



CALIFORNIA
NORTHSTATE
COLLEGE *of*
PHARMACY

Catalog | 2009-2010

Table of Contents

	Page
History of the College	3
College Mission, Values, and Goals	4
Accreditation	5
Admission Requirements	5
Academic Calendar	7
Curriculum	8
Course Descriptions	9
Professional Competencies and Qualities	15
Expected Educational Outcomes	16
Learning Resources	17
Registration Policies and Procedures	19
Tuition and Fees	20
Cancellation and Refund Policies	20
Academic Policies and Procedures	21
Requirements for Internship and Licensure	23



History of the College

California Northstate College of Pharmacy is an autonomous institution that was conceived by a group of independent and corporate pharmacy managers who were having difficulty hiring enough pharmacists to adequately staff their pharmacies. After researching the problem thoroughly, they discovered that the state of California has only half the number of practicing pharmacists per 100,000 capita as many other states in the union. The shortage would continue to escalate unless something was done. A case for a new pharmacy school in California was so compelling that the group decided to start a new school in the Sacramento area.

The founding pharmacists of California Northstate College of Pharmacy recruited a number of investors who shared their vision to create a new, quality college of pharmacy, and now they had the financial resources to do it. The College was established within a limited liability company that was formally organized in the state of Delaware on January 17, 2007. Registration to do business in the state of California was obtained on February 2, 2007, and approval to operate as a professional doctorate educational institution in California was granted by the Bureau for Private Postsecondary and Vocational Education on April 15, 2007.

California Northstate College of Pharmacy received eligibility from Western Association of Schools and Colleges (WASC) on March 15, 2007 and was granted precandidate status by the Accreditation Council for Pharmacy Education (ACPE) during the June 18-22, 2008 meeting.

Dr. David Hawkins was named Founding Dean of the College on June 1, 2007, and began immediately recruiting his executive team and faculty. Dean Hawkins has more than 34 years of experience in academic pharmacy and is committed to developing a college with a strong teaching and research program.

The Charter Class of California Northstate College of Pharmacy began their doctoral program of study on September 2, 2008.

College Mission, Values, and Goals

Mission: To advance the science and art of pharmacy.

Vision: To transform pharmacy education by incorporating team-based learning into every course.

Values: **Advancing** our college, goals, and discipline
 Caring about our students, staff, and profession
 Teamwork in teaching, learning, research, and service.

To fulfill our mission, we believe that we must reach the following goals in education, research, scholarship, and service:

Educational Goals:

1. An academic program that fosters critical thinking, problem-solving, clinical reasoning, and self-directed learning skills.
2. An experiential program that progressively develops student skills, attitudes, values, judgment, professional behavior, and expertise in patient-centered care.
3. Graduates who attain effective oral and written communication skills.
4. Graduates who use technology to support life-long learning, research, and practice.

Research and Scholarship Goals:

1. A research infrastructure that promotes collaboration, innovation, and discovery.
2. A faculty engaged in discipline-related research and other scholarly activities.
3. A faculty development program that nurtures and supports a learning-centered curriculum and the scholarship of teaching.

Service Goals:

1. Faculty engaged in professional and community activities.
2. A continuing education program responsive to the needs of alumni, pharmacy practitioners, and other health care professionals.
3. Student participation in professional organizations and community projects to learn skills needed to be an advocate for the profession.

Accreditation

The Accreditation Council for Pharmacy Education (ACPE) accredits Doctor of Pharmacy programs offered by Colleges and Schools of Pharmacy in the United States and selected non-US sites. For a Doctor of Pharmacy program offered by a new College or School of Pharmacy, ACPE accreditation generally involves three steps: Precandidate status, Candidate status, and Full accreditation. Precandidate accreditation status denotes a developmental program, which is expected to mature in accord with stated plans and within a defined time period. Precandidate status is awarded to a new program of a College or School of Pharmacy that has not yet enrolled students in the professional program, and authorizes the college or school to admit its first class. Candidate accreditation status is awarded to a Doctor of Pharmacy program that has students enrolled, but has not yet had a graduating class. Full accreditation is awarded to a program that has met all ACPE standards for accreditation and has graduated its first class. Graduates of a class designated as having Candidate status have the same rights and privileges of those graduates from a fully accredited program. ACPE conveys its decisions to the various boards of pharmacy and makes recommendations in accord with its decisions. It should be noted, however, that decisions concerning eligibility for licensure, by examination or reciprocity, reside with the respective state boards of pharmacy in accordance with their state statutes and administrative rules.

