

Bachelor of Pharmacy Program

English Program 2004

1. Degree Program

Bachelor of Pharmacy

2. Degree Offered

Bachelor of Pharmacy

B.(Pharm.)

3. Responsible Faculty

Faculty of Pharmaceutical Sciences

Khon Kaen University

4. Rationale, Philosophy, and Objectives

4.1 Rationale

A Bachelor of Pharmacy Program, organized by the Faculty of Pharmaceutical Sciences Khon Kaen University has been established to produce qualified pharmacists to the standard of practice of pharmacy. The faculty aims to establish graduates with well-balanced knowledge, morals and wisdom. The program comprises general education, professional and elective courses, to prepare graduates to be qualified pharmacists. The revision of the program is a consequence of the economic and social changes and the reforms of the country health policy. In addition, the revision of the program follows the Standard of Pharmacy Practice (2002) established by the Pharmacy Council, and will be used for examination of licensed pharmacists.

4.2 Philosophy

To produce graduates to the standard required of pharmacy practice in Thailand (2002).

4.3 Objectives

The objectives of the Bachelor of Pharmacy Program are to produce graduates with the ability to:

- 4.3.1 Gain academic knowledge both in pharmaceutical sciences and professional skills.
- 4.3.2 Create and to possess reasonably thinking with moral philosophy, to analyze, solve problems and make reasonable decisions.
- 4.3.3 Practice in pharmacy areas which will serve the country's economy and the country's development plans.
- 4.3.4 Possess vision, to be creative with leadership manner in order to work compatibly with other professionals.

5. Effective Dates

The program will commence in the first semester of the academic year 2004.

6. Qualification of the Applicants

Applicants must have qualification in accordance with Khon Kaen University Regulation for Bachelor Degree 1999, Section 2, number 9 (Appendix number 4) and conforming for any requirements of the Regulation of Khon Kaen University that may be revised thereafter.

7. Admission Requirement

The admission adheres to the Regulations of Khon Kaen University on Bachelor Level Education, 1999, Section 2, number 8, (Appendix number 4) or the newly modified Regulations of Khon Kaen University.

8. Education System

Adherence to the Regulations of Khon Kaen University on Bachelor Level Education, 1999, Section 1, (Appendix number 4), or the newly modified Regulations of Khon Kaen University.

9. Duration of the Program

- 9.1 The regular duration of study is 5 years or 10 semesters.
- 9.2 The duration of study must not exceed 10 years or 20 semesters.
- 9.3 The duration of study must not be less than 9 semesters.

10. Registration

Adherence to the Regulations of Khon Kaen University on Bachelor Level Education, 1999, Sections 4, 5, and 6 (Appendix 4), or the newly modified Regulations of Khon Kaen University.

11. Evaluation and Graduation

Adherence to the Regulations of Khon Kaen University on Bachelor Level Education, 1999, Section 8 and 9, or the newly modified Regulations of Khon Kaen University.

12. Instructors

12.1 Coordinator Instructors

**Associate Professor Bung-Orn Sripanidkulchai, Dean, Faculty of
Pharmaceutical Sciences, Khon Kaen University**

12.2 Regular Instructors

12.2.1 Department of Clinical Pharmacy

No	Name	Qualification and Discipline	Academic Position
1.	Mr.Wiwat Arkaravichien	B.Sc.(Pharm.) M.Sc.(Pharmacy) Ph.D.(Pharmacology)	Associate Professor
2.	Mrs.Aporanee Chaiyakum	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharmacy) Board Certified in Pharm.Care	Assistant Professor
3.	Mrs.Chulaporn Limwatananon	B.Sc.(Pharm.) M.Sc.(Hospital Pharmacy) Ph.D.(Social and Administrative Pharmacy)	Assistant Professor

No	Name	Qualification and Discipline	Academic Position
4.	Ms.Julraht Konsil	B.Sc.(Pharm.) Ph.D.(Pharmacy)	Assistant Professor
5.	Mrs.Narumol Jareansiripornkul	B.Sc.(Pharm.)(First Class Honors) M.Sc.(Pharmacy) Ph.D.(Clinical Pharmacy)	Assistant Professor
6.	Mrs.Nutjaree Pratheepawanit	B.Sc.(Pharm.) Pharm.D. Ph.D.(Clinical Pharmacy)	Assistant Professor
7.	Mrs.Yupaporn Preechagoon	B.Sc.(Pharm.)(Second Class Honors) M.Sc.(Pharmacy) Ph.D.(Pharmacokinetics)	Assistant Professor
8.	Mrs.Acharawan Toparkngarm*	B.Sc.(Pharm.)(Second Class Honors)	Lecturer
9.	Mr.Chedchai Soontornpas*	B.Sc.(Pharm.) M.Sc.(Pharmacy)	Lecturer
10.	Ms.Chuleekorn SirisangtraKul*	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Clinical Pharmacy)	Lecturer
11.	Mr.Denpong Patanasethanon	B.Sc.(Pharm.) M.Pharm.(Pharmacy)	Lecturer
12.	Mrs.Nungruthai Suksai*	B.Sc.(Pharm.)(Second Class Honors) M.Sc.(Clinical Pharmacy)	Lecturer
13.	Mr.Prapoch Wattanalumlerd*	B.Sc.(Pharm.)	Lecturer
14.	Ms.Sirilux Jaisue	B.Sc.(Pharm.) M.Pharm.(Clinical Pharmacy)	Lecturer
15.	Mr.Somchai Suriyakrai*	B.Sc.(Pharm.) M.Sc.(Clinical Pharmacy)	Lecturer
16.	Mr.Suphat Subongkot	B.Sc.(Pharm.) M.Sc.(Clinical Research) PharmD, BCPS, BCOP	Lecturer

