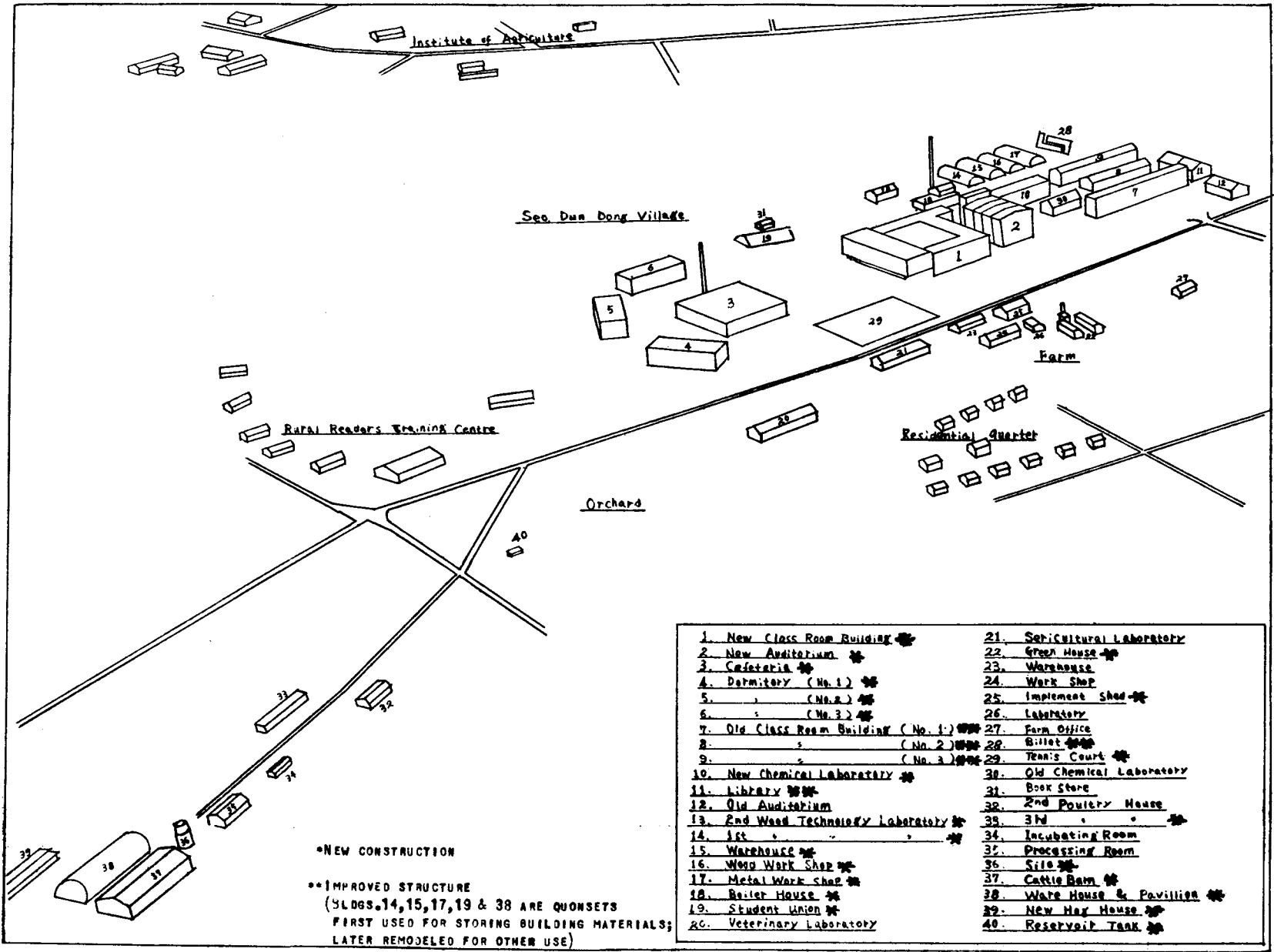
SEOUL NATIONAL  
UNIVERSITY

Final Report of  
Over-all Adviser  
ROY O. BRIDGFORD

June 1961







•NEW CONSTRUCTION  
 ••IMPROVED STRUCTURE  
 (Bldgs. 14, 15, 17, 19 & 38 ARE QUONSETS  
 FIRST USED FOR STORING BUILDING MATERIALS;  
 LATER REMODELED FOR OTHER USE)

- |                                    |                             |
|------------------------------------|-----------------------------|
| 1. New Class Room Building         | 21. Sericultural Laboratory |
| 2. New Auditorium                  | 22. Green House             |
| 3. Cafeteria                       | 23. Warehouse               |
| 4. Dormitory (No. 1)               | 24. Work Shop               |
| 5. " (No. 2)                       | 25. Implement Shed          |
| 6. " (No. 3)                       | 26. Laboratory              |
| 7. Old Class Room Building (No. 1) | 27. Farm Office             |
| 8. " (No. 2)                       | 28. Billet                  |
| 9. " (No. 3)                       | 29. Train's Court           |
| 10. New Chemical Laboratory        | 30. Old Chemical Laboratory |
| 11. Library                        | 31. Book Store              |
| 12. Old Auditorium                 | 32. 2nd Poultry House       |
| 13. 2nd Wood Technology Laboratory | 33. 3rd " "                 |
| 14. 1st " "                        | 34. Incubating Room         |
| 15. Warehouse                      | 35. Processing Room         |
| 16. Wood Work Shop                 | 36. Silo                    |
| 17. Metal Work Shop                | 37. Cattle Barn             |
| 18. Boiler House                   | 38. Ware House & Pavilion   |
| 19. Student Union                  | 39. New Hay House           |
| 20. Veterinary Laboratory          | 40. Reservoir Tank          |

COLLEGE OF AGRICULTURE  
SEOUL NATIONAL UNIVERSITY

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## ACKNOWLEDGMENT

The writer would like to express his thanks and appreciation to Professor Cho Baik Hyun(formerly Dean of the College of Agriculture), Dean Yun Sang Won, Professor Yu Tal Young and to all of the staff members of the College, whose combined efforts have made his stay and work so pleasant, interesting and it is hoped of some material value. Their whole-hearted cooperation and assistance has been greatly appreciated.

During his assignment in Korea the writer was privileged to do considerable travelling in South Korea, visiting national and provincial colleges, experiment stations, agricultural high schools and observing types of farming in all sections of the country. Special thanks are due the various Korean associates who so generously contributed their time as guides and interpreters.

Finally it is with sincere gratitude that I acknowledge the advice and wise counsel of Dr. A. E. Schneider, Chief Adviser of the Seoul National University Cooperative Project.

## PREFACE

The writer came to Korea on March 19, 1957 on an assignment from the University of Minnesota as an agricultural adviser to the College of Agriculture of Seoul National University. The primary purpose and duties of this assignment were to render assistance in so far as possible toward rehabilitation of the College and improvement of teaching and research. My term of service under the ICA/University of Minnesota contract actually began on February 25, 1957 with a trip to the Philippine Islands and later to Japan to acquire some familiarity with agricultural practices in these countries, as they are similar to those in Korea. It was also considered desirable to observe and secure some first-hand information on the ICA program being conducted in the Philippines, particularly the work being sponsored by Cornell University at the University of the Philippines at Los Banos. Having had no previous experience in the Orient, these visits and inspections were of inestimable value to me so far as orientation was concerned.

Upon arrival in Korea an attempt was made to acquire further overall knowledge of the country's most pressing needs and problems, and to ascertain to what extent and in what way the College of Agriculture could most effectively assist in improving them. Many field trips were made throughout the rural areas, observations taken on farming practices, kinds and varieties of crops being grown, insect and disease prevalence, rotations being used, methods of fertilization, seed storage, weeds and methods of weed control. With a staff member from the College as a guide and interpreter an inspection trip was also made to all national, and some provincial, colleges of agriculture, and experiment stations, to become familiar with

their curricula teaching methods and research activities.

Following this orientation a plan was followed to learn the fundamentals of organization and administration of Seoul National University with particular reference to the College of Agriculture and its relationship to the whole; to become personally acquainted with Korean colleagues and leaders in agriculture; to familiarize myself with the details and procedures currently in effect at the College; and to become acquainted with the amount and quality of research being undertaken as well as its major problems affecting teaching and research.

A brief history of the College and current information concerning its administration, faculty, departments and student distribution are presented below.

Brief History  
College of Agriculture

- 1906: The School of Agriculture and Forestry was founded at Suwon on September 10, separated from "The School of Agriculture, Commerce, and Technics," which had been established at Seoul in 1904.
- 1910: Korea was occupied by Japan; the school was run under Japanese control.
- 1918: The School was raised to the status of college and named "The Suwon College of Agriculture and Forestry." There were two departments in the College; Dept. of Agriculture and Dept. of Forestry.
- 1937: A Department of Veterinary and Livestock was established.
- 1945: A Department of Agricultural Engineering was established.
- 1945: On August 15, Korea was liberated from Japan.
- 1946: Seoul National University was inaugurated and the College of Agriculture became an integral part of it. At the same time Departments of Agricultural Chemistry, Agricultural Economics and Agricultural Biology were established, and the Department of Veterinary and Livestock was reorganized into two departments, the Department of Veterinary and the Department of Livestock.



- 1950: On June 25 the North Korean Communist army invaded South Korea.
- 1952: During the Korean War the College moved to Pusan and lectures were resumed temporarily under the United University there. On September 23, 1952 the College returned to its normal status. Considerable damage to its physical plant and equipment had occurred during the war.
- 1952-53: Members of the FAO/UNKRA Mission To Korea made an important recommendation to rehabilitate the College of Agriculture in Suwon as a unique and complete national college of agriculture. "...The Mission recommends, therefore, that the College of Agriculture at Suwon be developed into the one strong National College of Agriculture. It is recommended that this school be provided with all facilities necessary to maintain a student body not to exceed one thousand, who can be given the best in scientific agricultural training...." (Quoted from UNKRA-Agriculture Forestry and Fisheries in South Korea, Columbia University Press, 1954, P. 187.)
- 1953-54: UNKRA aided in rehabilitating a part of damaged physical plant.
- 1954: A contract was made between ICA (at that time FOA) and the University of Minnesota to aid in the rehabilitation and raise the standards of teaching, research and administration of Seoul National University, involving the three broad fields of Agriculture, Engineering, and Medicine.
- 1955: Fourteen staff members from the College of Agriculture went to the University of Minnesota the first year of the Cooperative Project. The personnel exchange program has continued for six years with forty-five staff members studying abroad, forty-three at Minnesota and two at other institutions. Ten staff members from Minnesota have served as advisers at the College.
- 1956: The Department of Sericulture was established.
- 1957: A large construction program was begun under the ICA/University of Minnesota contract program which rapidly changed the war-damage phase of the College.
- The Minnesota Cooperative Project was extended for two more years.
- 1959: The Department of Home Economics was established.
- The Cooperative Project was extended for another two years, to June 30, 1961.

## NUMBER OF STUDENTS IN THE COLLEGE OF AGRICULTURE

Korean law controls the upper limit of the number of students permitted to enter each college of the university. Applicants who want to study at Seoul National University have to pass the entrance examination which is held in early March every year. The College of Agriculture is permitted to select 300 out of more than 1000 applicants (boys & girls) each year. Each Department of the College selects respectively its allotted number of new students. The following table shows the allotted number of students permitted to enter each year.

Agriculture	40	Agr. Economics	40
Forestry	30	Agr. Biology	30
Livestock	35	Sericulture	20
Agr. Engineering	40	Agr. Home Economics	30
Agr. Chemistry	35		

## CREDITS REQUIRED FOR THE B.S. DEGREE

Courses at the College are given on a semester basis and Seoul National University requires 160 credits with an average grade of C or above for the B.S. Degree. Credit requirements are as follows:

At least 36 credits from general basic courses of college education.

At least 80 credits from major fields.

At least 44 credits from the related elective fields.

## GRADUATE WORK AT THE COLLEGE OF AGRICULTURE

Graduate work at the College of Agriculture is still in the beginning stage with candidates enrolled for only the M.S. degree. The institutional establishment of the Graduate School of Seoul National University was achieved generally after 1952. A few qualified students who have finished their undergraduate work from each department of the College of Agriculture

are recommended to take the entrance examination to the Graduate School. To date the number of graduate students enrolled has been about 30 per year.

For M.S. degree work at least 24 credits are required before submitting a master's thesis. Applicants for the M.S. degree are required to present a thesis to the appointed committee before its submission.

Lectures for graduate students have not been entirely satisfactory because of a shortage of teaching personnel of requisite qualifications. Because of the limited number of qualified faculty there has been no Ph.D. work at the College of Agriculture to date. With the return of additional participants now abroad, and the further advanced education of faculty through other auspices, it is expected that the College will in the not-too-distant future offer Ph.D. programs in some fields.

#### THE LIBRARY

The College Library now contains 25,362 books, of which 8,500 or approximately 34% are printed in the English language, 55% in Japanese and the balance in Korean. A substantial number of American reference books are now on hand and on order from lists submitted by the various departments. The Library is now getting 301 different journals and periodicals in diversified fields of Agriculture and related sciences.

A SUMMARY OF THE ICA COOPERATIVE PROJECT FOR THE  
COLLEGE OF AGRICULTURE

As mentioned, the Cooperative Project covers chiefly the three important segments of personnel exchange, rehabilitation of physical plant, and the procurement and installation of laboratory equipment. Data for each segment of the program follow.