The Doctor of Pharmacy program of the California Northstate College of Pharmacy was awarded precandidate status during the June 18-22, 2008 meeting of the ACPE Board of Directors, based upon an on-site evaluation conducted April 24-25, 2008, and discussion with College officials. Following the enrollment of the inaugural class of students in fall 2008, an on-site evaluation will be scheduled during academic year 2008-2009 for purposes of gathering additional information to be considered in the Board's consideration of advancement to Candidate accreditation status. Based upon this evaluation, should the Board feel that Candidate status cannot be conferred, the College could respond to the Board's concerns and reapply prior to the graduation of the first class. If Candidate status is not granted, even after reapplication, graduates may not be eligible for licensure as pharmacists. If Candidate status is granted and the program continues to develop as planned, full accreditation of the Doctor of Pharmacy program would be considered by the Board following the graduation of students from the program.

Admission Requirements

The California Northstate College of Pharmacy (CNCPharm) participates in the national Pharmacy College Application System (PharmCAS). Applicants for admission to the entry-level Doctor of Pharmacy program at CNCPharm will be required to complete and submit an official online application at www.PharmCAS.org. Applicants must also submit a completed supplemental application and an application fee to the admissions office.

The admissions staff will evaluate applicants for admission on an individual basis. All candidates will be required to meet all prerequisites. Prerequisites may be substituted with courses or experience that the admissions committee evaluates to be equivalent. One or more members of the admissions committee will review and evaluate each completed admissions packet to determine an invitation for an interview.

The interview will be conducted on campus by a minimum of two committee members. During the interview, the applicant will be asked to discuss experiences, reasons of interest in pharmacy, and any related experiences. The interview is designed to assess a variety of factors including: interest, oral and written communication skills, maturity, dedication, and an assessment of the applicant's ability to complete the program successfully and advance in the field of pharmacy. In addition, the interview will be used to determine if the student has the English language proficiency to complete instruction in the English language since English is the language of instruction.

If there is a question about the level of English proficiency of an applicant whose first language is not English, and the applicant is otherwise qualified for admission, the Committee may require that the student submit scores from the Test of English as a Foreign Language (TOEFL) examination and the Test of Spoken English (TSE). The minimum score on the TSE is a 50 and the minimum score on the TOEFL is 550 paper version and 213 CBT version. Also the listening sub-score must be no lower than 50/16.

At this time, the College does not have the capacity to issue a student visa.

Maximum credits accepted for transfer from other institutions

The College will not accept transfer students from other pharmacy institutions. The student may apply for admission, but no credit will be awarded for previous courses taken at another school. This policy will remain in effect until 2013, after the first class enrolled at CNCP graduates.

Pre-pharmacy Requirements

Admission to the four-year Doctor of Pharmacy program requires a baccalaureate degree from a regionally accredited college or university in the United States. CNCP will not initially be approved for granting visas to foreign students. Should a US resident with college coursework from a foreign college or university apply, the college and the courses will need to be evaluated for equivalency with regionally accredited standards. CNCP will contract with a private company specializing in evaluation of foreign transcripts for this service and the applicant will be required to pay the fee.

The pre-pharmacy requirements were established to ensure that applicants have the primary academic background necessary to complete a rigorous professional curriculum, as well as an adequate exposure to a broad range of academic coursework. Each applicant must receive a

“C” or better college credit in each prerequisite course and graduate with a minimum GPA of 2.8. The specific requirements are as follows:

COURSE	Semesters	Credits
Public Speaking	1	3
Psychology	1	3
Economics	1	3
Biochemistry	1	3
Microbiology	1	4
Calculus	1	4
General Physics*	1	4
General Chemistry*	2	8
Organic Chemistry*	2	8
General Biology*	2	8
Anatomy and Physiology or Physiology	1	4

* Course must have a laboratory component

Academic Calendar

Fall Semester 2009		
Orientation	August 27-28	
Online Registration	August 27-28	
Classes Begin	August 31	
Late Registration (with late fee)	September 1-8	
Labor Day Holiday	September 7	
Last Day to Add Classes	September 8	
Thanksgiving Vacation	November 25-27	
Classes End	December 11	
FINAL EXAMS	December 14-18	
Winter Break	Dec 21 – Jan 19	