No	Name	Qualification and Discipline	Academic Position
17.	Ms.Verawan Uchaipichat*	B.Sc.(Pharm.) M.Sc.(Pharmacy)	Lecturer
8.	Ms.Wanvilai Tungsateanrapap	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Clinical Pharmacy)	Lecturer

12.1.2 Department of Botany and Pharmacognosy

No	Name	Qualification and Discipline	Academic Position
1.	Mr.Chayan Picheansoontorn	B.Sc.(Pharm.) Ph.D.(Natural Product Chemistry and Pharmacognosy)	Assistant Professor
2.	Ms.Waraporn Putalun	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharmacognosy) Ph.D.(Pharm.Sc.)	Assistant Professor
3.	Mr.Kiettipum Phontree	B.Sc.(Bio.Tech.) M.Sc.(Bio.Tech.)	Lecturer
4.	Ms.Natsajee Naunkhaw	B.Sc.(Pharm.) M.Sc.(Pharmacy)	Lecturer
5.	Ms.Srisomporn Pripem	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharm.Chem.) Ph.D.(Pharmaceutical Sciences)	Lecturer
6.	Mr.Supachai Tiyavorrannun	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharmacognosy)	Lecturer
7.	Mr.Tanit Padumanonda*	B.Sc.(Pharm.) MSc.(Medicinal Chemistry and Pharmacognosy)	Lecturer
8.	Mr.Thaweesak Titimatharaj*	B.Sc.(Biology) M.Sc.(Botany)	Lecturer
9	Mr.Tripetch Kanchanapoom	B.Sc.(Pharm.) M.Sci.(Pharmacognosy) Ph.D.(Pharmaceutical Sciences)	Lecturer

No	Name	Qualification and Discipline	Academic Position
10.	Ms.Varima Wongpanich	B.Sc.(Pharm.) M.Pharm.(Pharmacy) Ph.D.(Pharmacognosy)	Lecturer

12.1.3 Department of Pharmaceutical Chemistry

No	Name	Qualification and Discipline	Academic Position
1.	Mrs.Bungorn Sripanidkulchai	B.Sc.(Pharm.)(First Class Honors, Gold Medal) M.Sc.(Bio.Chem.) Ph.D.(Cell Biology)	Associate Professor
2.	Ms.Chantana Aromdee	B.Sc.(Pharm.) (Second Class Honour) M.Sc.(Org.Chem.) Ph.D.(Pharm.Chem.)	Associate Professor
3.	Ms.Jinda Wangboonskul	B.Sc.(Pharm.) M.Pharm.(Pharm.Chem.) Ph.D.(Pharm.Chem.)	Associate Professor
4.	Mr.Sumon Sakolchai	B.Law.(First Class Honors) B.Sc.(Pharm.)(First Class Honors) M.Sc.(Pharmacology) Ph.D.(Med.Chem.)	Associate Professor
5.	Ms.Kanokwan Jarukamjon	B.Sc.(Pharm.)(First Class Honors) M.Pharm.(Pharm.Chem.) Ph.D.(Pharmaceutical Sciences)	Assistant Professor
6.	Mrs.Supavadee Daodee*	B.Sc.(Pharm.) M.Pharm.(Pharm.Chem.)	Assistant Professor
7.	Mrs.Suwanna Vorarat	B.Sc.(Pharm.)(First Class Honors) M.Sc.(Pharmacy) Ph.D.(Pharm.Chem.)	Assistant Professor
8.	Ms.Jantana Boonyarat*	B.Sc.(Pharm.) M.Sc.(Pharm.Chem)	Lecturer
9.	Ms.Nathida Weerapreyakul	B.Sc.(Pharm.) Ph.D.(Pharmaceutical Sciences)	Lecturer

No	Name	Qualification and Discipline	Academic Position
10.	Ms.Orawan Monthakantirat*	B.Sc.(Pharm.) M.Pharm.(Pharm.Chem.)	Lecturer
11.	Ms.Ploentip Puthongking*	B.Sc.(Pharm.)	Lecturer
12.	Ms.Suthasinee Pitchayawasin*	B.Sc.(Pharm.) M.Pharm.(Pharm.Chem.)	Lecturer
13	Mr. Wirat Ruengsitagoon	B.Sc. (Chemistry) M.Sc. (Analytical chemistry)	
14.	Ms.Yaowared Sumanont*	B.Sc.(Pharm.) M.Pharm.(Pharm.Chem.)	Lecturer

12.1.4 Department of Toxicology

No	Name	Qualification and Discipline	Academic Position
1.	Mrs.Kannikar Chatsantiprapa	B.Sc.(Pharm.)(Second Class Honors) M.Sc.(Pharmacology) Ph.D.(Toxicology)	Associate Professor
2.	Mrs.Skunrat Ussanawarong	B.Sc.(Nursing) M.Sc.(Forensic Science)	Associate Professor
3.	Mr.Wongwiwat Tassaneeyakul	B.Sc.(Pharm.) M.Sc.(Pharmacology) Ph.D.(Clinical Pharmacology)	Associate Professor
4.	Ms.Achara Srisodsai*	B.Sc.(Pharm.)(Second Class Honors)	Lecturer
5.	Ms.Piyada Songsermsakul	B.Sc.(Pharm.) M.Sc.(Pharmacology)	Lecturer
5.	Mr.Pramote Mahakunakorn*	B.Sc.(Pharm.)(Second Class Honors) M.Sc.(Pharmacology)	Lecturer
6.	Ms.Supatra Porasuphatana	B.Sc.(Pharm.) M.Sc.(Pharmacology) Ph.D.(Pharmacology)	Lecturer
7.	Mr.Supol Boonsaner	B.Sc.(Pharm.)	Lecturer