1. Personnel Exchange Program (1955-1961)

1) Korean Staff to the U.S. (all but two to Minnesota)

<u>Department</u>	<u>No. of Participants</u>	<u>Returned to Korea</u>	<u>Continuing Their Studies at Minn.</u>	<u>M.S. Degree Rec'd.</u>	<u>Ph.D. Degree Rec'd.</u>
Agriculture	7	5	2	2	1
Forestry	2	2	-	1	-
Animal Science	6	5	1	3	-
Agr. Engineering	5	4	1	1	2
Agr. Chemistry	7	6	1	1	1
Agr. Economics	5	3	2	3	-
Agr. Biology	8	4	4	4	-
Sericulture	2	1	1	0	-
Home Economics	2	2	-	-	-
Dean Cho Baik Hyun	1	1	-	-	-
<b>Total</b>	<b>45</b>	<b>33</b>	<b>12</b>	<b>15</b>	<b>4</b>

ADMINISTRATIVE OFFICERS

COLLEGE OF AGRICULTURE

Yun, Il Sun	President, Seoul National University
Yun, Sang Won	Dean, College of Agriculture
Kim, Moon Hyup	In Charge of Registration
Lee, Sung Whan	In Charge of Student Affairs
Hyun, Koo Pyo	Libraries
Lee Chai Pil	General Affairs

DEPARTMENT OF THE COLLEGE OF AGRICULTURE

Since 1950 the College has been organized on a four-year basis and is composed of ten departments as follows:

	<u>Head</u>
Agronomy and Horticulture	Professor Yu, Tal Young
Animal Science	Professor Lee, Young Bin
Forestry	Dr. Hyun, Sin Kyu
Agricultural Engineering	Professor Lee, Chang Koo
Agricultural Chemistry	Professor Kim, Ho Sik
Agricultural Economics	Professor Kim, Jun Bo
Biology	Professor Baik, Woon Hah
Sericulture	Professor Kim, Nak Chung
Home Economics	Professor Kim, Bun Ohk
General Subjects	Assoc. Prof. Cho, Sung Ji

COLLEGE OF AGRICULTURE FACULTY

1. "TABLE OF ORGANIZATION" (REGULAR) STAFF MEMBERS

Name	Age	Degree	Rank	Other Employment	Program participant Period
<u>Dean</u>					
1. Cho Baik Hyun	60	MA Kyushu	Professor (1952-53, 6-mos., Europe (Gen.), UNESCO)		Apr.-Aug.56
<u>Department of Agronomy and Horticulture</u>					
1. Yu Tai Young*	50	BA Suwon**	Professor		Apr.-Sept.56
2. Lee Tai Hyun	45	MS Minn.	Assoc.Prof.		June 55-Aug.56
3. Pyo Hyun Koo	41	Ph.D. Minn.	Assoc.Prof.		Dec. 55-Jan.58
4. Lee Eun Woong	37	BS Suwon	Ass't.Prof.		Aug. 59-
5. Hahn Sang Ki	28	MS Suwon	Instructor		July,60-
6. Huh Moon Hoi	34	BS Suwon	Instructor (1959, Texas A&M, ICA)		

The following individuals, formally staff members at the College of Agriculture, had participant training abroad under the Minnesota contract:

Chi Young Lin, B.A. Suwon, professor and head of the department, was a contract participant from April to August, 1956. Professor Chi resigned his post at the College in the spring of 1960 to run for the legislature, which attempt was unsuccessful. He later was offered and accepted the deanship of Chungbuk College, Chungju, Korea.

Kim In Kwon, MS. Minnesota, professor, studied at Minnesota from June, 1955 to August, 1956, earning an M.S. degree while there. Professor Kim resigned his post about two years ago to accept a position with the Ministry of Agriculture and Forestry.

\*Department head

\*\*"Suwon" as degree source, means SNU's College of Agriculture, or the same institution under previous names.

Name	Age	Degree	Rank	Other Employment	Program participant Period
<u>Department of Animal Science</u>					
1. Yun Sang Won*	61	MS Texas A&M	Professor (1931-35, Texas A&M, private)		Apr.-Sept.56
2. Lee Yong Bin	47	MS Minn.	Professor (1954-55, 1-yr., Univ.of Minn., ROK Ministry of Education)	Lecturer SNU Col. of Vet. Medicine	Mar.-Sept. 55
3. Rhee Seung Kyu	51	BA Suwon	Assoc.Professor		
4. Yuk Chung Yung	39	MS Minn.	Assoc.Professor		Aug.57-Aug. 58
5. Ohh Bong Kug	38	MS Minn.	Asst.Prof.	Lecturer, SNU Col. of Vet. Med.	Dec.55-Dec. 57
6. Song Kai Won	39	BA Suwon	Instructor		Aug.59-
7. Lee Young Sang	33	BA Suwon	Instructor		Apr.56-Apr. 58
<u>Department of Chemistry</u>					
1. Kim Ho Sik*	56	MS Kyushu	Professor	Min.of Defense Scientific Research Institute	June 55-Jan.56
2. Lee Chun Young	43	Ph.D. Georgetown	Professor (Feb.-Aug.48, U.of Hawaii, 48-52, Georgetown U., private)	" "	
3. Shim Sang Chil	44	MS SNU	Assoc. Professor	Lecturer, Chungang U.	Sept.56-Mar.58
4. Lee Sung Hwan	41	MS SNU	Assoc.Professor		Aug.57-July 58
5. Cho Duck Hiyon	33	MS SNU	Asst.Prof.		Aug.57-Aug.58
6. Kim Ze Wook	35	MS SNU	Instructor		Aug.59-
7. Lee Su Rae	20	MS Minn.	Instructor		Aug.56-Aug.58
8. Cho Chai Moo	30	Ph.D. Minn.	Ass 't.Prof.	Lecturer, SNU Col. Edu.	June55-June 59

Name	Age	Degree	Rank	Other Employment	Program Participant Period
<u>Department of Biology</u>					
1. Ahn Jai Joon	60	BA Suwon	Professor		
2. Paik Woon Hah*	44	MS Minn.	Professor		June, 55-Sept. 56
3. Kang Soo Won	41	BA Suwon	Asst. Prof.		Sept. 59-
4. Chung Hoo Sup	31	MS Minn.	Instructor		Sept. 55-Sept. 57
5. Im Hyong Bin	40	MS Minn.	Asst. Prof.		Aug. 57-Aug. 58
6. Hyun Jai Sun	35	MS Minn.	Instructor		Aug. 58-Apr. 60
7. Choi Seung Yun	29	BA Suwon	Assistant		
8. Cho Yong Sup	27	BS Suwon	Assistant		Aug. 59-
9. La Yong Joon	28	BS Suwon	Assistant		Sept. 59-
10. Shim Jai Wook	27	BS Suwon	Assistant		Oct. 60-
<u>Department of Forestry</u>					
1. Hyun Sin Kyu*	49	Ph.D. Cal.	Professor (37, U. of Calif. 51-53, Inst. of Forest Genetics, Calif. State Dept. Exchange Program)	Central Forest Experiment Station	
2. Bang Sun Hi	50	BS Suwon	Professor		
3. Shim Chong Sup	43	Ph. D. SNU	Professor (49-52, Yale & U. of Mich, CARIO)		
4. Lee. Tchang Bok	41	MA Harvard	Assoc. Professor (55-57, Harvard U., UNKRA)	Lecturer, SNU Col. of Edu. " Kyunghi Univ.	
5. Yim Kyong Bin	39	MS Minn.	Asst. Professor (60, Sweden, Swedish Gov't.)		Aug. 57-Spet. 58
6. Park Tai Sik	37	MS N.Y. State U.	Asst. Prof. (54-56, Syracuse U., UNKRA)		
7. Kim Kap Duk	34	BA Suwon	Instructor		Aug. 58-Apr. 58



Name	Age	Degree	Rank	Other Employment	Program Participant Period
<u>Department of Agricultural Engineering</u>					
1. Lee Chang Koo*	56	BA Suwon	Professor		
2. Park Sung Woo	42	MS Minn.	Assoc. Professor		Aug. 57-Aug. 58
3. Park Young Gwan	49	BS Pyongyang Daidong Eng. Col.	Asst. Professor		
4. Pyun Po Yup	41	BS Nippon Univ.	Instructor		
5. Ryu Han Yeol	34	Ph.D. Minn.	Asst. Professor		June 55-Aug. 59
6. Lee Chul Choo	32	Ph.D. Minn.	Asst. Prof.		Sept. 55-Dec. 59
7. Ko Chae Koon	33	BA Suwon	Instructor		Apr. 56-Apr. 58
8. Chung Chang Choo	29	BA Suwon	Assistant		July 60-
<u>Department of Agricultural Economics</u>					
1. Kim Chun Po*	45	MA Kyushu	Professor	Member Monetary Board	
2. Kim Chun Su	59	BA Toshisha Col. Japan	Professor		
3. Park Zin Whan	34	MS Minn.	Asst. Professor		Sept. 55-Sept. 57
4. Park Hong Nai	32	MS Minn.	Instructor		Aug. 56-Aug. 58
5. Sim Young Kun	32	MS SNU	Instructor		Aug. 58-Mar. 60
6. Chu Bong Kyu	30	MS SNU	Assistant		Dec. 59-
7. Wang In Keun	30	MS Wisconsin	Assistant		Aug. 59-Dec. 60
8. Kim Moon Sik	40	BS Japan	Asst. Professor		
9. Ban Seung Whan	32	BA Suwon	Assistant		

Name	Age	Degree	Rank	Other Employment	Program Participant Period
<u>Department of Sericulture</u>					
1. Kim Moon Hyup*	44	BS Tokyo Seri.Col.	Professor		
2. Kim Nak Jung	52	BS Ueda Seri. Col.Japan	Associate Professor		
3. Chun Dae Hyok	41	BS Tokyo Seri. Col.	Asst.Professor		
4. Choe Byong Hee	39	BS Ueda Seri. Col.	Asst.Professor		Aug.59-June 60
5. Park Kwang Eui	25	BS Suwon	Assistant		Oct.60-
6. Park Byung Hi	56	BS Tokyo Seri.Col.	Professor		
<u>General Basic Courses</u>					
1. Cho Sung Chi*	48	BA Kwansai Gakuin U., Japan	Professor		
2. Choi Hak Keun	38	MA SNU	Asst.Professor		
3. Han In Kun	37	BA SNU	Instructor		
<u>Department of Home Economics</u>					
1. Kim Bun Ohk*	54	BS Tokyo Teacher's Col.	Professor		
2. Mo Sumi	35	MS U. of Mass.	Instructor (55-60, U.of Mass., Private)		Sept.59-Aug.60
3. Lee Yaing Hoo	38	Diploma - 2-yr. Course Ewha Womens U.			Dec. 59-Mar.61

Total number of Table of Organization (regular) staff members as of 1 January, 61 - 68.

2. PART TIME STAFF MEMBERS

<u>Name</u>	<u>Age</u>	<u>Degree</u>	<u>Rank</u>	<u>Agency or Institution at Which Employed</u>
<u>Department of Agronomy and Horticulture</u>				
1. Lee Chung Haing	43	BS Tokyo Agr. Col.	Section Chief	Agricultural Experiment Station, Suwon
2. Choi Hyun Ok	43	BS Suwon	" "	" " " "
<u>Department of Forestry</u>				
1. Cho Tai Yong	57		Director	The Central Forestry Association
<u>Department of Animal Science</u>				
1. Lim Yung Moon	38	BS Suwon	Specialist	The Central Institute of Veterinary, An Yang Branch
<u>Department of Agricultural Engineering</u>				
1. Han Sung Kum	37	BS Taegu Agr. Col.	Section Chief	Agricultural Experiment Station, Suwon
2. Kim Kwang Sik	35		Specialist	The Central Meteorological Observatory
3. Lee Ki Chyoon	34	BS Suwon	Asst. Professor	Seoul Agricultural College
<u>Department of Agricultural Chemistry</u>				
1. Oh Wang Kun	36	BS Suwon	Specialist	Agricultural Experiment Station, Suwon
2. Lee Zai Hyun	40	BS Suwon	Section Chief	" " " "
3. Lee Tong Suk	33	BS Suwon	Specialist	" " " "
4. Kim Jyum Sik	32	BS SNU Col. of Eng.	Specialist	Scientific Research Institute, Ministry of Defense
5. Lee Ke Ho	27	BS Suwon	"	" "

<u>Name</u>	<u>Age</u>	<u>Degree</u>	<u>Rank</u>	<u>Agency or Institution at Which Employed</u>
<u>Department of Agricultural Economics</u>				
1. Chung Nam Kyu	42	Ph.D. Wisc. Univ.	Director	The Institute of Agriculture
2. Choi Hyung Rai	36	BS Suwon	Specialist	Agricultural Experiment Station, Suwon
3. Che Kwan Sik	37	BS Suwon	Section Chief	" " " "
4. Lee Yung Hwan	29	MS SNU Law	Instructor	College of Law, Seoul National Univ.
<u>Department of Agricultural Biology</u>				
1. Chang Yung Chul	54	BS Tokyo U.	Director	Agricultural Experiment Station, Suwon
2. Park Chan Ho	38	BS Suwon	Professor	Seoul Agricultural College
<u>General Basic Courses</u>				
1. Park Hwan Duk	27	BS SNU Col. of L.A. & S.	Teacher	Yang Jyung High School
2. Kim Dong Sun	30	MS " " " "	"	Duk-Soo Commercial High School
3. Ro Chyung Hi	40	BS " " " "	"	Tong-Sung High School
4. Kil Ryon Ik	30	MS " " " "	"	Sung-Dong High School
5. So Kwang Hi	26	MS " " " "	"	Research Committee, SNU

Total number of part-time staff members as of 1 January 1961 - 23.