Spring Semester 2010		
White Coat Ceremony	January 16	
Online Registration	January 17-18	
President’s Day	February 15	
Classes Begin	January 19	
Spring Break	April 5-9	
Classes End	May 7	
FINAL EXAMS	May 10-14	
Summer Break	May 17 – Aug 30	

Doctor of Pharmacy Curriculum

YEAR 1

Semester One

	Credit Hours
PHAR 611: Pharmacy and the Health Care System	3
PHAR 621: Clinical Cellular & Molecular Biology & Biochemistry	5
PHAR 631: Drug Chemistry and Design, & Molecular Modeling	5
PHAR 641: OTC's, Alternative and Complementary Medicines	3
PHAR 661: Introduction to Pharmacy	2

Semester Two

PHAR 612: Professional Communications	3
PHAR 622: Pathophysiology of Neurological and Endocrine Systems	5
PHAR 632: Biopharmaceutics, Drug Delivery, Calculations	5
PHAR 642: Patient Interviewing and Physical Assessment	3
PHAR 662: IPPE I	2

YEAR 2

Semester Three

PHAR 723: Pathophysiology of Cardiovascular and Renal Systems	5
PHAR 733: Basic & Clinical Pharmacokinetics	3
PHAR 743: Drug Literature Evaluation and Drug Information	3
PHAR 751: Integrated Sciences I – Neuropsychiatric and Endocrine Disorders	5
PHAR 763: IPPE II	2

Semester Four

PHAR 724: Pathophysiology of GI, GU, Pulmonary Systems	4
PHAR 725: Clinical Immunology and Rheumatology	4
PHAR 752: Integrated Sciences II – Cardiovascular and Renal Disorders	5
PHAR 771: Longitudinal Learning Project	1
PHAR 764: IPPE III	2
PHAR 781: Electives	2

YEAR 3

Semester Five

PHAR 813: Pharmacy Law and Ethics	3
PHAR 814: Biostatistics and Pharmacoepidemiology	3
PHAR 853: Integrated Sciences III -GI, GU, and Pulmonary Disorders	4
PHAR 854: Integrated Sciences IV – Gynecologic and Dermatologic Disorders	3
PHAR 865: IPPE IV	2
PHAR 882: Electives	3

SEMESTER SIX

PHAR 815: Management and Economic Principles	3
PHAR 826: Biotechnology and Pharmacogenomics	3

PHAR 844: Special Populations and Medication Safety	3
PHAR 855: Integrated Sciences V: Microbiology and Infectious Diseases	3
PHAR 856: Integrated Sciences VI: Hematology/Oncology	3
PHAR 872: Longitudinal Learning Project	1
PHAR 866: IPPE V	4

YEAR 4

SEMESTER SEVEN

PHAR 971: APPE Inpatient/Acute Care Medicine	6
PHAR 972: APPE Hospital or Health System Pharmacy	6
PHAR 973: APPE Elective	6

SEMESTER EIGHT

PHAR 974: APPE Ambulatory Care	6
PHAR 975: APPE Community Pharmacy	6
PHAR 976: APPE Elective	6

Course Descriptions

The core curriculum is defined as a series of courses within each major sub-discipline (i.e., biomedical, pharmaceutical, social/behavioral/administrative, clinical, and integrated sciences) that will provide adequate depth, scope, timeliness, quality, sequence, and experiences needed to accomplish the expected educational outcomes of the Doctor of Pharmacy degree program.

1. Biomedical Sciences

PHAR 621: *Cellular and Molecular Biology and Biochemistry*

This course will discuss the basic principles of the molecular basis of cellular function and control mechanisms of the human body and other living organisms, as well as biochemistry of macromolecules, enzymes, and metabolic pathways.

PHAR 622: *Pathophysiology of Neurological and Endocrine Systems*

This course will cover the functional anatomy and physiology of the nervous and endocrine systems and the pathophysiology of neurological and endocrine disorders.

PHAR 723: *Pathophysiology of Cardiovascular and Renal Systems*

This course will cover the functional anatomy and physiology of the cardiovascular and renal systems and the pathophysiology of cardiovascular and renal disorders.

PHAR 724: *Pathophysiology of the GI, GU, and Pulmonary Systems*

This course will cover the functional anatomy and physiology of the gastrointestinal, genitourinary, and pulmonary systems and the pathophysiology of GI, GU, and pulmonary disorders

PHAR 725: *Clinical Immunology and Rheumatology*

This course will cover human immunology, the molecular biology of the immune response, principles of antigen-antibody relationships, and the genetic basis for antibody synthesis, development, function, and immunopathology, as well as the pathophysiology of rheumatological disorders.