12.1.5 Department of Pharmaceutical Technology

No	Name	Qualification and discipline	Academic position
1.	Mrs.Aroonsri Priprem	B.Sc.(Pharm.) Ph.D.(Biopharmaceutics)	Associate Professor
2.	Mr.Theera Rittirod	B.Sc.(Pharm.) M.Sc.(Pharmacy) Ph.D.(Pharm.Sci.)	Associate Professor
3.	Ms.Watcharee Khunkitti	B.Sc.(Pharm.) M.Sc.(Pharmaceutics) Ph.D.(Pharmaceutics)	Associate Professor
4.	Mr.Arom Tattawasart	B.Sc.(Pharm.) M.Pharm.(Indust.Pharm.) Ph.D.(Pharmaceutics)	Assistant Professor
5.	Mr.Detpon Preechagoon	B.Sc.(Pharm.) M.Pharm.(Indust.Pharm.) Ph.D.(Pharmacy)	Assistant Professor
6.	Ms.Janejira Ruangchayajatuporn	B.Sc.(Pharm.) M.Pharm.(Indust.Pharm.)	Assistant Professor
7.	Ms.Jomjai Peerapattana	B.Sc.(Pharm.) M.Sc.(Pharmacy) Ph.D.(Pharmaceutics)	Assistant Professor
8.	Mr.Thaned Pongjanyakul	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharmaceutics) Ph.D.(Pharmaceutics)	Assistant Professor
9.	Mr.Akapol Limpongsa*	B.Sc.(Pharm.) M.Pharm.(Indust.Pharm.)	Lecturer
10.	Ms.Uracha Rungsardthong	B.Sc.(Pharm.)(First Class Honors) Ph.D. (Pharmacy)	Lecturer
11.	Ms.Doungkamol Leaokittikul*	B.Sc.(Pharm.)	Lecturer
12.	Ms.Manita Hanpanitcharoen	B.Sc.(Pharm.) M.Sc.(Pharmacy) Ph.D.(Pharmaceutics)	Lecturer
13.	Mr.Narin Chansri*	B.Sc.(Pharm.) M.Sc.(Pharmacy)	Lecturer
14.	Ms.Padungkwan Chitropat	B.Sc.(Pharm.) M.Pharm.(Indust.Pharm.)	Lecturer

No	Name	Qualification and discipline	Academic position
15.	Ms.Patravadee Chancham	B.Sc.(Pharm.) Ph.D.(Pharm.Biotech.)	Lecturer
16.	Mrs.Ratiya Kukhetpitakwong*	B.Sc.(Pharm.) M.Pharm.(Pharmaceutics)	Lecturer
17.	Mrs.Saowanee Jaratveakin*	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Pharmaceutics)	Lecturer
18.	Ms.Sudarat Eaimtrakarn	B.Sc.(Pharm.)(Second Class Honors) M.Pharm.(Indust.Pharm.) Ph.D.(Pharm.Sci.)	Lecturer

12.1.6 Department of Social and Administration Pharmacy

No	Name	Qualification and discipline	Academic position
1.	Mr.Chanchai Charupash	B.Sc(Pharm.) M.Sc.(Com.Med.) Dr.P.H.(Pub.Health Admin.)	Assistant Professor
2.	Mrs.Nusaraporn Kessomboon	B.Sc.(Pharm.) M.Sc.(Health Economics) Ph.D.(Pharmacy)	Assistant Professor
3.	Mrs.Supatra Chadbunchachai	B.Sc.(Pharm.) M.P.H. Ph.D.(Pharmacy)	Assistant Professor
4.	Mr.Supon Limwattananon	B.Sc.(Pharm.) M.P.H.M. Ph.D.(Social and Administrative Pharmacy)	Assistant Professor
5.	Mrs.Areewan Cheawchanwattana*	B.Sc.(Pharm.) M.P.H.(Biostat.)	Lecturer
6.	Ms.Kornkaew chanthapasa*	B.Sc.(Pharm.) M.Sc.(Medical Anthropology).	Lecturer
7.	Mrs.Maneerat Layton*	B.Sc.(Pharm.) M.B.A.	Lecturer
8.	Mr.Paiboon Daosodsai	B.Sc.(Pharm.) M.Pharm.(Phar.Admin.) Ph.D.(Epidemiology)	Lecturer

No	Name	Qualification and discipline	Academic position
9.	Mr.Prathan Luecha	B.Sc.(Pharm.) M.Pharm.(Phar.Admin.)	Lecturer
10.	Ms.Raksaworn Arsanam*	B.Sc.(Pharm.)	Lecturer
11.	Ms.Tipaporn Kanjanarach*	B.Sc.(Pharm.) M.P.H.	Lecturer
12.	Mr.Viboon Wattananamkul*	B.Sc.(Pharm.) M.Sc.(Com.Dev.)	Lecturer
13.	Ms.Wannee Chaichalempong*	B.Sc.(Pharm.) M.B.A.	Lecturer
14.	Mr. Jeffrey Roy John	B.Sc. (Chemistry) M.Sc. (Honours) Ph.D.(Chemical Engineering)	Lecturer