INFORMATION ON PART TIME STAFF MEMBERS  
COLLEGE OF AGRICULTURE

"Foreign Travel for Observation or Study"

<u>Name</u>	<u>When</u>	<u>Where</u>	<u>Fund Source</u>
Lee Chung Haing	1958.1-1959.2	Agricultural and Mechanical College of Texas, College Station, Texas, USA	ICA
Cho Tai Yong	1959.6-1959.9	USA	
Han Sung Kum	1961.1	Japan	
Oh Wang Kum	1957.1-1957.8	Mississippi State College, State College, Mississippi, USA	ICA
Lee Zai Hyun	1957.1-1957.7	Clemson Agricultural Col. Clemson, South Carolina, USA	ICA
Chung Nam Kyu	1949.2-1952.8	University of Wisconsin Madison 6, Wisconsin, USA	GARIOA
Che Kwan Sik	1956.1-1957.6	University of Minnesota Minneapolis 14, Minnesota, USA	ICA
Chang Yung Chul	1952.9-1953.1	Mississippi State College State College, Mississippi, USA	FOA

Graduates on March 28, 1961  
College of Agriculture

<u>Department</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agronomy & Horticulture	24	1	25
Forestry	27		27
Animal Science	19		19
Agricultural Engineering	23		23
Agricultural Economics	29		29
Agricultural Chemistry	22	2	24
Agricultural Biology	9	3	12
Sericulture	7		7
<hr/>			
Total	160	6	166

STUDENT ENROLLMENT

May 10, 1961

<u>Department</u>		<u>Freshman</u>	<u>Sophomore</u>	<u>Junior</u>	<u>Senior</u>	<u>Total</u>	<u>Graduate Students</u>
Agriculture	Men	40	34	45	41	160	3
	Women	-	1	-	1	2	1
Forestry	M	28	26	28	31	114	3
	W	-	-	-	-	-	-
Livestock	M	33	33	36	34	136	6
	W	1	1	-	-	2	1
Agri. Engineering	M	40	29	45	23	137	3
	W	-	-	-	-	-	-
Agri. Chemistry	M	34	32	33	24	123	5
	W	-	-	2	-	2	1
Agri. Economics	M	40	35	52	32	159	4
	W	-	-	-	-	-	-
Agri. Biology	M	30	24	33	21	108	2
	W	-	1	-	-	1	-
Sericulture	M	20	19	24	13	76	1
	W	-	-	-	1	1	-
Agr. Home Econ.	M	-	-	-	-	-	-
	W	26	13	14	-	53	-
Sub-Total	M	266	232	296	219	1,013	27
	W	27	16	16	2	61	3
Total		293	248	312	221	1,074	30

COLLEGE OF AGRICULTURE FACULTY AS OF APRIL, 1961

	Department										
	Agronomy and Horticulture	Animal Science	Chemistry	Biology	Forestry	Agricultural Engineering	Agricultural Economics	Sericulture	Home Economics	General Courses	Total
T.O. ("Regular") staff											
Total	6	7	9	10	7	8	9	6	3	3	68
Foreign study total	6	6	8	9	6	5	5	2	2		50
a) Minn. Contract	5	6	8	8	2	5	5	2	2		43
b) Other	1	(1)1/	(1)1/	1	4		(1)1/		(1)1/	(3)1/	7
By academic rank											
Professor (Av. age 51)	1	2	3	2	3	1	2	2	1	1	18
Assoc. Prof. (" " 43)	2	2	2		1	1		1			9
Ass't. " (" " 37)	1	1	2	2	2	3	2	2		1	16
Instructor (" " 34)	2	2	2	2	1	2	2		1	1	15
Assistant (" " 29)				4		1	3	1	1		10
Advanced degrees											
( *Korean Institution)											
( **Japanese " )											
(***Western " )											
Master's	1*		4*				2*		1*		8*
			2**				1**				3**
	1***	4***	1***	4***	3***	1***	3***		1***		18***
Ph.D.					1*						1*
	1***		2***		1***	2***					6***

1/ In addition to being a participant under this contract

In addition to the above full-time faculty (11 of whom are currently engaged in graduate studies abroad all but 1 are due back in Korea during the



PART TIME FACULTY - COLLEGE OF AGRICULTURE - April, 1961

	Department										
	Agr. and Hort.	Animal Science	Chem-istry	Biol-ogy	For-estry	Agr. Eng.	Agr. Econ.	Seri-culture	Home Econ.	General Course	Total
Total	2	3	5	1	1	3	3	1	0	5	24
Foreign Study (total)											
(a) Minn. Contract											
(b) Other	1		2	1	1	1	1				7
By academic rank											
Professor											
Assoc.Prof.		2									2
Asst.Prof.						1					1
Instructor	2	1	5	1	1	2	3	1		5	21
Assistant											
Advanced degrees											
*Korean Institution											
**Japanese       "											
***Western      "											
Masters			1*							3*	4*
Ph.D.				1*			1***				2

summer and fall of 1961) the College of Agriculture now has 23 part-time staff members - 18 in professional subjects and 5 in general areas such as languages, history, mathematics, etc. Of the 68 full-time staff members 50 (74%) either have had or are now pursuing graduate studies abroad. Of the latter total 43 (84%) have had their graduate study opportunity under ICA/University of Minnesota contract auspices.

From the above table it will be noted that 43 of the present staff members of the College of Agriculture have had the opportunity of studying abroad under auspices of the University of Minnesota contract with ICA. (Two additional College of Agriculture staff members who were participants under this project are no longer with the College. One is now dean of a college of agriculture; the other a division head in the Ministry of Agriculture and Forestry.) Thirty-one of these participants (including the two no longer with the College) have returned and resumed their teaching duties. Fifteen earned an MS degree through this advanced study; 4 the Ph.D. Two of these participants, still on the College staff, are currently abroad under other auspices, for further advanced study.

With one exception everyone on the College of Agriculture staff who could qualify has been able to do graduate work in America, ranging in time from one to four years. - And this one staff member of the Agricultural Economics Department left April 6 for study in the United States under a grant from the Council on Economic and Cultural Affairs.

With the early return to duty of the twelve participants still in the United States the College of Agriculture will possess an outstanding faculty. Every department will have a number of well trained men, all capable of doing a high quality of work in their respective fields.

With the phasing out of the agriculture portion of the Minnesota contract on 30 June of this year the participant portion of the program will end except for the possibility, still under discussion, that some extensions of graduate study periods for some individuals now abroad may be worked out. Regarding this most important aspect of the Cooperative Project, the original and primary objective of the program was to assist Seoul National University to upgrade and improve teaching and research. Thus it would now seem reasonable to assume 1) that Seoul National University and the College of Agriculture will take all administrative steps necessary and possible to retain and use fully and efficiently all faculty members, with particular attention paid those selected for advanced studies abroad; 2) that if and when further participant training becomes possible, consideration should be given to faculty members of proven quality who have earned the masters degree and have taught successfully for 3 or 4 years following their initial studies abroad; upgrading of the graduate program could be greatly enhanced by having some of these men return to America and pursue courses leading to the Ph.D.; and 3) that the time now seems propitious to place emphasis on encouraging a few well qualified men from other Korean Universities to come to the College of Agriculture at Suwon for graduate study. With a nucleus of 43 staff members who have had training abroad, many of whom have earned advanced degrees, this development is now possible.

Equipment and Supplies. Discussions were held with the Dean and each department head concerning the current status of equipment and supplies for teaching and research. The results are summarized as follows:

Department of Agronomy and Horticulture: Number of undergraduate students 168; number of graduate students 4; number of laboratories 4.

The four laboratories have been made available in the aid project provided new classroom building and at present are being utilized as follows: A small room used primarily by faculty as a preparation laboratory; a crops breeding laboratory; one for plant physiology; and one for the general use of graduate students.

This department's major equipment, consisting of such items as compound microscopes, chemical balances, sterilizer, germinator, refrigerator, low temperature incubator, grain separator divider, barley huller, distillation apparatus and pH. meter are quite adequate at present and every piece has been and continues to be used. The same may be said for other large items used for both horticulture and agronomy such as spraying and pruning equipment and some modern farm machinery including tractor (not aid program procured) disc harrow, gang plow, spring tooth harrow, fertilizer spreader, and wheel barrows. A generous amount of smaller supplies, chemicals, glassware, etc., are on hand to adequately take care of needs for some time to come.

Two additional items of equipment were mentioned by the department as needed - a duplicating machine and a small projector, both of which will be considered in a later general statement.

Department of Animal Science: Number of undergraduate students 131; graduate students 5; number of laboratories 4( used by 8 class sections a total of 16 times weekly).



Students inspecting grasses and legumes introduced from Minnesota.

Minnesota double crosses with parental inbred lines being tested for adaptability. 707 - an early strain 608 and 609 midseason types.



A varietal of winter wheat. From left: Miss Kim Pil-Chu, Miss Lee Mi-Soon.



Incubating orchids at the Department of Agriculture and Horticulture.



Testing milled rice samples for moisture content. From left Miss Lee Mi-Soon, Prof. Lee Eun-Woong, Chun Cha-Fun (at scale), Lee Han-Sik (reading the meter).



Inspecting varieties of winter barley. From left Prof. Chi Young-Lin, former dean Cho Baik-Hyun, Prof. Lee Eun-Woong, Prof. Roy O. Bridgford, Adviser in Agriculture at the College.



An adaptation test of winter barley. Prof. Lee Eun-Woong (left) and two students.

These laboratories are located in the new classroom building and are equipped and designated according to the use for which intended, namely: animal breeding and physiology, animal nutrition, dairy and poultry husbandry.

This department's major equipment, such as microscopes, refrigerators, autoclaves, distillation apparatus, incubator, calorimeter, milk separator, egg grader, metabolism and sterilizing apparatus, chemical balances, as well as miscellaneous supplies, are quite adequate, according to the department head. All of the larger equipment items are in use, although the unsteady and erratic electric service at times handicaps the use of the large autoclave as well as distillation and metabolism apparatus and refrigerators. The stand-by generator could relieve this difficulty if it were operating automatically.

It is well to mention that the animal science department has, in addition to the above mentioned laboratories, a modern dairy barn, silo, hog house, poultry house and judging pavilion to offer training in the practical phases of animal husbandry.

Of several additional items mentioned as needed the ones deserving the most consideration, in the opinion of the adviser, are equipment and apparatus for sterilizing, cooling and bottling the milk produced on the farm and making same available as a part of the diet of those eating in the College cafeteria. The estimated cost of this equipment is from \$1,000. to \$2,500. depending on size and amount.

Department of Agricultural Chemistry: Number of undergraduate students 118; graduate students 5, number of laboratories 11. Of the latter, 4 are used for undergraduate instruction, 1 for graduate students, and 6 (small) by the faculty.





Feeding time at the new cattle barn. Dean Yun Sang-Won in center.



White Holland turkeys being grown by the Department of Animal Science.



The chicken house of the Department of Animal Science showing Prof. Lee Sung-Kyu with students testing Leghorn hens for laying capacity.



With Leghorn chickens from Minnesota.

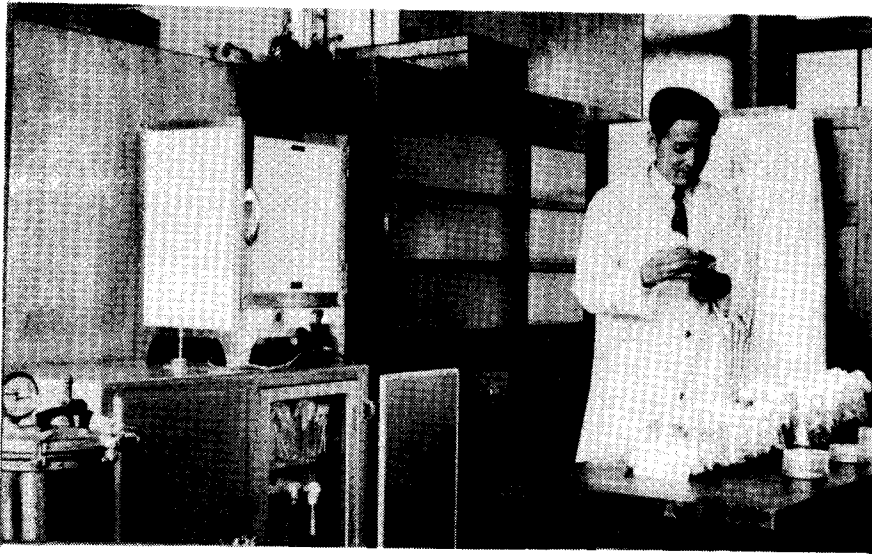
The newly erected chemistry building, together with the old laboratory, provides an adequate number of good facilities for this department, both for teaching and research. Each student laboratory is utilized approximately 24 hours weekly.

Major equipment as well as supplies are quite adequate, and all equipment is in use except for that to be used for canning. The canning laboratory room is expected to be available and the equipment installed ready for use early in the fall of this year.

Additional needs of this department are for: 1) A direct line from the two wells adjacent to the building to assure a constant supply of water at all times. This would involve the installation of an electric pump at an estimated cost of 600,000 hwan. 2) As recommended by Professor Paul Burson, a Sharples laboratory super centrifuge deep layer clarifier roter, at an estimated cost of \$965.00. This equipment is highly desirable for research in soils and microbiology.

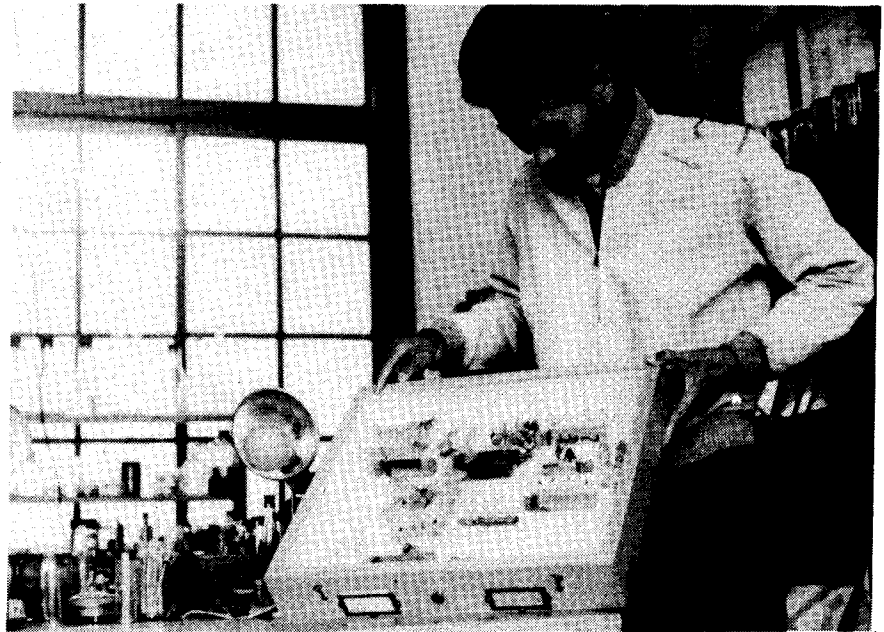
Department of Biology. Number of undergraduate students 96, graduate students 2, laboratories 8 - 4 in the new classroom building, 4 in the old building.

Two of the 4 laboratories in the new building are being used for instruction in Plant Pathology and Entomology; two are used by the faculty. The student laboratories are in use about 22 hours weekly. Miscellaneous supplies are adequate and a reasonable amount of major equipment such as microscopes, incubator, autoclave, refrigerator, ovens, and projector have been procured. In the opinion of the adviser there is enough equipment to meet requirements for a good teaching program and some research. However, the staff considers itself somewhat handicapped by the present number of



Prof. Chung Hoo-Sup, plant pathologist, working on rice blast fungus and barley stripe.

Prof. Paik Woon-Ha, Head, Department of Biology, with a case containing the gypsy moth, the pine defoliator and other plant pests which are being studied.



The Biology laboratory. from left, students Seu Pyong-Lin, Shin Chai-Ok and Prof. Ahn Chai-Chun.

microscopes, incubators and sterilizers. All of this equipment is being used.

In old building No. 2, there are two large rooms being used as laboratories for Botany and Plant Physiology, both having an adequate amount of equipment and supplies. Upon the return of Mr. Kang Soo Won from Minnesota the plan is for him to use one laboratory on the second floor of Building No. 3 for Zoology, another for Animal Ecology and Physiology.

If and when additional funds should become available for equipment the following items appear justified for procurement:

2 ovens for sterilization	Est.cost	\$200.00
2 small refrigerators	" "	300.00
2 incubators	" "	250.00
2 good compound microscopes with magnification of 1000 (One each for Plant Pathology and Entomology)	" "	1,500.00

Department of Forestry. Number of undergraduate students 123, graduate students 3, laboratories 8.

