

약사예비시험제도 (PCAT)의 방안제시

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Admission to Pharmacy School in the USA

- Mostly requires at least 2-years of pre-professional (undergraduate) coursework
 - 2+4 years: 85%
 - 하지만 3+4 또는 4+4로 입학이 대부분 (>90%)
- 약대입문을 위한 minimum pre-pharmacy hrs requirement:
 - Mean 66.76 (range 52-120) hours
 - Semester: 91%,
 - Quarter: 9%
- Not required to major in "pre-pharmacy" to be eligible for admission to pharmacy school
- Chemistry
 - Most common major for pharmacy applicants

**미국 약학대학 지원에 필요한
선수 과목명과 이수학점 (Prepharmacy)**

Courses	UCSF	U of Washington	UIC	U of Minnesota	SUNY Buffalo
General Chemistry (12)	3 Q+ lab (12)	3 Q + lab (15)	2 S + lab (8)	2 S + lab	2 S (10)
Organic Chemistry (12)	3 Q+ lab (12)	3 Q + lab (15)	2 S + lab (8)	2 S + lab	2 S (10)
Biology (12)	3 Q + lab (12)	3 Q + lab (15)	2 S + lab (8)	1 S + lab	2 S (8)
PhysiologyAnatomy (4)	1 Q (4)	-	1 S (4)	1 S + lab	-
Physics (12)	2 Q + lab (8)		2 S + lab (8)	2 S + lab	2 S (8)
Calculus (5)	2 Q (8)	1 Q (5)	1 S (3)	1 S	2 S (8)
English (12)	2 Q (8)	2 Q (10)	1 S (4)	2 S	2 S (6)
Communications (6)	elective	elective	1 S (4)	1 S	
Microbiology (6)	-	1 Q + lab (5)	-	1 S + lab	
Statistics (6)	-	1 Q (5)	-		1 S (3)
Social Sciences (5)	elective	elective (10)	1 S (3)	2 S	1 S (3)
Economics (5)	elective	elective (5)	1 S (3)	1 S	1 S (3)
Humanities (5)	elective	elective (10)	1 S (3)	-	1 S (3)
Electives*	28 Q units	10 Q units	4 S units		3 S units

**Pharmacy College Admission
Test (PCAT) in USA**

- PCAT requiring schools: 72%
- Constructed specifically for colleges of pharmacy
- Official admissions test for entrance to pharmacy school
 - Helps identify qualified applicants
 - Measures general academic ability and scientific knowledge necessary for the commencement of pharmacy education
- American Association of Colleges of Pharmacy (AACP)
 - Endorses the PCAT as the official preferred admission test for entrance to pharmacy college

PCAT



- Test publisher
 - Harcourt Assessment, Inc.
 - Commercial test publisher that develops and publishes tests
 - PSE Customer Relations - PCAT
1950 Bulverde Road
San Antonio, Texas 78259
1-800-622-3231 or 210-339-8710

PCAT



- Consists of multiple-choice questions and an essay.
 - Multiple-choice questions
 - 280 questions
 - Each multiple-choice question has four answer choices
- 4.5 hrs to complete the test
 - Divided into separate sections, each of which is timed separately
 - Permitted to work only on that section
 - Not allowed to go back to earlier or later subsets

PCAT-Test 6 Contents areas

Number of Test Items and Approximate
Percent of Item Types or Content Areas
in Each Subtest

PCAT Subtests	Number of Test Items and Approximate Percent of Item Types or Content Areas in Each Subtest
1. Verbal Ability (35 Minutes)	58 Items
Analogies	60%
Sentence Completion	40%
2. Biology (35 Minutes)	58 Items
General Biology	60%
Microbiology	20%
Anatomy & Physiology	20%
3. Reading Comprehension (50 Minutes)	6 Passages & 48 Items
Comprehension	30%
Analysis	40%
Evaluation	30%
4. Quantitative Ability (50 Minutes)	58 Items
Geometry	20%
Algebra	20%
Probability & Statistics	10%
Precalculus	20%
Calculus	30%
5. Chemistry (35 Minutes)	58 Items
General Chemistry	65%
Organic Chemistry	35%
6. Writing (30 Minutes)	1 Writing Topic
Conventions of Language	100%