***Study Leave**

12.3 Instructors of other Faculties

12.2.1 Faculty of Education

12.2.1.1 Instructors from Department of Educational psychology

12.2.2 Faculty of Sciences

12.2.2.1 Instructors from Department of Physics

12.2.2.2 Instructors from Department of Biology

12.2.2.3 Instructors from Department of Biochemistry

12.2.2.4 Instructors from Department of Mathematics and
Statistics

12.2.3 Faculty of Humanities and Social Sciences

12.2.3.1 Instructors from Department of Social Sciences and
Humanities

12.2.3.2 Instructors from Department of Foreign Languages

12.2.4 Instructors from Department of Social Sciences

12.2.4.1 Instructors from Department of Philosophy and Religion

12.2.5 Faculty of Public Health

12.2.5.1 Instructors from Department of Statistics

12.2.6 Faculty of Medicine

12.2.6.1 Instructors from Department of Anatomy

12.2.6.2 Instructors from Department of Physiology

12.2.6.3 Instructors from Department of Pathology

12.2.6.4 Instructors from Department of Biochemistry

12.2.6.5 Instructors from Department of Parasitology

12.2.6.6 Instructors from Department of Microbiology

12.2.6.7 Instructors from Department of Pharmacology

12.2.6.8 Instructors from Department of General medicines

12.4 Special Lecturers

No	Name	Qualification and discipline	Academic position
1.	Mr Ampol Mitrevej	Ph.D.(Pharmaceutics)	Professor
2.	Mr. Nijsiri Ruangrunsi	Ph.D.(Pharm.Sc.)	Associate Professor
3.	Mr Boonyuen Kijwijan	M.Sc.(Botany)	Associate Professor
4.	Mrs Pranom Chantaranothai	Ph.D.(Plant Taxonomy)	Associate Professor
5.	Mrs La-orsri Sanoamuang	Ph.D.(Zoology)	Associate Professor
6.	Mrs Suwanna Arunpongpaisal	Doc.Med.(Psychology)	Associate Professor
7.	Mrs Prapaporn Tungthanathanich	Ph.D.(Physiology)	Assistant Professor
8.	Mrs Sirinda Yunchalard	Ph.D.(Biotechnology)	Assistant Professor
9.	Mr Kanit Suwannaborirak	Ph.D.(Natural Products Chemistry and Pharmacognosy)	Lecturer
10.	Mrs Turenjai Dooljindachabaporn	M.Eng.(Environmental Technology and Management)	Lecturer
11.	Mr Vichai Leelavatcharamas	Ph.D.(Chemical Engineering)	Lecturer
12.	Mr Anuchit Raprukarn	Ph.D.(Chemistry)	Lecturer
13.	Mr Arwoot Yimtae	M.Eng. (Envir.)	Lecturer
14.	Mrs Yapa Tiengthawat	B.Sc.(Pharm.)	Pharmacist
15.	Mr Suthipong Chaingthong	M.Pharm.(Food Chem.)	-
16.	Mr. Peter Brian Setter	Master of Technology	-
17.	Ms Jenette Angle	PharmD.	Associate Professor

13. Student population

13.1 Study plan

Student population	Year				
	2004	2005	2006	2007	2008
First year students	50	50	50	50	50
Second year students		50	50	50	50
Third year students			50	50	50
Fourth year students				50	50
Fifth year students					50
Total	50	100	150	200	25
Graduates expected					50

14. Facilities and Teaching Equipment

14.1 Facilities

14.1.1 Existing Facilities (Faculty of Pharmaceutical Sciences)

Building 1

1. Department of Clinical Pharmacy
 - 1.1 Lecturer Office 5 rooms
 - 1.2 Administration 1 room
2. Department of Pharmaceutical Technology
 - 2.1 Lecturer Office 11 rooms
 - 2.2 Administration 1 room
3. Department of Pharmaceutical Botany and Pharmacognosy
 - 3.1 Lecturer Office 8 rooms
 - 3.2 Administration 1 room
4. Department of Toxicology
 - 4.1 Lecturer Office 7 rooms
 - 4.2 Administration 1 room
5. Department of Pharmaceutical Chemistry
 - 5.1 Lecturer Office 10 rooms
 - 5.2 Administration 1 room
6. Conference Room 20 seats 1 room

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|-----------------------------|--------|
| 7. Conference Room 15 seats | 1 room |
| 8. Conference Room 12 seats | 1 room |

Building 2

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| 1. Pharmaceutical Technology Laboratory | |
| 1.1 Laboratory | 15 rooms |
| 1.2 Equipment Room | 4 rooms |
| 1.3 Chemical Store Room | 2 rooms |
| 1.4 Technical Staff Office | 1 room |
| 2. Pharmaceutical Botany and Pharmacognosy Laboratory | |
| 2.1 Laboratory | 5 rooms |
| 2.2 Equipment Room | 1 rooms |
| 3. Pharmaceutical Chemistry Laboratory | |
| 3.1 Laboratory | 3 rooms |
| 3.2 equipment Room | 4 rooms |
| 4. Academic and Research Services Unit | |
| 4.1 Laboratory | 14 rooms |
| 5. Toxicology Laboratory | |
| 5.1 Laboratory | 3 rooms |
| 5.2 Equipment Room | 2 rooms |
| 5.3 Glass wears Store Room | 1 room |
| 6. Lecture Theatre 100 seats | 2 rooms |
| 7. Lecture Theatre 200 seats | 1 room |
| 8. Lecture Theatre 60 seats | 2 rooms |
| 9. Lecture Theatre 25 seats | 3 rooms |
| 10. Audio/visual Centre | 1 room |
| 11. Store Room | 3 rooms |
| 12. Administrative Board Office | |
| 12.1 Dean Office | 1 room |
| 12.2 Assistant Dean Office | 4 rooms |
| 12.3 Administration | 1 room |
| 12.4 Secretary Office | 1 room |
| 12.5 Head of Deputy Office | 3 rooms |
| 12.6 Deputy Office | 1 room |
| 12.7 Conference Room | 1 room |