PHAR 826: *Biotechnology and Pharmacogenomics*

This course will introduce students to the complexity of apparently simple genetic diseases, and the theoretical and technical application of combining basic research with genome sequences to create new types of medications.

2. Pharmaceutical Sciences

PHAR 631: *Drug Chemistry, Drug Design, and Molecular Modeling*

This course will discuss the physicochemical principles important for the formulation, preparation, stability, and performance of pharmaceutical dosage forms of drug products, and the concepts of pharmaceutical chemistry with specific applications in the area of drug metabolism, drug disposition, and drug toxicity.

PHAR 632: *Biopharmaceutics, Drug Delivery, and Calculations*

This course will discuss dosage forms in relation to drug delivery systems. It will cover routes of administration, pharmaceuticals, biopharmaceutics, bioavailability, bioequivalency, rate and extent of availability, onset and duration of effect, absorption, dissolution, disintegration, first-pass effect, passive diffusion and active transport. The course will also cover pharmaceutical calculations.

PHAR 733: *Basic and Clinical Pharmacokinetics*

This course will introduce a basic review of pharmacokinetic principles. It will cover the principles of bioavailability, volume of distribution, clearance, elimination rate constant, and half-life, and will include drug dosing techniques in various clinical situations.

PHAR 771 and PHAR 872: *Longitudinal Learning Project I and II*

This course sequence is designed to give students the opportunity to engage in a mini-research project with a faculty mentor and learn how to define a research question, formulate a hypothesis, access and evaluate pertinent published literature, conduct an experiment, gather and analyze data, present research findings, and prepare a written project report.

3. Social/Behavioral/Administrative Sciences

PHAR 611: *Pharmacy and the Healthcare System*

This course will introduce the organization, financing, and delivery of health care services in the United States and discuss the challenges that the changing health care system will have for patients, pharmacists, and society. The course will also cover the policy-making process and current prescription drug policies needed to modify and influence policies that promote safe, effective, and accessible drug therapy and provide patient-centered pharmacy care.

PHAR 612: *Professional Communications*

Students will be exposed to a variety of pharmacy practice environments, with emphasis on oral and written communication, patient interviewing, and problem solving.

PHAR 813: *Pharmacy Law & Ethics*

This class will introduce students to the scope and authority of programs which relate to the legal and ethical practice of pharmacy. This course will also provide students with an understanding of regulatory agencies and how pharmacy practically and ethically interacts with them.

PHAR 814: *Biostatistics and Pharmacoepidemiology*

This is an introductory course in biostatistics and pharmacoepidemiology. Course topics will include descriptive summary statistics (mean, median, and SD); techniques for testing hypotheses (z- and t-tests, chi-square tests, non-parametric methods, ANOVA, linear regression); and sampling; experimental design; risk assessment; outcomes in large populations, and post-marketing surveillance.

PHAR 815: *Principles of Management and Pharmacoeconomics*

This course presents coverage of management theory and practice. It focuses on the roles, skills, and functions of management, including attention to managerial responsibility for effective achievement of objectives. This course will also cover the principles utilized to manage drug therapy for patient populations to produce effective clinical, economic, and humanistic outcomes.

4. Clinical Sciences

PHAR 641: *OTC Medications and Alternative and Complementary Medicine*

This covers the principles of self medication with over-the-counter medications and alternative and complementary products including herbal remedies, vitamins, and supplements.

PHAR 642: *Patient Interviewing and Physical Assessment*

This course teaches students how to obtain a comprehensive patient history and conduct a physical assessment on patients with emphasis on evaluating a patient's response to

pharmacotherapy regimens. The course will also focus on triage and referral skills, interpreting clinical laboratory findings, and OTC point-of-care testing devices.

PHAR 743: *Drug Literature Evaluation, Study Design, and Drug Information*

This course will expose students to the principles of study design, data collection, and evaluation. Students will be required to do critical appraisals of primary literature and submit both written and verbal evaluations. The course will also provide an orientation to clinical references and experience in literature retrieval, analysis, and dissemination of drug information.

PHAR 844: *Special Populations and Medication Safety*

This course will address the principles of geriatric and pediatric pharmacotherapy, medication use during pregnancy, and dosage calculations and adjustments in patients with renal impairment and other special clinical conditions. The course will also address the causes of medication errors and strategies for preventing or minimizing therapeutic misadventures.