This department is utilizing 6 rooms for laboratories in the new building and two in the department's separate tree-breeding laboratory. Each of these laboratories has adequate equipment and supplies for conducting a good teaching and research program. Student sections average about 30 per class and during the regular term utilize the laboratories 20 hours weekly.

With few exceptions all of this department's major equipment is in use. One exception is a new piece of equipment recently received through a grant from the Rockefeller Foundation. It is expected to be ready for use soon. Another is the dry kiln which, per present plans, is to be



Students with Dr. Hyun Shin-Kyu (pointing) and Prof. Roy O. Bridgford, adviser from the University of Minnesota, studying pine tree breeding.



Students identifying forests by air photographs. Dr. Hyun Shin-Kyu standing near the door and Mr. Kim Kap-Duk in front of blackboard are the instructors.

installed at an early date. Counterpart funds for the latter purpose have been approved but not released as yet.

In this department, as has been mentioned for others, one major reason for some equipment being idle is the erratic or insufficient electricity.

As for additional needs, the department's head gives top priority to the speedy erection of the third greenhouse which has been designated for his use. Counterpart funds have been approved for this, but have not yet been released. One problem regarding this greenhouse is that no boiler or heating equipment was included in this Republic of Korea Office of Supply procurement. Heating facilities must be supplied.

Department of Agricultural Engineering: Number of undergraduate students 136, graduate students 3, laboratories 2, mechanical drawing and drafting room 1, wood working shop 1 and metal working shop 1.

This department has 5 rooms that can be classified as laboratories 2 of which are being used for concrete-soil mechanics and hydraulics; one large drafting or mechanical drawing room, and two improved quonsets, one of which will be used as a shop for wood working, the other for metal working. In addition, another room is being used for exhibiting various types of farm machinery and it is hoped to eventually secure working models of gas engines and tractors.

It is the opinion of the adviser that an adequate amount of equipment and supplies are now available for the staff of this department to do a very satisfactory job of teaching the type of agricultural engineering suitable for Korean students. Course offerings will be broadened somewhat when the two shops are completed and placed in use. Equipment for these



Engineering students operating levels in a surveying class. From left, Mr. Hong (operating level), Prof. Park Sung-Woo.



shops is scheduled to be installed by September 1, the beginning of the second semester.

One piece of this department's equipment, a "Vemco Drafting Machine" is unusable at this time because of a missing part. Steps are being taken to obtain this part.

Department of Agricultural Economics: Number of undergraduate students 152, graduate students 4; one laboratory.

This department, located on the third floor of the old Administration Building, maintains only one laboratory - for instruction in statistics.

Principal major equipment in this laboratory consists of 3 calculators - 1 manually operated, 1 operable by hand or electricity, 1 electric machine.

This department considers that it needs more calculators for the course in statistics. The justification for this additional equipment is not clear at this point.

Department of Sericulture: Number of undergraduate students 77, graduate student 2, laboratories 3.

In addition to these 3 laboratories in the new classroom building the department also makes use of the vocational training and research laboratory of the Institute of Agriculture. Another important phase of this department's practical work, the rearing of silk worms, is conducted in an old building which was remodeled for this purpose. For the most part these laboratories are used by junior, senior and graduate students. With the establishment of the home economics department, another sericulture laboratory section is to be scheduled for girls majoring in textiles. Regular sections average 20 students.

At the present time major equipment belonging to the Experiment Station has been made available for use by the College and is considered very adequate. Continued cooperation of this nature is expected.

This adviser is of the opinion that equipment presently available to or on order for the Sericulture Department will be adequate for its teaching and research. Among additional needs mentioned by the department were a cool storage house for mulberry leaves, and equipment for controlling temperature in the rearing house. These would require minor construction and could very well be taken care of with local help and at nominal expense.

Department of Home Economics: Number of undergraduate students 31, graduate students none, laboratories 3. One of the latter is for meal planning, preparation and serving; one for clothing, sewing and design, and one for chemistry of textiles, care of clothing, laundry and dyeing.

Since this is the newest department of the College and still in the formative stage, none of the laboratories is now in satisfactory shape or adequately equipped for the most desirable teaching procedures. Sufficient equipment and supplies are on order, however, which for all practical purposes will remedy this transitory situation. At present a sufficient number of good tables, a half dozen Japanese made sewing machines and 3 built-in ironing boards have been provided.

A Korean style cooking laboratory designed by the department head and constructed on the first floor of old Building No. 2 has enabled the department to conduct this phase of its work quite satisfactorily despite limited supplies.

The clothing laboratory is adequate as to size, but according to the department head needs more wall space for shelving, mirrors, pictures,

etc., and a replacement of electrical outlets, which at present are not handily located. These adjustments may be made by the College as funds permit.

When additional equipment is procured the department gives top priority to a hand weaving machine, a highly desirable and important piece of equipment in Korea. Plans call for including weaving in their crafts courses as soon as possible. The estimated cost of this item is \$600.

General All Departments: The following general statements are applicable to all departments:

1. Classrooms - A sufficient number of good classrooms is now available for all classes. These rooms are equipped with new chairs (with arm for writing or book), adequate blackboard space, and instructors desk.
2. Laboratories - All student laboratories are sufficiently equipped and have good work tables and stools. Also adequate utilities such as water, electricity, sinks, lavatories and electric outlets have been supplied. Some difficulties have been caused by water shortage at times and erratic electric current. Appropriate use of the generator and completion of the other well now planned would eliminate much of this trouble.
3. Storage -
  - (a) A very generous number of substantial cabinets has been constructed and supplied to each laboratory for the safekeeping and a storage of chemicals, glassware, other expendible materials and larger items of equipment. Metal safes with locks are also provided for the safekeeping of all high priced items such as microscopes, chemical balances, calculators, pH. meters, etc.
  - (b) Specially made drawer cabinets have been constructed and a plentiful supply made available to each department. They are very desirable for the storage and safekeeping of such items as insect and disease specimens, herbariums, weed mounts and wood samples.
4. Visual Aids - At present there are three projectors on the campus, one in the general pool and kept in the Dean's office; another in the hands of the Agricultural Engineering Department, and the third in Biology. For the general good of all concerned, and for efficient usage, it would seem advisable to have all three projectors in the general pool, available for any depart-

ment's use. This has been recommended.

5. Duplicating Machines - The College's supply appears adequate. Also, printing equipment is now being installed at the main Seoul National University campus and will presumably take care of most of the University's regular printing jobs.

The Physical Plant. With few exceptions the major portion of rehabilitation and remodeling of old buildings and new construction at the College had been completed prior to this six-month period. Major jobs remaining include the completion of paving (roads and sidewalks) around the campus, construction of another well, erection of a third greenhouse, construction of some shelving and benches in greenhouse No. 2., and the making of some minor changes in the two shop buildings to facilitate proper placement of equipment and supplies. Counterpart fund allocations for this work have been agreed upon, and work is expected to proceed upon release of these funds. The major physical plant work done during the period consisted of moving the stand-by generator to the space provided adjacent to the heating plant, making provisions for supplying water to the wood- and metal-working shops, and completion of some minor finishing jobs in old Building 1 and 2.

AMERICAN ADVISERS TO THE COLLEGE OF AGRICULTURE

The following American personnel have served in an advisory capacity at the College of Agriculture since the inception of the Minnesota Cooperative Project:

Dr. C.H. Bailey, Professor and Dean Emeritus, Institute of Agriculture, University of Minnesota	Sept. 8 - Dec. 1, 1955
Dr. Phil. Manson, Professor, Agricultural Engineering, University of Minnesota	Sept. 16 - Dec. 3, 1955
Harold Ostvold, Assistant Professor, Library, University of Minnesota	June 11 - Sept. 7, 1956

Dr. Andrew Hustrulid, Professor, Agricultural Engineering, University of Minnesota	Aug. 9 - Dec. 19, 1956
Dr. Frank Kaufert, Professor and Head, Department of Forestry, University of Minnesota	Aug. 20 - Nov. 7, 1956
Mr. Paul Burson, Professor, Soils Department, University of Minnesota	June 11 - Nov. 19, 1956
Dr. Clarence Mickel, Professor and Head, Department of Economic Zoology and Entomology, University of Minnesota	May 1 - Sept. 5, 1957
Dr. Thomas H. King, Professor, Plant Pathology, University of Minnesota	May 1 - Aug. 16, 1957
Mr. Arthur L. Anderson, Professor, Animal Husbandry, Iowa State University	Aug. 7, 1959 - Feb. 5, 1960
*Dr. Sherwood Berg, Professor and Head, Department of Agricultural Economics, University of Minnesota	Aug. 4-16, 1958
*Dr. S.E. Engene, Professor, Agricultural Economics, University of Minnesota	Aug. 21-23, 1958
**Dr. A. B. Lewis, Associate Director, Council on Economic and Cultural Affairs	Sept. 9-11, 1959
Mr. Roy O. Bridgford, Associate Professor, Department of Agronomy and Plant Genetics, University of Minnesota Overall adviser	March 19, 1957 to conclusion of contract June 30, 1961

\*Not on Minnesota contract but stopped enroute from other assignments to confer with staff members on matters pertaining to the welfare of the Agricultural Economics Department.

\*\*Through the efforts of Dr. Berg and Dr. Lewis the Department of Agricultural Economics secured a \$2,515.00 grant from the Council for publishing course materials, make an initial survey of a large number of Korean farms and a statistical analysis of data pertaining to agricultural production and prices. The Council also provided funds enabling Professors Park Zin Hwan and Ban Seung Whan to do further graduate study at the University of Minnesota.

## MAJOR ACTIVITIES

During my tenure as adviser at the College of Agriculture I have attempted to ascertain the primary needs of the College and its departments, given consideration to changes or additions that might be made for improvement and then worked towards achieving in so far as possible the objectives for upgrading teaching and research.

Primarily it has been my policy to work and counsel with the Dean and the Department heads on matters of administration, curricula, specific course content in the Department of Agronomy and Horticulture, physical plant and equipment. Also I have assisted with the selection of participants who were to study abroad aided in their processing and in some cases given some help toward improving their knowledge of English. I have continued to give lectures from time to time on crop improvement and the problems involved in utilizing such knowledge, and have encouraged the use of and interested the department of Agronomy and Horticulture in some practical research as a part of their teaching.

Through these efforts a combination teaching-research program having as its main objective the improvement of lectures and field laboratory work has been started and is progressing at the College. Under this program a corn breeding program was instituted, necessary seed stocks and supplies obtained and staff and students instructed in the technic of corn improvement by controlled pollination methods. The interest and cooperation of personnel in Animal Science and Plant Pathology with Agronomy faculty members was encouraged in an endeavor to obtain the greatest possible instruction and research benefits from all these projects. In all cases the field work was coordinated with lectures and the field projects used as a laboratory

to better acquaint students with crop improvement problems and methods of solving them. Detailed statements of all projects and description of specific research results have been reported separately.

For the past year the Department of Agronomy and Horticulture has been short of personnel. This was due primarily to the absence of Professor Lee Eun Woong and Han Sang Ki both studying at Minnesota, and the resignation of Professor Chi Young Lin as head of the department. Following the appointment of Professor Yu Tal Young to succeed Professor Chi, Mr. Huh Moon Hue, who had been employed by the Experiment Station, was engaged to take over on October 1st some of the teaching and research in Agronomy and handle some of the student details which were formerly a responsibility of Professor Chi. Mr. Huh is a graduate of the College of Agriculture and had recently returned from a year's graduate study at Texas A & M under auspices of ICA.

Since Mr. Huh was new and unacquainted with our experimental projects, I have spent considerable time in explaining to him, discussing the objectives and technical aspects of conducting them and giving particular emphasis to their use in conjunction with classroom teaching. Also stressed was the necessity of preparing a specific outline and statement of each project, and preparing, at the end of the year, a project report giving work done, accomplishments, if any, and plans for the coming year.

Winter wheat and barley planting season in mid-October necessitated the preparation of planting plans, so I counselled with and aided Mr. Huh in getting these in order, packaging the seed, planning land preparation, laying out the plots, seeding and labelling.

Specifically these trials included the testing of:

1. Twenty strains of winter wheat in a regular yield trial using 2-row plots each 18 ft. long with three replicates.
  - (a) 15 improved Minnesota varieties
  - (b) 5 Korean strains
2. Seven improved strains of winter barley in a regular yield trial consisting of:
  - (a) 5 standard U.S. varieties selected on the basis of their merit in preliminary trials.
  - (b) 2 superior Korean strains.
3. (a) Growing 600 strains of winter barley in 8 ft. rows consisting of 550 from the World Collection that were improved in 1957 and 50 improved Korean strains.
  - (b) Growing 400 strains of winter wheat, 375 of which were from the World Collection, and 25 improved Korean strains.
4. A preliminary test (second year) of selected strains from the World Collection, consisting of
  - (a) 26 superior strains of winter barley
  - (b) 19 " " " " wheat
  - (c) 14 " " " " " (New Sel.)
5. Sowing small increase plots of the varieties Dayton, Ward, Ky. #1, Mo. B-400 and Mo. B-475.

As in past years the writer again collected a large number of rust samples from the grain plots and forwarded them to the United States Department of Agriculture as part of the program for determining the physiological species of stem rust that exist in Korea.

6. An initial rod-row test of soybeans, 2 American varieties and one Korean, using two dates of planting; and 25 late-maturing experimental varieties grown in 18 ft. rows for a preliminary test, also using two dates of planting.
7. A corn improvement project was started in 1958, testing for adaptation 10 double-crossed hybrids, their parental single crosses and inbreds, production of double-crossed seed and an adaptation study of two lines of sweet corn.



8. Twelve improved strains of legumes and 13 strains of grasses were grown in an adaptation trial with yields and other agronomic data secured.
9. Yield trials were conducted on 12 varieties of Minnesota potatoes which were augmented by 10 Korean varieties in 1961.
10. As a part of the fruit improvement program in horticulture a new orchard was established in 1960 for testing the merits and adaptability of a large number of superior varieties of grapes, apples, plums, pears and apricots. The stock used was imported from California and Minnesota.

The writer also assisted in taking necessary field data on the projects, computing yields, preparing annual reports and in general familiarizing Korean personnel with these matters. Since investigational work in crop production and improvement necessitates continuous growing and testing of many varieties of corn, grain, grasses, soybeans and potatoes, the work that was initiated at the College in 1957 and 1958 was increased to some extent in 1959 and 1960 with such changes, additions or deletions as seemed advisable from data already secured. As mentioned in previous reports, it is well to bear in mind that all of the projects have been made a part of, and coordinated with, courses taught in Agronomy and Horticulture as well as in Plant Pathology, thus giving these students an opportunity of becoming familiar with varieties, agronomic characters, disease reaction, and ways and means by which superior strains are developed. We have attempted to do the things that could result in practical benefit rather than trying to engage in basic research, leaving the latter for graduate students or to the professors themselves.