12.8 Data Store Room	1 room
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Building A: Fifth Floor (belongs to Faculty of Associated Medical Sciences)

1. Department of Social and Administrative Pharmacy

1.1 Lecturer offices	15 rooms
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1.2 Conference room	1 room
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1.3 Administration	1 room
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1.4 Postgraduate room	1 room
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2. Clinical Pharmacy laboratory	1 room
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3. General Purpose and Student Activities Building

3.1 Student Union and Clubs	4 rooms
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3.2 Pharmacy Alumni	1 room
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3.3 Conference room	2 rooms
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Other Buildings are of Faculty of Sciences, Faculty of Humanities and Social Sciences, Faculty of Education, Faculty of Nursing, Faculty of Medicines. Private and government sector are such as Hospitals and Pharmaceutical Industries for professional training.

14.1.2 Additional required facilities

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15. Libraries

The libraries in Khon Kaen University have a variety of textbooks, and books, journals involved in the Pharmaceutical Sciences field as follow:

15.1 Central library

15.1.1 Books

in Thai	12,791 items
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in English	11,551 items
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15.1.2 Journals

in Thai	75 items
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in English	82 items
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15.1.3 Electronic Medias

Cassettes	70 items
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Videos	86 items
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Computer files	- item
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15.1.4 Databases

15.1.4.1 Electronic Medias

15.1.4.1.1 Reference Database

15.1.4.1.1.1 CD-ROM

1. Chemistry Citation Index
2. Dissertation Abstracts Ondisc
3. International Pharmaceutical Abstracts
4. HealthSTAR
5. Life Sciences
6. MEDLINE
7. Science Citation Index

15.1.4.1.1.2 Online system

1. Dissertation Abstracts Online
2. MEDLINE
3. SciFinder

15.1.4.1.2 Full Text Database

15.1.4.2.1 Journals

1. LINK (Springer)
2. Science Direct
3. Wilson OmmiFile: Full text Select
4. ACS Publications
5. ProQuest Medical Library
6. MIT-Art and Architecture
7. ABI/INFORM
8. AIP/APS

15.1.4.2.2 Books

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15.1.5 KKU Library Database

15.1.5.1 Bibliographic Database

15.1.5.1 Thesis Abstracts Database

15.1.5.2 Current Contents Database

15.2 Library of Faculty of Pharmaceutical Sciences

15.2.1 Books

in Thai	7,321items
in English	3,983 items
15.2.2 Journals	
in Thai	52 items
in English	26 items

15.2.3 Electronic Medias

15.2.3.1 Reference Database

- Online CD-ROM
 - HealthStar
 - Nursing & Allied Health
 - International Pharmaceutical Abstracts
 - Science Citation Index
 - Dissertation Abstracts
 - ABI/Inform
 - MEDLine
 - Sci Finder
 - Chemistry Citation Index

15.2.3.2 Full Text Database

- Science Direct
- Springer Link
- ProQuest Medical Library
- H.W. Wilson OmniFile
- ACS Publications.

15.2.3.3 Online Public Access Catalog, OPAC

16. Budget

Expenditures	Fiscal Year (Baht)				
	2003	2004	2005	2006	2007
Wages and salary	22,828,200	24,255,000	25,710,000	27,253,000	28,888,000
Overheads/utility	3,809,300	4,025,000	4,427,000	4,870,000	5,357,000
Total (operating expenditure)	26,291,300	28,280,000	30,137,000	32,123,000	34,245,000
Capital	5,000,000	22,026,000	13,800,000	4,694,000	5,000,000
1 year construction	-	10,000,000	6,000,000	8,000,000	5,000,000
New building construction	-	33,079,000	66,159,000	66,159,000	-
Total (Investment expenditure)	5,000,000	65,105,000	85,959,000	78,853,000	10,000,000
Supporting budget	2,800,000	3,688,000	3,688,000	3,688,000	3,688,000
Grand Total	34,091,300	97,073,000	116,096,000	114,664,000	47,933,000

Estimated unit cost per head per year = 114,542 Baht

17. Curriculum

17.1 Total Credit	186 credits
17.2 Program Structure	
17.2.1 General Education	30 credits
Language	15 credits
Other General Education	15 credits
17.2.2 Specific Subjects	150 credits
Basic Sciences and Mathematics	18 credits
Core subjects	114 credits
Basic Professional Subjects	21 credits
Professional Subjects	93 credits
Subjects for Special Interest	18 credits
17.2.3 Free Electives (not less than)	6 credits
Grand Total	186 credits

17.3 Courses

(Subject* are new Subjects)

1. General Education	30 credits
1.1 Language Group	15 credits
411 106 English for Health Sciences I	3(3-0-2)
411 206 English for Health Sciences II	3(3-0-2)
411 236 Technical English for Pharmaceutical Sciences	2(2-0-2)
*411 xxx Professional English for Pharmacist	4(4-0-8)
One Subject from Language Group	3 credits
1.2 Other General Subjects	15 credits
213 110 General Psychology	2(2-0-4)
412 102 Information Literacy	2(2-0-2)
Choose one subject from	
320 101 Microcomputer and Application	2(2-0-1)
320 102 Computer Usage in Scientific Methods	3(2-2-0)
One Subject (One credit) from General Group of Physical Education	
7-8 credits from list below	
*000 101 Isarn Cultural Landscape	3(1-6-3)
300 102 Science in Everyday Life	3(3-0-6)
400 100 Man, Society and Culture	3(3-0-3)