5. Integrated Sciences

The basic principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapy will be covered as appropriate in each of the following integrated courses:

PHAR 751: *Neuropsychiatric and Endocrine Disorders*

This course will focus on integrating pathophysiologic mechanisms with the pharmacotherapeutic interventions used in the management of neuropsychiatric and endocrine disorders including but not limited to multiple sclerosis, epilepsy, Parkinson's disease, headache disorders, Alzheimer's disease, schizophrenia, depression, bipolar disorders, anxiety disorders, and sleep disorders, diabetes, thyroid disorders, Cushing's syndrome, and Addison's disease.

PHAR 752: *Cardiovascular and Renal Disorders*

This course will focus on integrating pathophysiologic mechanisms with the pharmacotherapeutic interventions used in the management of various cardiovascular, renal, and endocrine disorders including but not limited to hypertension, heart failure, ischemic heart disease, acute coronary syndromes, arrhythmias, venous thromboembolism, stroke, hyperlipidemia, peripheral arterial disease, acute and chronic renal failure, glomerulonephritis, electrolyte disorders, and acid-base disorders.

PHAR 853: *GI, GU, and Pulmonary Disorders*

This course will focus on integrating pathophysiologic mechanisms with the pharmacotherapeutic interventions used in the management of GI, GU, Pulmonary, and EENT disorders including but not limited to gastroesophageal reflux, peptic ulcer, inflammatory bowel disorders, nausea and vomiting, diarrhea and constipation, irritable bowel syndrome, alcoholic liver disease, pancreatitis, hepatitis, endometriosis, menopause, erectile dysfunction, benign prostatic hyperplasia, urinary incontinence, asthma, chronic obstructive lung disease.

PHAR 854: *Gynecologic and Dermatologic Disorders*

This course will focus on integrating pathophysiologic mechanisms with the pharmacotherapeutic interventions used in the management of dermatological disorders including but not limited to osteoporosis, osteomalacia, rheumatoid arthritis, osteoarthritis, gout, acne, psoriasis, atopic dermatitis, glaucoma, and allergic rhinitis and gynecologic issues including pregnancy, contraception, menstrual-related disorders, endometriosis, and hormone replacement therapy.

PHAR 855: *Microbiology and Infectious Diseases*

This course will cover the pathophysiology and treatment of bacterial, viral, fungal, and parasitic infections, as well as the principles of antimicrobial regimen selection and antimicrobial prophylaxis.

PHAR 856: *Hematology/Oncology*

This course will focus on integrating pathophysiologic mechanisms with the pharmacotherapeutic interventions used in the management of hematologic and oncologic disorders including but not limited to anemias, coagulation disorders, sickle cell disease, breast cancer, lung cancer, colorectal cancer, prostate cancer, lymphomas, ovarian cancer, acute and chronic leukemias, and melanoma.

6. Introductory Course

PHAR 661: *Introduction to Pharmacy*

This introductory course will review the history of pharmacy, pharmacy dispensing, and the principles of pharmacotherapy.

7. Introductory Pharmacy Practice Experiences (PHAR 662,763, 764, 865, and 866)

The Introductory Pharmacy Practice Experiences (IPPE I-V) will be based in community, institutional, long-term care, and primary care settings. Each IPPE will consist of a minimum of 60 hours per semester and include, but not be limited to, the following supervised activities:

- processing and dispensing new and refill medication orders
- conducting patient interviews to obtain pertinent patient information
- creating patient profiles
- responding to drug information inquiries
- interacting with other health care professionals
- participating in public health educational programs
- interpreting and evaluating patient information
- triaging and assessing the need for patient referral

- identifying patient-specific factors that affect health and pharmacotherapy
- assessing patient health literacy and compliance
- performing calculations required to compound, dispense, and administer medications
- administering medications
- providing point-of-care and patient-centered services
- conducting physical assessments
- preparing and compounding extemporaneous preparations and sterile products
- communicating with patients and health care providers
- interacting with pharmacy technicians in the delivery of pharmacy services
- documenting interventions in patient records
- presenting patient cases
- billing third parties for pharmacy services

8. Advanced Pharmacy Practice Experiences (PHAR 971 – 976)

The required Advanced Pharmacy Practice Experiences (APPE I-VI) will be based in community pharmacy, institutional pharmacy, acute care general medicine, and ambulatory care settings. Elective APPE's will be offered in oncology, critical care, nuclear pharmacy, and other specialized pharmacy care settings. Each APPE is 240 hours (40 hours/week X 6 weeks) in duration and will include, but not be limited to, the following activities:

- all of the above IPPE activities
- identifying and reporting medication errors and adverse drug reactions
- managing the drug regimen through monitoring and assessing patient information
- providing pharmacist-delivered patient care
- providing patient education
- educating the public and health care professionals on the treatment of medical conditions, wellness, dietary supplements, durable medical equipment, and medical and drug devices
- retrieving, evaluating, managing, and using clinical and scientific publications in the decision-making process
- accessing, evaluating, and applying information to promote optimal health care
- ensuring continuity of pharmaceutical care among health care settings
- participating in discussions and assignments regarding compliance with accreditation, legal, regulatory/legislative, and safety requirement, the drug approval process, and health care policy matters that affect pharmacy
- working with the technology used in pharmacy practice
- managing systems for storage, preparation, dispensing, and safety of medications and help supervise technical personnel involved in such processes
- performing prospective and retrospective outcomes analyses to support formulary recommendations and therapeutic guideline development
- creating a business plan to support a patient care service
- administering medications where practical and legal

Professional Competencies and Qualities

1. Provide evidence-based, patient-centered care that :

- is integral among and collaborative with physicians and other health care professionals;
- includes designing, implementing, monitoring, evaluating, and adjusting patient-specific pharmacy care plans;
- provides drug information to patients, their families, and other involved health care providers;
- adheres to legal, ethical, social, economic, and professional standards and guidelines;
- continues to evolve as new information, products, and services that impact therapeutic outcomes emerge.

2. Manage and use health care system resources to:

- promote health;
- provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and
- improve therapeutic outcomes of medication use.

3. Actively engage in public health by:

- promoting health improvement;
- enhancing wellness; and
- developing disease prevention programs.

Professional Qualities

The California Northstate College of Pharmacy is committed to preparing Doctor of Pharmacy graduates who:

- are skilled practitioners
- improve the well being and quality of life of the patients they serve
- provide compassionate care
- embrace the role of ongoing scholarship to advance the scope of pharmacy practice
- advocate changing and expanding patient-centered pharmacy services throughout the health care system
- engage in life-long learning

Expected Educational Outcomes

1. Appropriately prepare and dispense prescribed medications as part of the patient's care plan.
2. Accurately prepare sterile dosage forms and enteral nutrition products.
3. Accurately compound extemporaneous pharmaceutical products.
4. Formulate sound, evidence-based, individualized pharmacy care plans.
5. Design drug dosage regimens and select proper dosage forms based on patient-specific or population-based pharmacokinetic and pharmacodynamic data.
6. Select specific drug products based on bioequivalence, pharmaceutical and therapeutic equivalence.
7. Adjust pharmacotherapeutic plans based on pharmacogenomic variations in drug response, pharmacokinetic and pharmacodynamic properties, and adverse drug effects.
8. Evaluate a patient's basic disease process and response to drug therapy.

9. Improve therapeutic outcomes and minimize adverse drug events by recommending appropriate adjustments or changes in pharmacotherapeutic regimens.
10. Implement strategies for improving medication adherence.
11. Communicate effectively with patients, their caregivers, clinicians, and other health care professionals in providing pharmacotherapy counseling, consultation, and education.
12. Function collaboratively and effectively as a member of the inter-professional health care team.
13. Display professional attitudes, values, and behaviors in the delivery of pharmaceutical care.
14. Develop population-specific, evidence-based disease management programs.
15. Formulate and manage strategies for promoting health, wellness, and disease prevention to resolve public health problems.
16. Guide and assist patients in identifying, and accessing local health care resources.
17. Guide and assist patients in assessing and optimizing pharmaceutical services and utilizing their health insurance prescription plan effectively.
18. Develop a pharmacy operational plan that includes personnel management, required physical and technical resources, medication distribution safety procedures, and appropriate control systems.
19. Develop a business plan that supports the implementation and provision of medication therapy management services.
20. Actively engage in culturally sensitive community services that help advance the art of pharmacy.