### Some Conclusions.

Because of the fact that so many factors are involved in determining the merits of a new variety, such as variable weather conditions, rainfall, soil, prevalence of insects and diseases, longer periods of testing are necessary before definite conclusions could be made. However, from observations, results and data at hand it is within reason to conclude that:

- A. With proper culture it is possible to grow strains of hybrid corn that will produce yields of both ears and stalks significantly higher than native strains, and that it is also possible to produce seed for continuing the strains by the proper crossing of parental seed stocks. Difficulties in pollinating during the rainy season can be obviated somewhat by using two dates of planting. Because of extreme moisture and humidity at harvest time, some artificial means of drying the seed corn is essential if viable seed is to be obtained.
- B. Early-maturing soybeans appear unsuitable because of poor seed quality. Beans of late maturity seems to perform better when planted in mid-June rather than earlier or later. Of 13 strains tested, 6 of the American varieties, including 2 vegetable type appeared worthy of further trial. Eleven experimental strains showed enough merit to warrant further study.
- C. Of the 5 strains of winter barley that were grown in yield trials the variety "Dayton" has shown outstanding yielding ability, and No. 475 the most winter hardiness.
- D. Seven of the 15 Minnesota strains of winter wheat have shown immunity to stem rust the others highly resistant. Three years' data indicate that 8 of these strains showed yields significantly higher than the average and warrant further consideration.
- E. From the standpoint of yield, Kenland red clover has been outstanding with a 2-year average of 5.05 tons per acre, Narragansett alfalfa outyielded the other 3 varieties with a 2-year average of 2.45 tons per acre. Birdsfoot Trefoil thrives well and could be useful for pasture.

### Other Research Problems for Consideration.

Because increased production of food crops per unit area is so urgent in Korea, research projects in the Agronomy and Horticulture Department should be planned with that objective in mind. Practical projects, designed to

supply as soon as possible the answers to many of the farmers' difficulties, are recommended. In addition to those already in operation consideration in the future might well be given to the following:

1. In so far as land, funds, and personnel permit: A soil project to:
  - (a) Determine soil acidity and the proper amounts of lime needed to correct it, for both legumes and grains.
  - (b) A comparison of the use of compost or green manure with various types of nitrogen fertilizer.
  - (c) Use and comparison of phosphate, fertilizer alone and in combination with nitrogen and potash.
  - (d) A project designed for determining the amounts of commercial fertilizer needed to secure maximum returns, both on rice and upland crops.
  - (e) Further study of the factors involved for securing the greatest possible benefits from alfalfa. This would need the cooperation of Agronomy, Soils and Plant Pathology.
2. Greater impetus to disease control, both by development of superior varieties and by use of fungicides, is of prime importance.
3. Pasture renovation involving the use of lime and commercial fertilizer might well be a valuable addition to the grass and legume varietal testing project now in operation. Since such a project would require considerable time as well as land, the cooperation of the Whasan Branch Experiment Station could be considered.

It is believed that these experimental projects have added immeasurably to the quality of courses taught in agronomy, plant genetics and plant pathology and have been of great value by arousing student interest in the practical side of their course work. These projects should by all means be continued.

In view of the continuing great importance of these projects and taking appropriate cognizance of the termination of contract service on 30 June, 1961, conferences were held with the Department of Agronomy and

Horticulture Head, Professor Yu, Tal Young at various times and the practical aspects of the work discussed, acquainting him in so far as possible with the type of projects under way and recommended, objectives, principles involved, land usage, fertilization help needed, project statements and annual reports. His whole-hearted support has been most gratifying.

The writer also:

1. Conferred with former Dean Cho and recently appointed Dean Yun at various times on matters pertaining to physical plant maintenance and other problems bearing on the welfare of the institution. (Dean Cho having completed four 4-year terms in this office, did not choose to seek another term and has been succeeded by Professor Yun Sang Won, former head of the Department of Animal Science.)
2. Gave a series of one-hour lectures to a class of sophomores on crop improvement methods with particular emphasis on corn and soybeans.
3. Assisted the Agricultural Engineering Department by arranging for Mr. Wm. Johnson (Agricultural Engineering, USOM Division of Agriculture) to meet with and advise them in regard to setting up equipment in the metal- and wood-working shops. Plans and specifications have now been drawn for installing this equipment and the work of installation scheduled to start when allotted funds are released.
4. Assisted in the preparation of a list of supplies and equipment needed for the Home Economics Department and also obtained the help of Mrs. L. McLeod (home economist with USOM's Division of Agriculture) for expert advice thereon.
5. Edited and assisted in the preparation of scientific papers for publication by various Korean colleagues in agriculture.
6. Consulted department heads at the University of Minnesota and arranged to obtain for the College of Agriculture seed corn and other supplies for continuing the corn breeding projects; seed potatoes for an adaptation and yield trial; and scions of some improved varieties of apples, plums, pears and apricots to be used for the fruit improvement program.

### Physical Plant Improvement.

During my assignment with Seoul National University great changes have been effected in the physical plant and facilities of the College of Agriculture, whose buildings and equipment were practically destroyed, and its faculty decimated by the Korean War. The college's physical facilities in 1957 consisted mainly of an inadequate library and three old buildings in a poor state of repair. The latter housed the administrative offices, provided office for staff, and class and laboratory space for the entire college. At that time equipment and supplies needed for teaching were negligible. Through allocations of ICA dollar funds and dollar-generated counterpart the physical plant of the college has emerged from practical destruction to a modern institution having most of the basic facilities for instructional work and research in the various fields of agriculture. In addition ample facilities for housing and feeding students are now available as well as an auditorium for college affairs and public functions.

Specifically the new construction completed and now in use includes:

1. Three dormitories with accommodations for 500 students; completed in 1958.
2. A modern cafeteria; completed in 1958.
3. A three-story building containing additional laboratory facilities, classrooms and staff offices; completed in 1959.
4. An auditorium with a seating capacity of 1250; completed in 1959.
5. A third-story addition to the original No. 1 Building to provide office and classrooms for the Department of Agricultural Economics; completed in 1958.
6. An addition to the Library, completed in 1958, increasing office and stack space and doubling reading room capacity.

7. A new chemistry building, providing office space for staff members and ample laboratories, was built during the latter part of 1959. It was completed, equipped and put into use on July 1, 1960.
8. A modern dairy barn with an adjoining silo was constructed for the livestock department with adequate provision made for storage of supplies and equipment. An adjacent quonset (40' x 100') provides storage space for stock feed as well as a livestock judging pavilion. A new poultry laying house and hog barn were constructed in 1960.
9. Two greenhouses have been constructed; a third is to be constructed in 1961.
10. In addition to buildings, each department of the college has been supplied with a substantial amount of new equipment and supplies enabling staff members to utilize their talents to full capacity in carrying on a well-rounded program of teaching and research.
11. The remodeling and repair of the three original buildings. Terrazzo floors were laid on the main floors and in the classrooms of each structure, steam pipes put in, and new electric conduits, outlets and wiring installed. Toilet and lavatory facilities were provided in Building No. 1.
12. A large drainage system, to serve both the north and south sides of the campus, adequate for removing all surplus water rapidly during the rainy season and eliminate the drainage difficulties experienced before, has been completed.
13. The erection of the 9 foot woven wire fence surrounding the campus adds beauty to the place and establishes a security area about the buildings that is most essential.
14. A new steam heating plant was completed and put into operation in December, 1959.
15. Cement floors have been laid in the four remodeled quonset structures in preparation for the installation of equipment and its use in teaching. These remodeled structures, expected to be ready for occupancy at the start of the second semester on September 1, 1961, will be utilized as follows:
  - No. I. Machine shop and laboratory for the Department of Engineering.
  - No. II. Wood working shop.
  - No. III. Will continue to be used for storage.

No. IV. Wood utilization laboratories, Forestry Department.

No. V. Student Union Building.

15. On the campus, paving has been finished from the cafeteria to and in front of the Administration Building; four tennis courts have been constructed and much landscaping has been completed.

Current Needs.

1. Completion of the third greenhouses for the Department of Forestry at an early date would assist materially and strengthen the practical instruction in this department.
2. Some items in the new classroom building need repair such as broken windows and door panes, broken lavatory pipes and leaking faucets, stair railings, faculty office floors, etc. It would seem only a matter of a good maintenance policy and preservation to keep these things in a good state of repair. Possibly some member of the Engineering Department could assist on this.

To insure a steady, adequate supply of electricity at all times, specially for ovens, incubators, electric appliances, etc., as well as for light, it is highly important that the standby generator be operated when needed. The city service is intermittent and not dependable.

Completion of the paving job and sidewalks around the buildings as soon as the weather permits, and before the rainy season, would be of great benefit and aid in keeping all buildings clean.

Since water is so essential for use in laboratories, toilets, lavatories and for cleaning purposes it is important that a sufficient supply be available at all times. With counterpart funds now approved it is most advisable to complete the construction of another well at an early date.

Before further new physical plant needs are considered by the College the completion of all present projects for which funds have been allotted must be assured, and particularly those having a direct bearing on the efficiency of teaching and research. In this category are: 1) Completion of the additional well as soon as possible to aid in providing an adequate supply of water for laboratories, building maintenance, sanitation in the dormitories and cafeteria, etc., 2) Provision of a sure supplementary supply

of electricity through commercial means augmented by more efficient use of the stand-by generator. The present erratic and unsteady supply of electricity is a serious handicap to some departments and staff members whose laboratory work requires the use of ovens, germinators, autoclaves, refrigerators, incubators and other electrical equipment. In fact, without a steady supply of proper voltage current some of this work cannot be undertaken. 3) Delay in getting the greenhouses finished has seriously handicapped research work in the Departments of Biology, Agronomy and Forestry. These three items have been recommended to the Dean for urgent consideration.

#### Teaching.

Regarding teaching, the writer feels that during the last couple of years there has been a decided improvement at the College. There is less reliance on the lecture method, more on the practical; there is a tendency toward promptness, fewer missed classes, more student counseling and greater use of visual aids. Much of this is doubtless attributable to the staff exchange portion of the project, but an important part may well be the result of provision of improved facilities in laboratories and classrooms. Further stress of the practical would be possible by including more laboratory work, field and other, in course offerings. This would give students opportunity to apply lecture learning in practice.

Among other matters worthy of consideration regarding the improvement of instruction at the College of Agriculture are the following:

Definite assignments for all laboratory courses would strengthen them and make for more efficient use of laboratories.

It would be advantageous to develop and offer more 3- and 4-credit courses, thus permitting greater concentration of subject matter and fewer courses for the required credits. Some changes of this nature have already



been made at the College.

With the return of all faculty members from abroad more consideration should be given to ways of making greater use of their services for the graduate level training of young staff members from other universities who have been unable to undertake foreign study. The recently established Professorial Institute of Seoul National University is an important step in this direction.

More whole-hearted cooperation between departments at the College is highly essential for the welfare of all concerned and a factor of importance regarding both instruction and research. This is particularly true among closely related departments.

There is a continuing great need for more textbooks in the Korean language. Where possible, faculty with the ability should be encouraged to either write or translate needed material.

An examination of the faculty data set forth above indicates that when all staff members now studying abroad return to resume their duties at the College each department will be staffed with well-trained men capable of doing a high grade job of teaching at the college level, as well as having ability for the conduct of research. Many will be competent to guide graduate training at the Master's degree level; some at the Ph.D. level where supporting departments have adequate strength. As a whole, it will be a well-trained and qualified faculty. Thus both its opportunities and responsibilities are great - to educate and train to the limit of its capabilities a highly selected group of students who will one day guide Korean agriculture.

## Research.

Regarding this important area of faculty responsibility the following comments are made:

- 1) Most projects in research would be enhanced a great deal if there were more cooperation between the College and the Experiment Station. This would be particularly true in the case of extension, the source by which valuable information is gotten out to farmers and others who could benefit from it. It would also be very helpful in the release and distribution of superior grain or soybean varieties. Progress is being made, however, as Professors Paik Woon Hah and Chung Hoo Sup again this year conducted a short course in the fundamentals of entomology and plant pathology for extension workers of the Experiment Station.
- 2) In general, more consideration should be given to simpler research projects that could be of material benefit within the foreseeable future. Large, complicated projects involving the expenditure of considerable sums of money are in the adviser's opinion not desirable now except for the kind of well-supported (through the Ministry of Agriculture and Forestry) project such as the one in tree genetics under the direction of the Head, Department of Forestry of the College.
- 3) It should be imperative that any new research project to be attempted be given much consideration by the department head and those who are to be the leaders. As much information as possible should be obtained concerning its objective, cost, time required for completion, practical application, methods, etc., and before putting it into operation a definite project statement should be written up, giving it a number and incorporating the details mentioned above. Copies of same should be in the hands of the department head, the leader, and dean of the College.
- 4) An annual research project report is also necessary indicating the work done during the year, accomplishments if any, and plans for the coming year. These reports supply a historical record of everything pertaining to the project and keep the department as well as the administration informed as to progress. They also enable the leader to have easily available the facts for any publications he may wish to prepare.

### Additional Advisory Assistance.

With regard to further advisory assistance, provided funds for this purpose become available in the future, in the adviser's opinion two areas should be given paramount consideration not only for the good of the College but for the welfare of the country. These areas are soils and plant pathology, both of which are of most fundamental importance to crop production. Next in priority would be assistance in further improving instruction and research in practical agricultural engineering.

### Conclusion.

The College of Agriculture of Seoul National University has a well-educated faculty and now possesses a very fine, substantial and adequate physical plant. New modern structures have been erected, well equipped, and are now in use; old ones have been rehabilitated and modernized. Student housing and eating facilities have been provided; the library has been expanded and improved. The 1,250 seat auditorium is ample in size and facilities to take care of all student affairs as well as public gatherings. Plenty of good classrooms and laboratories, adequately equipped, are available for all departments. An athletic field, tennis and volley ball courts, as well as a modest, improved-quonset student union building, provide basic facilities for a wide range of recreation and athletics. The farm and livestock areas have also taken on a new look with the addition of new buildings and facilities.

Only a few unfinished physical plant items remain to be completed and this action is expected at an early date. The full and efficient use of all these facilities by the College's well qualified staff will without question greatly improve the quality of agricultural education in the Republic of Korea.