400 101 Man and Nature	3(3-0-3)
400 102 Human and the Self	3(3-0-6)
414 151 Introduction to Law	3(3-0-0)
414 340 Leadership	3(3-0-0)
416 216 Public Speaking	2(1-2-2)
419 110 Introduction to Philosophy	2(2-0-2)
419 122 Religions and Society and Culture	3(3-0-3)
419 124 Buddhism and Thai Society and Culture	3(3-0-3)
419 125 Buddhism and Daily Life	2(2-0-2)
861 101 Art Appreciation	2(2-0-0)
864 101 Music Appreciation	2(2-0-0)
961 261 Principles of Management	3(3-0-2)
962 100 Principles of Economics	2(2-0-0)
963 110 Preliminary to Business	3(3-0-1)
963 111 Introduction to Management	2(2-0-0)
Or Other Subjects to be released later	

2. Specific Subject Group

150 credits

2.1 Basic Sciences and Mathematics Group

18 credits

311 101 Biology I	3(3-0-6)
311 102 Biology Laboratory I	1(0-3-0)
315 106 Introductory Physics	3(3-0-0)
315 181 General Physics Laboratory I	1(0-3-0)
312 112 Basic Organic Chemistry	3(3-0-0)
312 113 Basic Organic Chemistry Laboratory	1(0-3-0)
312 234 Biophysical Chemistry	3(2-3-0)
321 102 General Mathematics	3(3-0-0)

2.2 Core Subjects Group

114 credits

2.2.1 Basic Professional Subjects

21 credits

361 216 Human Anatomy	4(3-4-0)
362 216 Microbiology for Pharmaceutical Science Students	4(3-3-1)
363 216 Biochemistry for Pharmaceutical Science Students	4(3-3-2)
364 216 Parasitology for Pharmaceutical Science Students	2(1.5-2-0)
*365 316 Pathology for Pharmaceutical Science Students	3(3-0-0)
367 216 Physiology for Pharmaceutical Science Students	4(3-3-0)

2.2.2 Professional Subjects	93 credits
366 316 Pharmacology I for Pharmaceutical Sciences Students	4(3-3-6)
366 326 Pharmacology II for Pharmaceutical Sciences Students	4(3-3-6)
610 311 Source of Medicine	3(2-3-4)
610 312 Quality Assurance of Pharmaceutical Products	4(3-3-6)
610 313 Drug development	2(2-0-4)
610 315 Pharmaceutical Biotechnology	3(2-3-4)
610 481 Professional Practice in Pharmacy	3(0-18-18)
611 311 Biopharmaceutics	3(3-0-6)
611 313 Pharmaceutical Care	3(2-3-4)
611 314 Pharmacotherapeutics 1	3(2-3-4)
611 315 Pharmacotherapeutics 2	3(2-3-4)
611 316 Pharmacotherapeutics 3	3(2-3-4)
611 317 Pharmacotherapeutics 4	3(2-3-4)
612 354 Natural Health Products	4(3-3-6)
613 251 Basic Pharmaceutical Chemistry	3(2-3-4)
613 252 Pharmaceutical Analysis I	3(2-3-4)
613 351 Pharmaceutical Analysis II	4(3-3-6)
613 352 Pharmaceutical Chemistry	3(3-0-6)
614 351 Toxicology	4(3-3-6)
615 253 Basic Principle in Pharmaceutical Technology	4(3-3-6)
615 254 Pharmaceutical Technology I	4(3-3-6)
615 354 Pharmaceutical Technology II	3(2-3-4)
616 212 Pharmacy Profession and Its Ethics	2(2-0-4)
616 312 Public Health Pharmacy	2(1-3-4)
616 313 Pharmacy Jurisprudence	2(2-0-4)
616 315 Health Behavior and Communication in Pharmacy	2(2-0-4)
616 316 Introduction to Pharmaceutical management	2(2-0-4)
616 317 Research Methods in Pharmaceutical Sciences I	3(2-3-4)
616 318 Research Methods in Pharmaceutical Sciences II	3(3-0-6)
616 511 Introduction to Pharmacoeconomics	2(2-0-4)
616 514 Introduction to Pharmacoepidemiology	2(2-0-4)

2.3 Special Subjects for Special Interest**18 credits**

After students have studied core subjects of specific subjects, the students have the right to study one group from 2 groups as follow

Group 1 Pharmaceutical Care

6 credits of Compulsory subjects and 12 credits from Pharmaceutical Care Group

Compulsory subjects

*610 491 Seminar in Pharmaceutical Care and Administration	1(1-0-2)
611 591 Special Project in Clinical Pharmacy	3(0-9-9)
or 616 591 Special Project in Social and Administrative Pharmacy	3(3-0-3)
616 583 Professional Practice in Pharmaceutical Care and administration	2(0-10-10)