Learning Resources

Library Facilities

The California Northstate College of Pharmacy Learning Resource Center is available for students, faculty, staff, preceptors, as well as local pharmacists. This program includes 8000 square feet of space devoted to the following resources:

- Library Facility and Collection
- Library Computer System

- CNCP Electronic Library
- Computer Lab
- Tutoring Center
- Classroom Resources
- CNCP Academic Alert System
- Interlibrary Loan Program
- Career Resource Center

Facility

The library facility is a significant part of the CNCP Learning Resources Center. It houses the library collection and provides space for individual and group study. It is open seven days a week. The hours of operation when the school is not in session, including holidays and spring break, will vary. The regular hours of operation when the school is in session are as follows:

Days	Hours
Monday to Thursday	8am to 9pm
Friday	8am to 5 pm

Staff

The California Northstate College of Pharmacy’s Learning Resource Center is managed and operated by a combination of a full time health sciences librarian and a part-time librarian assistant.

The pharmacy librarian will provide training and consultation to students and faculty on how to access good information and efficiently use electronic resources. The pharmacy librarian holds an academic appointment on the faculty and participates in all faculty functions and meetings.

An Information technology specialist works with the pharmacy librarian to update, maintain, and operate electronic systems in the resource center.

Library Resource Center Programs

The Library Resource Center provides both students and faculty with support as well as sufficient research references. The following programs are offered to educate students and faculty on the availability of resources and the process of their uses:

- **Students Resource Center Orientation Session:** At the beginning of each semester, a Resource Center Orientation session is scheduled to accommodate all interested students. The attendance is mandatory for all first semester students and optional for other students. During this orientation, the students will be introduced to the learning resources available as well as to policies and procedures relevant to their usage.
- **Faculty Resource Center Orientation Training:** When new faculty members are hired, they will go through Faculty Resource Center Training. It is important that all faculty members have in-depth knowledge and understanding of the Resource Center programs and

resources, so that they can appropriately direct students. As new programs are instituted at the Resource Center, all faculty members will be appropriately educated to its function and operation. Faculty will be encouraged to give student assignments that need to be completed in the Learning Resource Center so that they will be comfortable with accessing information from a variety of resources.

- **Tutoring Center:** The tutoring center is supervised by Student Affairs. Students needing assistance can sign up for tutoring. The tutoring is offered free of charge and is provided by student and faculty volunteers. In addition, faculty is expected to refer students from their classes to the tutoring center for additional help. The tutoring center will also facilitate the convening of groups of students who wish to study together.

CNCP Electronic Learning Resources

CNCP Resource Center maintains an Electronic Learning Resources System. Its purpose is to provide library and learning resources to students, faculty, and staff, and serve as an entry point for all users to meet their academic and research needs.

Library Computer System

A designated area of the learning resource center is dedicated as a computer lab. The computers in the lab are available to students, where they can access the CNCP electronic resources as well as CNCP electronic library materials. Additionally, the lab provides students with general PC software, access to the Internet, and the ability to print desired materials.

Library Collection

The library subscribes to approximately 1,000 scholarly electronic journals.

Interlibrary Loan Program

With the large number of colleges and universities in the Sacramento valley, CNCP is developing affiliation agreements with the libraries at other institutions in order to facilitate interlibrary loans. Please see the pharmacy librarian for details.

Registration Policies and Procedures

Registration for courses will occur on line on the date (s) specified by the College. All admission contingencies must be fulfilled before the student can register for courses.

Tuition and fees are due on or before the registration date for each semester.

All required immunizations and a cleared background check and any other institutional requirements must be documented before beginning any pharmacy practice experience courses.

Tuition and Fees

All tuition, fees, and expenses, and policies listed in this publication are effective fall session 2009 and are subject to change without notice by California Northstate College of Pharmacy.

Tuition

Enrollment is not complete until fees are paid. Tuition is charged based upon enrollment in the program as a full time student. Tuition is paid by semester and is due one month prior to the beginning of each semester. The program is not offered on a part-time basis. The fee for remedial courses is \$1275.00/credit.

Doctor of Pharmacy - Tuition & Fees

Required Fees & Tuition	Amount
Application Fee	\$60
Tuition	\$36,400
Student Health Fee	1,658
Student Association Fee	\$100
Professional Liability (estimated)	\$50
Books & Supplies (estimated)	\$1,600
Total Estimated Cost per Year	\$39,868

Tuition may be increased by the rate of inflation each year.

Cancellation and Refund Policies

Tuition Refund Policy

A student wishing to withdraw from classes must notify the Office of the Registrar by filling out an Add/Drop form. On approved applications, students who have completed 60 percent or less of the course of instruction shall be given a refund on the following schedule:

Before the opening of class	100% of tuition and Fees
Before the end of the 3rd week of class	80% of tuition and Fees
Before the end of the 6 th week of class	60% of tuition and Fees
After the 6 th week of class	No Refund

If any student is suspended from the School of Pharmacy for any cause, **no** refund of tuition or any part of the fees will be made.