ACADEMIC CALENDAR 1961 - 1962  
First Semester 1961

1961

April 1	Class work begins. (Upper-class)
April 1,2	Registration of class schedule
April 4	Freshmen orientation program
April 5	Legal holiday: Arbour day
May 25	Midterm examination begins
May 31	Midterm examination ends
June 6	Legal holiday: National heroes' memorial day
June 15	Farmer's day
July 13	Final examination begins
July 20	Final examination ends
July 17	Legal holiday: Constitution day
July 21	Summer vacation begins
August 15	Legal holiday: Liberation day
August 31	Summer vacation ends

Second Semester 1961 - 1962

1961

August 29	Registration and enrollment begins
August 31	Registration and enrollment ends
September 1	Class work begins
September 24	Legal holiday: Harvest day
October 3	Legal holiday: Dan-gun day
October 9	Legal holiday: Han-gul day
October 15	Legal holiday: Foundation day - Anniversary of SNU
October 24	Legal holiday: United Nations day
November 2	First midterm examination begins
November 8	First midterm examination ends
December 14	Secondary midterm examination begins
December 20	Secondary midterm examination ends
December 21	Winter vacation begins

1962

January 31	Winter vacation ends
February 1	Class work begins
February 19	Final examination begins
February 24	Final examination ends
March 1	Legal holiday: Sam-il (March First) day
March 1	Special recess begins
March 20	Special recess ends
March 21	Spring recess begins
March 31	Spring recess ends
March 23	Freshman registration begins
March 26	Freshman registration ends
March 28	Graduation ceremony
March 29	Upper-class registration begins
March 31	Upper-class registration ends

Freshman class (A)

(Departments of Forestry, Agricultural Engineering, Agricultural Economics, Sericulture and Home Economics)

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Re-mark
		Credits	Hours	Credits	Hours		
101 b	Korean Language			4	4(0)	4	
102	English Language	4	4(0)			4	
103	English Language			4	4(0)	4	
104 a	German Language	4	4(0)			4	
105 b	Outline of Philosophy			4	4(0)	4	
106 a	History of Civilization	2	3(0)			2	
107 b	Outline of Natural Science			4	2(4)	4	
108	Physical Training	1	2(0)			1	
109	Physical Training			1	2(0)	1	
110 a	Principal of Economics	2	2(0)			2	
111	Mathematics	2	2(2)			2	
112	Mathematics			2	2(2)	2	
113 a	Physics	3	3(2)			3	
114 b	General Chemistry			3	3(2)	3	
115 a	General Botany	2	2(2)			2	
116 a	General Zoology	2	2(2)			2	
	Total	22	24(8)	22	21(8)	44	

Freshman class (B)

(Departments of Agriculture, Livestock, Agricultural Chemistry and Agricultural Biology)

101 a	Korean Language	4	4(0)			4	
102	English Language	4	4(0)			4	
103	English Language			4	4(0)	4	
104 b	German Language			4	4(0)	4	

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Re-mark
		Credits	Hours	Credits	Hours		
105 a	Outline of Philosophy	4	4(0)			4	
106 b	History of Civilization			2	3(0)	2	
107 a	Outline of Natural Science	4	2(4)			4	
108	Physical Training	1	2(0)			1	
109	Physical Training			1	2(0)	1	
110 b	Principal of Economics			2	2(0)	2	
111	Mathematics	2	2(2)			2	
112	Mathematics			2	2(2)	2	
113 b	Physics			3	3(2)	3	
114 a	General Chemistry	3	3(2)			3	
115 b	General Botany			2	2(2)	2	
116 b	General Zoology			2	2(2)	2	
	Total	22	21(8)	22	24(8)	44	

Department of Agriculture (Sophomore class)

L 201 b	Outline of Animal Science			2	3(0)	2	Major
EN 215	Agricultural Meteorology			2	2(0)	2	"
C 201 a	Outline of Soil Science	2	3(0)			2	"
C 203 a	Qualitation Analysis (II)	1	0(2)			1	"
C 211 b	Organic Chemistry			4	3(2)	4	"
C 233 a	Fertilizer	2	3(0)			2	"
EC 212	Agricultural Management (I)			2	2(0)	2	"
EC 215 a	Statistics	3	3(0)			3	"
B 201 a	Outline of Plant Physiology	2	3(0)			2	"
B 202 a	Outline of Genetics	2	3(0)			2	"
B 203	Crop Disease	2	1(2)			2	"
B 204	Field Crop Pest & Entomology Control			2	1(2)	2	"
		14	16(4)	12	11(4)	26	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	Remark
		Credits	Hours	Credits	Hours	Credits	
F 201 a	Outline of Forestry	2	3(0)			2	Elec- tive
L 231	Feeds and Feeding (I)			4	3(2)	4	"
L 262	Physiology of Domestic Animal			4	3(2)	4	"
EN 201	Outline of Agr. Engineering			2	3(0)	2	"
EN 202	Outline of Farm Machinery	2	2(2)			2	"
EN 203	General Drawing			2	3(0)	2	"
EN 204	Outline of Surveying	2	3(0)			2	"
C 224	Inorganic Chemistry			2	2(0)	2	"
EC 211 a	Agricultural Economics (I)	3	3(0)			3	"
EC 241 b	Outline of Laws			2	2(0)	2	"
B 433	Apiculture	2	1(2)			2	"
S 201 a	Outline of Sericulture	2	3(0)			2	"
		13	16(2)	16	16(4)	29	"
<u>Department of Agriculture (Junior class)</u>							
A 311	Principles of Plant Cultivating			3	2(2)	3	Major
A 321	Food Crops (I)	4	3(2)			4	"
A 322	Food Crops (II)			4	3(2)	4	"
A 331	Forage Crops	3	2(2)			3	"
A 341	Vegetables Crops (I)	3	2(2)			3	"
A 342	Vegetable Crops (II)			3	2(2)	3	"
A 391	Seminar in Agriculture	1	3(0)			1	"
A 392	Seminar in Agriculture			1	3(0)	1	"
C 213 a	Biological Chemistry (I)	3	2(2)			3	"
		15	12(10)	12	10(8)	27	

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
A 351	Weed Control			2	1(2)	2	Elective
L 315	Swine Production	4	3(2)			4	"
L 332	Poultry Breeding			3	2(2)	3	"
L 402	Outline of Livestock Processing			2	3(0)	2	"
EN 328	Soil Conservation			3	3(0)	3	"
EN 413	Land Clearing			2	2(0)	2	"
C 334	Soils, Lab.	3	0(6)			3	"
EC 312	Farm Management (II)	3	3(0)			3	"
EC 341 b	Administrative Law			3	3(0)	3	"
B 371	Microtechnique (I)			1	0(2)	1	"
B 452 a	Experimental Design	3	2(2)			3	"
		13	8(10)	16	14(6)	29	"

Department of Agriculture (Senior class)

A 411	Industrial Crops			3	2(2)	3	Major
A 421	Fruits Production (I)	3	2(2)			3	"
A 422	Fruits Production (II)			3	2(2)	3	"
A 431	Floriculture (I)	3	2(2)			3	"
A 432	Floriculture (II)			3	2(2)	3	"
A 441	Vegetable Seed Production	3	2(2)			3	"
A 451	Crops Breeding (I)	3	2(2)			3	"
A 452	Crops Breeding (II)			3	2(2)	3	"
A 491	Seminar in Agronomy	1	3(0)			1	"
A 492	Seminar in Agronomy			1	3(0)	1	"
C 401	Outline of Agr. Products	2	3(0)			2	"
		15	14(8)	13	11(8)	28	"



Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
F 412	Gardening			2	2(0)	2		Elective
L 417	Poultry Production	4	3(2)			4		"
L 420	Livestock Management			4	4(0)	4		"
L 465	Animal Hygiene			3	2(2)	3		"
C 420	Agriculture Chemicals	2	2(0)			2		"
C 425	Radioisotops for Agriculture			2	2(0)	2		"
EC 413	Agricultural Extension	2	2(0)			2		"
EC 415	Agricultural Cooperation	3	3(0)			3		"
402	Pedagogy			3	3(0)	3		"
		11	10(2)	14	13(2)	25		"

Department of Forestry (Sophomore class)

F 212	Dendrology			4	3(2)	4		Major
F 281	Forest Surveying	5	3(4)			5		"
EN 215	Agricultural Meteorology			2	2(0)	2		"
C 201 a	Outline of Soil Science	2	3(0)			2		"
C 203 a	Fertilizer	2	3(0)			2		"
C 211 b	Organic Chemistry			4	3(2)	4		"
EC 215 b	Statistics			3	3(0)	3		"
B 201 b	Outline of Plant Physiology			2	3(0)	2		"
B 301	Principles of Plant Diseases Control	2	3(0)			2		"
		11	12(4)	15	14(4)	26		"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	
		Credits	Hours	Credits	Hours	Credits	Remark
A 351	Weed Control			2	1(2)	2	Elec- tive
L 436	Range Management	2	2(0)			2	"
EN 203	General Drawing			2	3(0)	2	"
C 203 a	Qualitative Analysis (II)	1	0(2)			1	"
C 337	Soil Microbiology	2	2(0)			2	"
EC 241 b	Outline of Laws			2	2(0)	2	"
EC 242	Constitution	3	3(0)			3	"
B 202 b	Outline of Genetics			2	3(0)	2	"
B 211	Plant Morphology	3	2(2)			3	"
B 212	Plant Taxonomy	4	3(2)			4	"
B 316	Plant Ecology			4	3(2)	4	"
		15	12(6)	12	12(4)	27	"

Department of Forestry (Junior class)

F 311	Spring Camp	1	once			1	Major
F 312	Silviculture (I)			5	4(2)	5	"
F 314	Forest Protection			2	2(0)	2	"
F 322	Mensuration			4	3(2)	4	"
F 341	Wood Physics	4	3(2)			4	"
F 344	Wood Chemistry			2	1(2)	2	"
F 381	Soil Conservation	4	3(2)			4	"
F 391	Seminar in Forestry	1	3(0)			1	"
F 392	Seminar in Forestry			1	3(0)	1	"
		10	9(4)	14	13(6)	24	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
F 324	Forest Finance			3	3(0)	3		Elective
F 343	Logging	3	2(2)			3		"
A 451	Crop Breeding (I)	3	2(2)			3		"
FN 328	Soil and Water Conservation			3	3(0)	3		"
EN 333	Electric Survey			3	2(2)	3		"
C 213 a	Biological Chemistry (I)	3	2(2)			3		"
C 334	Soil, Lab.	3	0(6)			3		"
EC 341 a	Administration Law	3	3(0)			3		"
EC 431	Agricultural Extension	2	2(0)			2		"
B 302	Forest Diseases			2	1(2)	2		"
B 304	Forest Entomology			2	1(2)	2		"
B 371	Microtechnique			1	0(2)	1		"
		17	11(12)	14	10(8)	31		"
<u>Department of Forestry (Senior class)</u>								
F 411	Silviculture (II)	5	4(2)			5		Major
F 421	Forest Management	6	4(4)			6		"
F 422	Practice			2	0(4)	2		"
F 424	Forest Policy			3	3(0)	3		"
F 442	Wood Technology			4	3(2)	4		"
F 443	Forest Products	5	4(2)			5		"
F 482	Aerial Mapping			2	1(2)	2		"
F 483	Forest Engineering	3	2(2)			3		"
F 491	Seminar in Forest	1	3(0)			1		"
F 492	Seminar in Forest			1	3(0)	1		"
		20	17(10)	12	10(8)	32		"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Re-mark
		Credits	Hours	Credits	Hours		
F 412	Cardening			2	2(0)	2	Elective
F 444	Wood Preservation			2	1(2)	2	"
F 445	Water use Management	2	1(2)			2	"
F 462	Forest Law			2	2(0)	2	"
A 201 b	Outline of Horticulture			2	3(0)	2	"
C 425	Radioisotopes for Agriculture			2	2(0)	2	"
B 452 B	Experimental Design			3	2(2)	3	"
402	Pedagogy			3	3(0)	3	"
		2	1(2)	16	15(4)	18	"

Department of Livestock (Sophomore class)

L 211	Poultry Judging			2	1(2)	2	Major
L 212	Breeds of Domestic Animals	3	3(0)			3	"
L 231	Feeds and Feeding (I)			4	3(2)	4	"
L 261	Anatomy of Domestic Animal	4	3(2)			4	"
L 262	Physiology of Domestic Animal			4	3(2)	4	"
C 201 b	Outline of Soil Science			2	3(0)	2	"
C 211 a	Organic Chemistry	4	3(2)			4	"
EC 215 a	Statistics	3	3(0)			3	"
B 202 b	Outline of Genetics			2	3(0)	2	"
		14	12(4)	14	13(6)	28	"
L 263	Animal Bacteriology	2	1(2)			2	Elective
A 202 a	Outline of Field Crops	2	3(0)			2	"
EN 202	Outline of Farm Machinery	2	3(0)			2	"
EN 215	Agricultural Meteorology			2	2(0)	2	"
C 203 b	Qualitative Analysis (II)			1	0(2)	1	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
C 213 b	Biological Chemistry (I)			3	2(2)	3		Elec- tive
C 233 b	Fertilizer			2	3(0)	2		"
EC 211 a	Agricultural Economics (I)	3	3(0)			3		"
EC 241 a	Outline of Laws	2	2(0)			2		"
EC 341 b	Administration Law			3	3(0)	3		"
B 303	Agricultural Entomology	2	1(2)			2		"
B 372	Microtechnique (II)			1	0(2)	1		"
S 201 a	Outline of Sericulture			2	3(0)	2		"
		13	13(4)	14	13(6)	27		"
<u>Department of Livestock (Junior class)</u>								
L 313	Rabbit Production	3	2(2)			3		Major
L 314	Cattle Husbandry (I)			4	3(2)	4		"
L 315	Swine Production	4	3(2)			4		"
L 316	Livestock Judging			3	2(2)	3		"
L 332	Poultry Breeding			3	2(2)	3		"
L 333	Feeds and Feeding (II)	3	2(2)			3		"
L 334	Animal Breeding	4	3(2)			4		"
L 341	Meat and Meat Processing			3	2(2)	3		"
L 391	Seminar in Livestock	1	3(0)			1		"
L 392	Seminar in Livestock			1	3(0)	1		"
		15	13(8)	14	12(8)	29		"
L 335	Poultry Nutrition	3	2(2)			3		Elec- tive
L 364	Animal Disease	2	2(0)			2		"
A 331	Forage Crops	3	2(2)			3		"
A 351	Weed Control			2	1(2)	2		"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	
		Credits	Hours	Credits	Hours	Credits	
EN 328	Soil Preservation			3	3(0)	3	Elec- tive
C 313	Biological Chemistry	3	3(0)			3	"
EC 212	Farm Management (I)			2	2(0)	2	"
EC 311	Agricultural Economics (II)			3	3(0)	3	"
B 452 b	Experimental Design			3	2(2)	3	"
		11	9(4)	13	11(4)	24	"
<u>Department of Livestock (Senior class)</u>							
L 417	Poultry Production	4	3(2)			4	Major
L 418	Sheep Husbandry	3	2(2)			3	"
L 419	Cattle Husbandry (II)	4	3(2)			4	"
L 420	Livestock Management			4	4(0)	4	"
L 437	Physiology of Reproduction in Farm Animals			3	2(2)	3	"
L 442	Poultry Products			3	2(2)	3	"
L 443	Milk Processing			3	2(2)	3	"
L 493	Seminar in Livestock	1	3(0)			1	"
L 494	Seminar in Livestock			1	3(0)	1	"
		12	11(6)	14	13(6)	26	"
L 421	Horse Husbandry			3	2(2)	3	"
L 436	Range Management	2	2(0)			2	"
L 444	Tanning	3	2(2)			3	"
L 465	Animal Hygiene			3	2(2)	3	"
C 401	Outline of Agricultural Products	2	3(0)			2	"
C 411	Chemistry of Nutrition			2	2(2)	2	"
C 414	Chemistry of Food	3	3(0)			3	"