Elective Subjects

611 616 Current Knowledge in Pharmacotherapy	2(2-0-4)
611 617 Current Knowledge in Pharmaceutical Care	2(2-0-4)
611 651 Clinical Drug Information Services	2(1-3-2)
611 653 Drug Use Evaluation	2(1-3-2)
611 655 Adverse Drug Reaction Evaluation	2(1-3-2)
611 681 Clinical Pharmacy Clerkship in Therapeutic Drug Monitoring	2(0-10-10)
611 682 Clinical Pharmacy Clerkship in Drug Information Services	2(0-10-10)
611 683 Clinical Pharmacy Clerkship in Ambulatory Care	2(0-10-10)
611 684 Clinical Pharmacy Clerkship in Acute Care	2(0-10-10)
611 685 Clinical Clerkship in Community Pharmacy	2(0-10-10)
618 712 Financial Management in Health Organization	3(3-0-3)
618 713 Quantitative Analysis in Health Product Management	3(3-0-3)
618 714 Strategic Management in Health Organization	3(3-0-3)
618 715 Marketing Management of Health Products	3(3-0-3)
618 732 Accounting for Health Organization	3(3-0-3)
618 738 Pharmacy Benefit Management in Health Insurance System	3(3-0-3)
618 741 Work Study in Health Organization	3(3-0-3)

Or other subjects to be released later

Group 2 Pharmaceutical Sciences

7 credits of compulsory subjects and at least 11 credits from subjects in group 2

Compulsory Subjects

*610 492 Seminar in Pharmaceutical Sciences	1(1-0-2)
*610 581 Professional Practice in Pharmaceutical Sciences	3(0-18-18)
613 591 Special Project in Research and Development in Pharmaceutical Sciences	3(0-9-9)
or 612 591 Special Project in Pharmacognosy	3(0-9-9)
or 614 591 Special Project in Pharmacology and Toxicology	3(0-9-9)
or 615 591 Special Project in Pharmaceutics	3(0-9-9)

Elective subjects

612 611 Chemistry of Pharmaceutical Natural Products I	3(3-0-6)
612 612 Chemistry of Pharmaceutical Natural Products 2	3(3-0-6)
612 614 Selected Topics in Pharmacognosy	2(2-0-4)
612 616 Thai Traditional Pharmacy	2(2-0-4)
612 617 Marine Pharmacognosy	2(2-0-4)
612 618 Medicinal and Poisonous Mushroom and Fungi	1(1-0-2)
612 619 Medicinal Plants in Daily Life	2(2-0-4)
612 621 Poisonous Plants and Animals	2(2-0-4)
612 622 Forestry for Pharmacy Students	1(1-0-2)
612 651 Tissue Culture of Medicinal Plants	3(2-3-4)
613 511 Structure Elucidation	3(3-0-6)
613 512 Advanced Pharmaceutical Chemistry	3(3-0-6)
613 513 Drug Design	3(3-0-6)
613 551 Drug Extraction and Separation	3(2-3-4)
613 552 Drug Synthesis	4(3-3-6)
613 554 Advanced Pharmaceutical Analysis	3(2-3-4)
613 555 Techniques in the Application of Analytical Instruments	3(1-6-2)
613 651 Quality Control of Cosmetics	3(2-3-4)
613 652 Quality Control of Ethnomedicine	2(2-0-4)
613 653 Quality Control of Food-product	3(2-3-4)
613 654 Food Chemistry	3(2-3-4)

614 551 Clinical Toxicology	3(2-3-4)
614 552 Food Toxicology	3(2-3-4)
614 553 Techniques in Pharmacology and Toxicology	3(1-6-2)
614 572 Current Concepts in Pharmacology and Toxicology	1(1-0-2)
614 582 Clinical Pharmacology and Toxicology Clerkship	2(0-12-12)
614 612 Molecular Toxicology	3(3-0-6)
614 651 Environmental Toxicology	3(2-3-4)
614 653 Addicted and Psychoactive Substances	2(2-0-4)
615 511 Unit Operation	2(2-0-4)
615 551 Advanced Pharmaceutics	3(3-0-6)
615 552 Drug Formulation Sciences	4(2-6-4)
615 553 Good Manufacturing Practice in Industrial Pharmacy	2(2-0-4)
615 612 Macromolecules in Pharmacy	2(2-0-4)
615 651 Cosmetic Sciences	3(2-3-4)
615 652 Veterinary Pharmaceutics	2(1-3-2)
615 653 Packaging in Pharmaceutical Sciences	2(2-0-4)

3. Free Elective 6 credits

Choose from bachelor degree subjects taught in Khon Kaen University

17.5 Description of Course Codes

Course codes are designated into a number of 6 digits as follow: the first three digits stand for Faculty and Department

- 610 Subjects of the faculty of pharmaceutical sciences
- 611 Clinical Pharmacy Department
- 612 Botany and Pharmacognosy Department
- 613 Pharmaceutical Chemistry Department
- 614 Toxicology Department
- 615 Pharmaceutical Technology Department
- 616 Social Science and Administrative Department
- 618 Health Product Management Division

The last three digits of each Department in the faculty of Pharmaceutical Sciences stand for

The fourth digit represents the level of subject

The 1 or 2 stand for basic subject

The 3 or 4 stand for medium-level subject

The 5, 6 or 7 stand for advanced subjects. The 4 or 5 stand for compulsory subjects of special interest. The 6 or 7 stand for elective subjects of special interest.