■ Proposed Requirements for the Admission of Pharmacy Schools in Korea

1. Pre-pharmacy Curriculum
2. Korean Pharmacy College of Admission Test (K-PCAT)

Proposed Prepharmacy Curriculum in Korea



- 약학교육에 입문하기 위해 필요한 기초교양과목의 구성
 - 인문학(humanities),
 - 자연과학,
 - 사회과학

- 학점
 - 65학점(semester credits)이상으로 구성

자연 과학분야



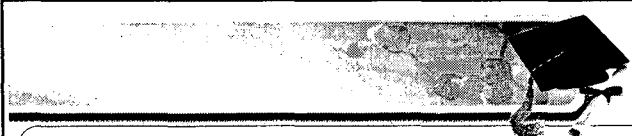
내용(교과목명)	세부 내용	실험실습 (laboratory)	학점계 (semester credits)
일반화학 I, II (General Chemistry)	inorganic chemistry, qualitative analysis	2	8
유기화학 I, II (Organic Chemistry)	organic chemistry	2	8
생물과학 I, II (Biological Science)	biology	2	8
생리학 I (Physiology)	physiology	1	4
물리과학 (Physical Science)	physics	1	4
수학 (Mathematics)	differential and Integral calculus	-	3
통계학 (Statistics)	basic statistics	-	3
컴퓨터기술 (Computer Technologies)	computing basics (Literacy, H/W, S/W)	-	3
총계	-	9	41

사회과학 및 일반 교양과목 (인문학)

내용(교과목명)	세부 내용	실험실습 (laboratory)	학점계 (semester credits)
인문학 (Humanities)	history, literature, philosophy, religion, fine arts, classics, ethics 등	-	4
행동과학 (Behavioral Science)	psychology, psychobiology 등	-	2
사회과학 (Social Science)	anthropology, sociology, economics 등	-	4
대화기술 (Communication Skills)	speech, public speaking, interpersonal communication 등	-	2
국어작문 (Korean Composition)	expository writing, approved literature	-	4
영어작문 (English Composition)	expository writing, approved literature	-	4
기타 교양	중국어, 일본어 등	-	4
총계		-	24

Development of Contents for K-PCAT

- Form a Task Force for the development and implementation of K-PCAT
 - Members should consist of faculty in the colleges of pharmacy and basic science
 - Decide on the test contents of the K-PCAT
 - Develop the test questions for each subsets
 - Validation of test questions
- Form an affiliation with the developer of PCAT in the USA
 - Harcourt Assessment, Inc.
- Receive an endorsement of Korean Association of Colleges of Pharmacy
 - As the official preferred admission test for entrance to pharmacy college in Korea

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- Time table for the development of K-PCAT

 - Periodic reviews of the test contents
 - Should be conducted by faculty, and administrators in schools of pharmacy
 - Should ensure that test items reflect curriculum changes in pharmacy schools

Development of Centralized Application Service



- A centralized application service
- For applicants applying to colleges of pharmacy
- A comprehensive service
 - Facilitates easier applications to pharmacy schools;
 - Increased efficiency for applicants to the schools they apply
 - Provide school-specific information
 - for processing, reviewing, and analyzing applications;
 - Allows to submit one application and one set of materials to apply to multiple colleges of pharmacy programs

Proposed K-PCAT Contents - 1



▪ **Korean Composition**

- Compose of questions that measures ability to comprehend, analyze, and evaluate Korean reading passages on science-related topics

▪ **English Comprehension**

- Compose of questions that measures ability to comprehend, analyze, and evaluate English reading passages on science-related topics.

▪ **Quantitative Ability**

- Compose of questions that measures skills in mathematical processes including applications of algebra, geometry, probability and statistics, pre-calculus and calculus

Proposed K-PCAT Contents - 2



▪ **Chemistry**

- Compose of questions that measure the knowledge of principles and concepts of inorganic and organic chemistry

▪ **Biology**

- Compose of questions that measure knowledge of the principles and concepts general biology, microbiology, and human anatomy and physiology

▪ **Writing**

- Compose of questions that measure conventions of language and composition skills in a written essay.
- An essay part that requires tester to write either an argumentative or problem solving essay