Subject Number	Subject Name	1st Semester		2nd semester		Total	
		Credits	Hours	Credits	Hours	Credits	Remark
C 425	Radioisotopes for Agriculture			2	2(0)	2	Elec- tive
EC 413	Agricultural Extension	2	2(0)			2	"
B 438	Apiculture	2	1(2)			2	"
402	Pedagogy			3	3(0)	3	"
		14	13(4)	13	11(4)	27	"

Department of Agriculture Engineering (Sophomore Class)

EN 211	Geology	3	2(2)			3	Major
EN 212	Engineering Mathematics	3	2(2)			3	"
EN 213	Differential Equation			3	2(2)	3	"
En 214	Advanced Physics	2	2(0)			2	"
EN 216	Surveying (I)	4	2(4)			4	"
EN 217	Surveying (II)			4	2(4)	4	"
EN 220	Drawing			4	3(2)	4	"
EN 221	Statics	3	3(0)			3	"
EN 222	Dynamics			3	2(2)	3	"
EN 223	Thermo Dynamics	3	2(2)			3	"
EN 224	Fluid Mechanics			4	3(2)	4	"
		18	13(10)	18	12(12)	36	"
EN 215	Agricultural Meteorology			2	2(0)	2	Elec- tive
A 201 b	Outline of Horticulture			2	3(0)	2	"
A 202 b	Outline of Field Crops	2	3(0)			2	"
C 201 b	Outline of Soil Science			2	3(0)	2	"
EC 211 a	Agricultural Economics (I)	3	3(0)			3	"
EC 241 a	Outline of Law	2	2(0)			2	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	
		Credits	Hours	Credits	Hours	Credits	Remark
EC 341b	Administrative Law			3	3(0)	3	Elective
EC 422	Korean Economy	2	2(0)			2	"
		9	10(0)	9	11(0)	18	"
<u>Department of Agricultural Engineering (Junior class)</u>							
EN 321	Strength of Materials	4	3(2)			4	Major
EN 322	Hydraulics	4	3(2)			4	"
EN 323	Concrete and Materials	2	2(0)			2	"
EN 324	Soil Mechanics	3	2(2)			3	"
EN 325	Reinforced Concrete			4	4(0)	4	"
EN 326	Hydrology	3	2(2)			3	"
EN 327	Irrigation			3	3(0)	3	"
En 328	Soil and Water Conservation			3	3(0)	3	"
En 329	Agricultural Machinery (I)	2	2(0)			2	"
EN 330	Agricultural Machinery (II)			3	2(2)	3	"
EN 338	Electric Engineering			3	2(2)	3	"
		18	14(8)	16	14(4)	34	"
EN 301	Outline of Mechanical Eng.	2	3(0)			2	Elective
EN 331	Mechanics of Machinery			2	2(0)	2	"
EN 332	Metallic Materials			2	2(0)	2	"
EN 334	Design of Timber and Steel			2	2(0)	2	"
EN 391	Seminar in Agr. Engineering(I)	1	3(0)			1	"
EN 392	Seminar in Agr. Engineering(II)			1	3(0)	1	"
F 482	Aerial Surveying			2	1(2)	2	"
L 436	Range Management	2	2(0)			2	"



Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
EC 311	Agricultural Economics (II)			3	3(0)	3		Elec- tive
EC 413	Agricultural Extension	2	2(0)			2		"
		7	10(0)	12	13(2)	19		"
<u>Department of Agricultural Engineering (Senior class)</u>								
EN 411	Structure of Water Utilization(I)	4	3(2)			4		Major
EN 412	Structure of Water Utilization (II)			4	3(2)	4		"
EN 415	Foundation	3	2(2)			3		"
EN 418	Shop Work	1	0(2)			1		"
EN 491	Seminar in Agr. Engineering(I)	1	3(0)			1		"
EN 492	Seminar in Agr. Engineering (II)			1	3(0)	1		"
		9	8(6)	5	6(2)	14		"
EN 413	Land Clearing			2	2(0)	2		Elec- tive
EN 414	Land Cleaning and Tide Land Reclamation	3	2(2)			3		"
EN 416	Road & Bridge Engineering			3	3(0)	3		"
EN 417	Farm Structures			3	2(2)	3		"
EN 419	Machine Design			3	2(2)	3		"
EN 420	Statically Indeterminate Structures	3	3(0)			3		"
EN 421	Rural Sanitary Engineering			2	2(0)	2		"
EN 422	Explosion			3	3(0)	3		"
EN 423	Pump & Prime Motor	2	2(0)			2		"
F 341	Wood Physics	4	3(2)			4		"
F 381	Forest Conservation	4	3(2)			4		"
C 425	Radioisotopes for Agriculture			2	2(0)	2		"
C 436	Soil Physics	2	2(0)			2		"
402	Pedagogy			3	3(0)	3		"
		18	15(6)	21	19(4)	39		"

Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
<u>Department of Agricultural Chemistry (Sophomore class)</u>								
C 211 a	Organic Chemistry	4	3(2)			4		Major
C 213 b	Biological Chemistry (I)			3	2(2)	3		"
C 221	Physical Chemistry (I)	3	3(0)			3		"
C 222	Physical Chemistry (II)			2	2(0)	2		"
C 223	Applied Mathematics	2	2(0)			2		"
C 224	Inorganic Chemistry			2	2(0)	2		"
C 225	Analytical Chemistry			2	2(0)	2		"
C 226	Qualitation Analysis	3	0(6)			3		"
C 227	Qualitation Analysis			3	0(6)	3		"
C 231	Soil Science			3	3(0)	3		"
C 233 b	Fertilizer			2	3(0)	2		"
A 202 a	Outline of Field Crop	2	2(0)			2		"
L 201 b	Outline of Livestock			2	3(0)	2		"
B 201 a	Outline of Plant Physiology	2	3(0)			2		"
		16	14(8)	19	17(8)	35		"
L 262	Physiology of Domestic Animal			4	3(2)	4		Elective
EN 211	Geology	3	2(2)			3		"
EC 211 a	Agricultural Economics (I)	3	3(0)			3		"
EC 241 a	Outline of Law	2	2(0)			2		"
B 202 a	Outline of Genetics	2	3(0)			2		"
B 255	Microbiology			3	3(0)	3		"
S 201 a	Outline of Sericulture	2	3(0)			2		"
		12	13(2)	7	6(2)	19		"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	
		Credits	Hours	Credits	Hours	Credits	Remark
<u>Department of Agricultural Chemistry (Junior class)</u>							
C 312	Organic Chemistry, Lab.			3	0(6)	3	Major
C 313	Biological Chemistry (II)	3	3(0)			3	"
C 320	Chemistry of Colloid	2	2(0)			2	"
C 333	Chemistry of Soil			2	2(0)	2	"
C 334	Soils Lab.	3	0(6)			3	"
C 335	Plant Nutrition			2	2(0)	2	"
C 336	Fertilizer, Lab.			3	0(6)	3	"
C 361	Fermentation Microbiology	2	2(0)			2	"
C 362	Chemistry of Fermentation			2	2(0)	2	"
C 363	Fermentation Microbiology, Lab.	3	0(6)			3	"
C 391	Seminar in Chemistry (I)	1	3(0)			1	"
C 392	Seminar in Chemistry (II)			1	3(0)	1	"
A 201 b	Outline of Horticulture			2	3(0)	2	"
F 201 b	Outline of Forestry			2	3(0)	2	"
		14	10(12)	17	15(12)	31	"
C 337	Soil Microbiology	2	2(0)			2	Elective
F 344	Wood Chemistry			2	1(2)	2	"
L 231	Feeds and Feeding (I)			4	3(2)	4	"
L 335	Poultry Nutrition	3	2(2)			3	"
L 341	Meat Processing			3	2(2)	3	"
EC 215 a	Statistics	3	3(0)			3	"
B 301	Principle of Plant Disease Control	2	3(0)			2	"
B 303	Principle of Insect Control	2	1(2)			2	"
		12	11(4)	9	6(6)	21	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Chemistry (Senior class)</u>							
C 411	Nutrition Chemistry			2	2(0)	2	Major
C 413	Biochemistry, Lab.	3	0(6)			3	"
C 414	Food Chemistry	3	3(0)			3	"
C 415	Food & Nutrition, Lab.	2	0(4)			2	"
C 462	Brewing	2	2(0)			2	"
C 468	Brewing, Lab.			2	0(4)	2	"
C 470	Chemical Technology	3	3(0)			3	"
C 491	Seminar in Agr. Chemistry (I)	1	3(0)			1	"
C 492	Seminar in Agr. Chemistry (II)			1	3(0)	1	"
		14	11(10)	5	5(4)	19	"
C 420	Agricultural Chemicals	2	2(0)			2	Elective
C 421	Chemistry of Agr. Chemicals			2	2(0)	2	"
C 422	Chemistry of Agr. Chemicals, Lab.			2	0(4)	2	"
C 425	Radioisotopes for Agriculture			2	2(0)	2	"
C 434	Manufacture of Fertilizer			2	2(0)	2	"
C 436	Soil Physics	2	2(0)			2	"
C 461	Fermentation Industry			2	2(0)	2	"
C 464	Food Technology (I)	3	2(2)			3	"
C 465	Food Technology (II)			3	2(2)	3	"
C 471	Chemical Machinery	2	2(0)			2	"
L 443	Milk Processing			3	2(2)	3	"
E 444	Tanning	3	2(2)			3	"
EC 413	Agricultural Extension	2	2(0)			2	"
S 444	Chemistry of Sericulture			4	3(2)	4	"
. 402	Pedagogy			3	3(0)	3	"
		14	12(4)	23	18(10)	37	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Economics (Sophomore class)</u>							
EC 211 a	Agricultural Economics (I)	3	3(0)			3	Major
EC 212	Farm Management (I)			2	2(0)	2	"
EC 213	Agricultural Geography	3	3(0)			3	"
EC 214	History of Korean Agriculture			2	2(0)	2	"
EC 215 b	Statistics			3	3(0)	3	"
EC 216	Farm Survey Method			2	2(once)	2	"
EC 221	Modern Economics			3	3(0)	3	"
EC 222	Economic History	3	3(0)			3	"
EC 242	Constitution	3	3(0)			3	"
EC 291	Seminar in Economics (I)	1	3(0)			1	"
EC 292	Seminar in Economics (II)			1	3(0)	1	"
A 202 b	Outline of Field Crops			2	2(0)	2	"
L 201 a	Outline of Animal Science	2	3(0)			2	"
		15	18(0)	15	18(0)	30	"
EC 241	Outline of Law	2	2(0)			2	Elective
EC 243	Civil Law			3	3(0)	3	"
EC 261	Accounting			2	2(0)	2	"
EC 262	Mathematical Economics	3	3(0)			3	"
A 201 a	Outline of Horticulture	2	3(0)			2	"
F 201 a	Outline of Forestry	2	3(0)			2	"
EN 201	Outline of Agr. Engineering			2	3(0)	2	"
C 201 a	Outline of Soil Science	2	3(0)			2	"
C 233 b	Fertilizer			2	3(0)	2	"
S 201 b	Outline of Sericulture			2	3(0)	2	"
		11	14(0)	11	14(0)	22	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Economics (Junior class)</u>							
EC 311	Agricultural Economics (II)			3	3(0)	3	Major
EC 312	Farm Management (II)	3	3(0)			3	"
EC 313	Agricultural Price	3	3(0)			3	"
EC 314	Agricultural Policy (I)	3	3(0)			3	"
EC 315	Economics Statistics			3	2(2)	3	"
EC 316	Agricultural Marketing			3	3(0)	3	"
EC 320	Consumption Economics	3	3(0)			3	"
EC 331	History of Economics			4	4(0)	4	"
EC 341 a	Administrative Law	3	3(0)			3	"
EC 381	Practice of Rural Survey (Summer)	1	(once)			1	"
EC 391	Practice of Rural Survey (Winter)			1	(Once)	1	"
		16	15(0)	14	12(2)	30	"
EC 317	History of World Agriculture			3	3(0)	3	Elective
EC 321	Dynamic Economics	3	3(0)			3	"
EC 322	Public Finance	3	3(0)			3	"
EC 323	Mathematical Economics			3	3(0)	3	"
EC 324	Money & Banking			2	2(0)	2	"
EC 342	Civil Law	3	3(0)			3	"
A 341	Vegetables (I)	3	2(2)			3	"
B 452 b	Experimental Statistics			3	2(2)	3	"
		12	11(2)	11	10(2)	23	"