Subjects of Other Faculties

000	Faculty of Human and Social Science
213	Faculty of Education
300	Faculty of Science
311	Department of Biology, Faculty of Science
312	Department of Biochemistry, Faculty of Science
313	Department of Physics, Faculty of Science
314	Department of Computer Science, Faculty of Science
315	Department of Mathematics, Faculty of Science
361	Department of Anatomy, Faculty of Medicine
362	Department of Microbiology, Faculty of Medicine
363	Department of Biochemistry, Faculty of Medicine
364	Department of Parasitology, Faculty of Medicine
365	Department of Pathology, Faculty of Medicine
366	Department of Pharmacology, Faculty of Medicine
367	Department of Physiology, Faculty of Medicine
400	Faculty of Human and Social Science
411	Department of Foreign Language Faculty of Human and Social Sciences
412	Department of Library and Information Science, Faculty of Humanities and Social Sciences
413	Department of Social Science, Faculty of Humanities and Social Sciences
414	Department of Thai Language, Faculty of Humanities and Social Sciences
419	Department of Philosophy and Religion, Faculty of Humanities and Social Sciences
861	Department of Painting, Faculty of Fine Arts
862	Department of Music, Faculty of Fine Arts

961 Department of Financial and Accountancy, Faculty of
Management Science

962 Faculty of Management Science

Description of Course Codes

The number of credit illustrates as Arabic number with 3 digits number in parenthesis. For Faculty of Pharmaceutical Sciences, the first number represents the number of lecture hour per week. The second number represents the number of laboratory hour per week and the last number is the number of self-study hour per week.

17.5 Class Schedules

First Year

First Semester

213 110 General Psychology	2(2-0-4)
311 101 Biology I	3(3-0-0)
311 102 General Biology Laboratory I	1(0-3-0)
315 106 Introductory Physics	3(3-0-0)
315 181 General Physics Laboratory I	1(0-3-0)
321 102 General Mathematics	3(3-0-0)
411 106 English for Health Sciences1	3(3-0-2)
412 102 Information Literacy	2(2-0-2)
Elective of General or free subjects	2-3 credits

Total 20-21 credits

Second Semester

312 112 Basic Organic Chemistry	3(3-0-0)
312 113 Basic Organic Chemistry Laboratory	1(0-3-0)
312 234 Biophysical Chemistry	3(2-3-0)
320 101 Microcomputer Application	2(2-0-2)
411 206 English for Health Sciences 2	3(3-0-2)
613 252 Pharmaceutical Analysis I	3(2-3-4)
616 212 Pharmacy Profession and Its Ethic	2(2-0-4)
*216 xxx Physical Education	1 credits
Elective of General or free subjects	2-3 credits

Total 20-21 credits

Summer Semester

361 216 Human Anatomy	4(3-4-0)
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Second Year**First Semester**

362 216 Microbiology for Pharmaceutical Science Students	4(3-3-1)
363 216 Biochemistry for Pharmaceutical Science Students	4(3-3-2)
364 216 Parasitology for Pharmaceutical Science Students	2(1.5-2-0)
411 236 Technical English for Pharmaceutical Science	2(2-0-2)
613 251 Basic Pharmaceutical Chemistry	3(2-3-4)
615 253 Basic Principle in Pharmaceutical Technology	4(3-3-6)
Elective of General or free subjects	2 credits

Total 21 credits**Second Semester**

367 216 Physiology for Pharmaceutical Science Students	4(3-3-0)
*610 311 Source of Medicines	3(2-3-4)
613 351 Pharmaceutical Analysis II	4(3-3-6)
615 254 Pharmaceutical Technology I	4(3-3-6)
Elective of General or free subjects	5-6 credits

Total 20-21 credits**Third Year****First Semester**

*365 316 Pathology for Pharmaceutical Science Students	3(3-0-0)
366 316 Pharmacology I for Pharmaceutical Science Students	4(3-3-6)
*610 312 Quality Assurance of Pharmaceutical Products	4(3-3-6)
611 313 Pharmaceutical Care	3(2-3-4)
*610 313 Drug development	2(2-0-4)
616 315 Health Behavior and Communication in Pharmacy	2(2-0-4)
615 354 Pharmaceutical Technology I	3(2-3-4)

Total 21 credits

Second Semester

366 326 Pharmacology II for Pharmaceutical Science Students	4(3-3-6)
611 311 Biopharmaceutics	3(3-0-6)
611 314 Pharmacotherapeutics I	3(2-3-4)
611 315 Pharmacotherapeutics II	3(2-3-4)
613 352 Pharmaceutical Chemistry	3(3-0-6)
614 351 Toxicology	4(3-3-6)

Total 20 credits

Fourth Year

First Semester

*610 315 Pharmaceutical Biotechnology	3(2-3-4)
611 316 Pharmacotherapeutics III	3(2-3-4)
611 317 Pharmacotherapeutics IV	3(2-3-4)
612 354 Natural Health Products	4(3-3-6)
616 313 Pharmacy Jurisprudence	2(2-0-4)
616 316 Introduction to Pharmaceutical Management	2(2-0-4)
616 317 Research Methods in Pharmaceutical Sciences I	3(2-3-3)

Total 20 credits

Second Semester

*411 xxx Professional English for Pharmacist	4(4-0-8)
616 312 Public Health Pharmacy	2(1-3-4)
616 318 Research Methods in Pharmaceutical Sciences II	3(3-0-6)
616 511 Introduction to Pharmacoeconomics	2(2-0-4)
616 512 Introduction to Pharmacoepidemiology	2(2-0-4)

Total 13 credits

6-7 credits of Subjects of Special Interest under the Suggestion of Instructors

Group 1 Pharmaceutical care Group

Group 2 Pharmaceutical Sciences

Total 19-20 credits

Summer Semester

610 481 Professional Practice in Pharmaceutical Sciences 3(0-18-18)

Fifth Year**First and Second Semester**

Subjects of Special Interest under the Suggestion of Instructors

Group 1 Pharmaceutical care Group

Group 2 Pharmaceutical Sciences

General Subject and Free Elective

6-7 credits

Total 17-18 credits