Subject Number	Subject Name	1st Semester		2nd semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Economics (Senior class)</u>							
EC 411	Farm Records	3	2(2)			3	Major
EC 412	Rural Sociology	3	3(0)			3	"
EC 413	Agricultural Extension	2	2(0)			2	"
EC 414	Farm Labor Problems			2	2(0)	2	"
EC 415	Agricultural Cooperation	3	3(0)			3	"
EC 416	Sampling Survey Method	2	2(0)			2	"
EC 417	Agricultural Credit			2	2(0)	2	"
EC 418	Agricultural Policy (II)			2	2(0)	2	"
EC 491	Seminar in Agricultural Econ.	1	3(0)			1	"
EC 492	Seminar in Agricultural Econ.			1	3(0)	1	"
EC 493	Seminar in Farm Management	1	3(0)			1	"
EC 494	Seminar in Farm Management			1	3(0)	1	"
EC 495	Seminar in Agricultural Price			1	3(0)	1	"
EC 496	Seminar in Agricultural Policy			1	3(0)	1	"
		15	18(2)	10	18(0)	25	"
EC 421	Economic Policy	2	2(0)			2	Elective
EC 422	Korean Economy	2	2(0)			2	"
EC 423	International Economics	3	3(0)			3	"
EC 441	Economic Law			2	2(0)	2	"
EC 442	Agricultural Law			2	2(0)	2	"
EC 443	The Law of Obligations	3	3(0)			3	"
A 421	Fruits (I)	3	2(2)			3	"
F 424	Forest Policy			3	3(0)	3	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total		Remark
		Credits	Hours	Credits	Hours	Credits	Hours	
F 462	Forest Law			2	2(0)	2		Elective
L 420	Livestock Management			4	4(0)	4		"
420	Pedagogy			3	3(0)	3		"
		13	12(2)	16	16(0)	27		"

Department of Agricultural Biology (Sophomore class)

B 211	Plant Morphology	3	2(2)			3		Major
B 212	Plant Taxonomy	4	3(2)			4		"
B 214	Plant Physiology (I)			3	2(2)	3		"
B 231	Animal Morphology			4	3(2)	4		"
B 232	Animal Taxonomy	4	3(2)			4		"
B 235	General Entomology	2	1(2)			2		"
B 255	Microbiology			3	3(0)	3		"
B 256	Microbiology, Lab.			1	0(2)	1		"
EN 215	Agricultural Meteorology			2	2(0)	2		"
C 201 b	Outline of Soil Science			2	3(0)	2		"
C 211 a	Organic Chemistry	4	3(2)			4		"
C 213 b	Biological Chemistry (I)			3	2(2)	3		"
		17	12(10)	18	15(8)	35		"
A 201 a	Outline of Horticulture	2	3(0)			2		Elective
A 202 b	Outline of Field Crops			2	3(0)	2		"
F 201 b	Outline of Forestry			2	3(0)	2		"
L 201 b	Outline of Animal Science			2	3(0)	2		"
C 203 a	Qualitative Analysis	1	0(2)			1		"
C 233 b	Fertilizer			2	3(0)	2		"
EC 215 a	Statistics	3	3(0)			3		"



Subject Number	Subject Name	1st Semester		2nd Semester		Total	Remark
		Credits	Hours	Credits	Hours	Credits	
EC 241 b	Outline of Law			2	2(0)	2	Elective
EC 242	Constitution	3	3(0)			3	"
S 201 a	Outline of Sericulture	2	3(0)			2	"
		11	12(2)	10	14(0)	21	"
<u>Department of Agricultural Biology (Junior class)</u>							
B 315	Plant Physiology (II)	3	2(2)			3	Major
B 316	Plant Ecology			4	3(2)	4	"
B 317	Principles of Plant Disease Control	2	1(2)			2	"
B 318	Fungus Diseases of Plants			3	2(2)	3	"
B 332	Animal Ecology			4	3(2)	4	"
B 333	Animal Physiology	4	3(2)			4	"
B 337	Principles of Insect Control	2	1(2)			2	"
B 338	Insects			3	2(2)	3	"
B 354	Experimental Genetics	3	2(2)			3	"
B 355	Cyto-Genetics			3	2(2)	3	"
371	Microtechnique (I) Elective			1	0(2)	1	"
B 372	Microtechnique (II)						"
B 391	Seminar in Agr. Biology	1	3(0)			1	"
B 392	Seminar in Agr. Biology			1	3(0)	1	"
		15	12(10)	19	15(12)	34	"
A 341	Food Crops (I)	3	2(2)			3	Elective
A 421	Fruit (I)	3	2(2)			3	"
F 314	Forest Protection			2	2(0)	2	"
L 231	Feeds and Feeding (I)			4	3(2)	4	"
L 402	Outline of Livestock Processing			2	3(0)	2	"
C 337	Soil Microbiology	2	2(0)			2	"
EC 341 a	Constitution	3	3(0)			3	"
		11	9(4)	2	1(2)	19	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Biology (Senior class)</u>							
B 418	Bacterial & Virus Diseases of Plants	2	1(2)			2	Major
B 436	Biological Control			2	1(2)	2	"
B 437	Chemical Control	2	1(2)			2	"
B 438	Apiculture	2	1(2)			2	"
B 452 a	Experimental Statistics	3	2(2)			3	"
B 491	Seminar in Agr. Biology	1	3(0)			1	"
B 492	Seminar in Agr. Biology			1	3(0)	1	"
C 420	Agricultural Chemicals (I)	2	2(0)			2	"
		12	10(8)	3	4(2)	15	"
A 331	Forage Crops	3	2(2)			3	Elective
A 351	Weed Control			2	1(2)	2	"
A 431	Floriculture (I)	3	2(2)			3	"
A 432	Floriculture (II)			3	2(2)	3	"
A 451	Breeding of Field Crops (I)	3	2(2)			3	"
F 412	Cardening			2	2(0)	2	"
L 333	Feeds & Feeding (II)	3	2(2)			3	"
L 420	Livestock Management			4	4(0)	4	"
L 436	Range Management	2	2(0)			2	"
C 411	Nutrition Chemistry			2	2(0)	2	"
C 425	Radioisotopes for Agriculture			2	2(0)	2	"
EC 211 b	Agricultural Economics (I)			3	3(0)	3	"
EC 413	Agricultural Extension	2	2(0)			2	"
420	Pedagogy			3	3(0)	3	"
		16	12(8)	21	19(4)	37	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Sericulture (Sophomore class)</u>							
S 211	Mulberry tree Science (I)			4	3(2)	4	Major
EN 215	Agricultural Meteorology			2	2(0)	2	"
C 201 b	Outline of Soil Science			2	3(0)	2	"
C 211 a	Organic Chemistry	4	3(2)			4	"
C 213 b	Biological Chemistry (I)			3	2(2)	3	"
C 233 b	Fertilizer			2	3(0)	2	"
EC 215 a	Statistics	3	3(0)			3	"
B 235	General Entomology	2	1(2)			2	"
B 354	Experimental Genetics	3	2(2)			3	"
B 355	Cyto Genetics			3	2(2)	3	"
		12	9(6)	16	15(6)	28	"
B 201 b	Outline of Plant Physiology			2	3(0)	2	Elective
B 255	Microbiology			3	3(0)	3	"
B 256	Microbiology, Lab.			1	0(2)	1	"
B 301	Outline of Plant Pathology	2	3(0)			2	"
B 372	Microtechnique (II)			1	0(2)	1	"
A,201 a	Outline of Horticulture	2	3(0)			2	"
A 202 b	Outline of Field Crops			2	3(0)	2	"
A 201 a	Outline of Animal Science	2	3(0)			2	"
EN 203	General Drawing			2	3(0)	2	"
EN 204	Outline of Surveying	2	3(0)			2	"
C 203 a	Qualitative Analysis	1	0(2)			1	"
EC 241 a	Outline of Law	2	2(0)			2	"
EC 242	Constitution	3	3(0)			3	"
		14	17(2)	11	12(4)	25	"

Subject Number	Subject Name	<u>1st Semester</u>		<u>2nd Semester</u>		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Sericulture (Junior class)</u>							
S 311	Mulberry Tree Science (II)	4	3(2)			4	Major
S 312	Mulberry Disease	4	3(2)			4	"
S 321	Silkworm Anatomy	4	3(2)			4	"
S 322	Silkworm Physiology			4	3(2)	4	"
S 323	Rearing of Silkworms	4	4(0)			4	"
S 324	Silkworm Pathology			4	3(2)	4	"
S 325	Practice (I)	2	0(4)			2	"
S 326	Practice (II)			2	0(4)	2	"
S 341	Materials of Raw Silk			2	1(2)	2	"
S 391	Seminar in Sericulture	1	3(0)			1	"
S 392	Seminar in Sericulture			1	3(0)	1	"
		19	16(10)	13	10(10)	32	"
EN 333	Electrical Engineering			3	2(2)	3	Elective
C 420	Agricultural Chemicals	2	2(0)			2	"
EC 211 b	Agricultural Economics (I)			3	3(0)	3	"
EC 212	Farm Management (I)			2	2(0)	2	"
EC 314	Agricultural Policy	3	3(0)			3	"
EC 341 b	Administrative Law			3	3(0)	3	"
EC 442	Agricultural Law			2	2(0)	2	"
B 303	Principles of Insect Control	2	1(2)			2	"
		7	6(2)	13	12(2)	20	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total	
		Credits	Hours	Credits	Hours	Credits	Remark
<u>Department of Sericulture (Senior class)</u>							
S 421	Production of Silkworm Eggs	3	2(2)			3	Major
S 422	Silkworm Breeding			2	2(0)	2	"
S 423	Practice (III)	2	0(4)			2	"
S 441	Silk Manufacture	5	4(2)			5	"
S 444	Sericultural Chemistry			4	3(2)	4	"
S 445	Fibers			4	3(2)	4	"
S 462	Sericultural Management			3	3(0)	3	"
S 491	Seminar in Sericulture	1	3(0)			1	"
S 492	Seminar in Sericulture			1	3(0)	1	"
		11	9(8)	14	14(4)	25	"
S 424	Practice (IV)			2	0(4)	2	Elective
S 442	Machines of Silk Manufacture	4	4(0)			4	"
S 443	Factory Management			2	2(0)	2	"
S 461	History of Sericulture	2	2(0)			2	"
S 463	Sericultural Policy			2	2(0)	2	"
C 425	Radioisotopes for Agriculture			2	2(0)	2	"
EC 413	Agricultural Extension	2	2(0)			2	"
EC 415	Agricultural Cooperation	3	3(0)			3	"
B 452 a	Experimental Statistics	3	2(2)			3	"
402	Pedagogy			3	3(0)	3	"
		14	13(2)	11	9(4)	25	"

Subject Number	Subject	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
<u>Department of Agricultural Home Economics (Sophomore class)</u>							
H 211	Science of Clothing (I)	3	2(2)			3	Major
H 212	Science of Clothing (II)			3	2(2)	3	"
H 213	Design & Clothing Construction (I)	3	2(2)			3	"
H 214	Design and Clothing Construction (II)			3	2(2)	3	"
H 221	Meal Planning & Preparation (I)	3	2(2)			3	"
H 222	Meal Planning & Preparation (II)			3	2(2)	3	"
H 231	Psychology			2	2(0)	2	"
H 251	Related Arts	4	3(2)			4	"
H 261	Family Health & Hygiene	2	2(0)			2	"
C 203 b	Qualitative Analysis (II)			1	0(2)	1	"
C 211 b	Organic Chemistry			4	3(2)	4	"
		15	11(8)	16	11(10)	31	"
H 232	Physiology			2	2(0)	2	Elective
H 271	Music	1	0(2)			1	"
A 202	Outline of Field Crops	2	3(0)			2	"
F 201 b	Outline of Forestry			2	3(0)	2	"
L 201 b	Outline of Animal Science			2	3(0)	2	"
C 201 a	Outline of Soil Science	2	3(0)			2	"
C 233 a	Fertilizer	2	3(0)			2	"
EC 211 b	Agricultural Economics (I)			3	3(0)	3	"
B 202 a	Outline of Genetics	2	3(0)			2	"
B 255	Microbiology			3	3(0)	3	"
S 201 a	Outline of Sericulture	2	3(0)			2	"
		11	15(2)	12	14(0)	23	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		

Department of Agricultural Home Economics (Junior class)

H 311	Tailoring (I)	2	1(2)			2	Major
H 312	Tailoring (II)			2	1(2)	2	"
H 321	Nutrition	4	4(0)			4	"
H 322	Science of Food	3	2(2)			3	"
H 323	Diet Therapy			2	1(2)	2	"
H 331	Child Care and Child Development (I)	2	1(2)			2	"
H 332	Child Care and Child Development (II)			2	2(0)	2	"
H 351	Agricultural Craft			2	1(2)	2	"
H 371	Family Relationship			3	3(0)	3	"
H 381	Housing, Furniture, & Household Equipment			2	2(0)	2	"
H 382	Applied Physics	2	1(2)			2	"
H 391	Seminar in Agr. Home Economics	1	3(0)			1	"
H 392	Seminar in Agr. Home Economics			1	3(0)	1	"
A 301	Horticulture (I)	2	1(2)			2	"
		16	13(10)	14	13(6)	30	"
H 372	Recreation	1	0(2)			1	Elective
H 373	Etiquette			1	0(2)	1	"
H 390	Audio-Visual Education			2	1(2)	2	"
F 412	Cardening			2	2(2)	2	"
L 402	Outline of Livestock Products			2	3(0)	2	"
C 213 a	Biological Chemistry (I)	3	2(2)			3	"
EC 216	Farm Survey Method			2	2(0)	2	"
EC 242	Constitution	3	3(0)			3	"
B 305	Applied Entomology			2	1(2)	2	"

Subject Number	Subject Name	1st Semester		2nd Semester		Total Credits	Remark
		Credits	Hours	Credits	Hours		
B 371	Microtechnique (I)			1	0(2)	1	Elective
B 438	Apiculture	2	1(2)			2	"
		9	6(6)	12	9(8)	21	"
<u>Department of Agricultural Home Economics (Senior class)</u>							
H 411	Functional Clothing (I)	2	1(2)			2	Major
H 412	Functional Clothing (II)			2	1(2)	2	"
H 421	Experimental Cookery(I)	3	2(2)			3	"
H 422	Experimental Cookery (II)			3	2(2)	3	"
H 441	Home Management	4	4(0)			4	"
H 442	Home Management Laboratory			2	5 wks	2	"
H 491	Seminar in Agr. Home Econ.(I)	1	3(0)			1	"
H 492	Seminar in Agr.Home Econ. (II)			1	3(0)	1	"
H 493	Teaching Methods of Extension			2	2(0)	2	"
A 401	Horticulture (II)	2	1(2)			2	"
L 401	Outline of Livestock Products	2	3(0)			2	"
		14	14(6)	10	8(4)	24	"
H 423	Institutional Management	2	1(2)			2	Elective
H 461	Home Care of Sick			2	1(2)	2	"
C 411	Chemistry of Nutrition			2	2(0)	2	"
C 414	Chemistry of Foods	3	3(0)			3	"
C 425	Radioisotops for Agriculture			2	2(0)	2	"
EC 241 b	Outline of Law			2	2(0)	2	"
EC 412	Rural Sociology	3	3(0)			3	"
EC 415	Agricultural Cooperation	3	3(0)			3	"
S 445	Fiber			4	3(2)	4	"
402	Pedagogy			3	3(0)	3	"
		11	10(2)	15	13(4)	26	"