Academic Policies and Procedures

Graduation Requirements

- Completion of a minimum of 144 semester credit hours credits
- Completion of all courses required in the professional pharmacy curriculum, including 5 credits of professional electives.
- Completion of all non-professional curriculum graduation requirements.
- Not on academic probation a cumulative GPA of 2.0 or above.
- Have a zero balance on tuition and fees.

Attendance

Regular class attendance is expected of all students. The college recognizes that circumstances may cause a student to miss an occasional class. The student is expected to make up the work missed. What constitutes an acceptable rate of class attendance is a matter between students and their instructors, although the college expects instructors to maintain reasonable standards. If a student misses more than 20% of any class he/she will need to meet with the assigned academic advisor to discuss the situation. The advisor may refer the student to tutoring or if too much time is missed, the advisor in discussions with the faculty member may suggest that the student repeat the course. Each faculty member will establish an absentee penalty policy for his or her course and publish the policy in the course syllabus.

Leaves of Absence and Withdrawal

Students enrolled at CNCP who leave in the middle of a semester and plan on re-enrolling must either request a leave of absence or officially withdraw. A leave of absence is approved for a specific period of time, usually no more than a year, and the institution agrees to permit the student to return to the College without formally reapplying for admission to the College. The student will be required to return to the College at the beginning of the semester in which the leave was granted. A student who officially withdraws from the college is entitled to apply for readmission. The admissions committee will review the request and will render its decision.

Academic Achievement

Students are expected to pass all courses every semester and maintain a cumulative GPA of 2.0 or above. Since courses offered once a year, failure of a course may cause a student to lose a year of progression.

The system of letter grading is as follows:

- Performance in the range of "A" represents exceptional scholarship and intellectual initiative in accomplishing course goals and objectives.
- Performance in the range of "B" represents solid or significant achievement in accomplishing course goals and objectives.
- Performance in the range of "C" represents average or satisfactory achievement in accomplishing course goals and objectives.
- Performance in the range of "D" represents the minimally acceptable performance in accomplishing course goals and objectives. Advisors may require a student to repeat a course with a D grade if a critical pre-requisite.
- Performance in the range of "F" represents unsatisfactory or below minimally acceptable achievement in accomplishing course goals and objectives.

An A=4.0 pts; B=3.0 pts; C=2.0 pts.; D=1.0 pts.; F= 0 pts

Academic Progression Policy

To progress from one semester to the next, students must have a minimum grade point average (GPA) of 2.0 and must pass all courses. If a student received a grade of D in any course, it must be remediated. Grades of D earned in the fall semester must be remediated by the end of the spring semester. Grades of D earned in the spring semester must be remediated before the start of the next academic year.

Students earning 3 D's in an academic year, and maintaining a minimum GPA of 2.0, must repeat the full year in order to progress.

Students earning an F grade cannot progress until the F grade is repeated the next time the course is offered. Students may, in addition to repeating the failed course, choose to repeat any of the other courses from that semester.

Probation

Any student whose grade point average (GPA) is below 2.0 is automatically notified in writing that he/she is on “academic probation” during the following semester. The notification letter states the minimum level of performance necessary for the student to avoid automatic suspension. Students who are on probation are removed from probation if their next semester GPA is above 2.0 and their cumulative GPA is above 2.0. Students whose semester GPA is above 2.0, but cumulative GPA is below 2.0 will be on “continued probation” for one additional semester. A student whose cumulative GPA is less than 2.0 for more than two for two consecutive semesters, is subject to “dismissal”.

Students who are placed on probation are required to meet a minimum of three times during the semester with their academic advisor who will monitor their progress and make certain that the student is taking advantage of the available support services, such as tutoring. Any student placed on academic probation will be referred to the Professional and Academic Standards Committee that will develop a remediation plan for the student. The Associate Dean for Academic Affairs will meet with the student to review, individualize, and implement the plan. The committee will consider dismissing any student not removed from probation after a second semester.

Dismissal

If a student is dismissed for being on probation for two consecutive semesters, the student may appeal the dismissal to the Dean. The Dean’s decision is final. Dismissed students must wait a year before being able to apply for readmission.

Academic Freedom

Academic Freedom is integral to an institution of higher education. It is the right of students to express their opinions without concern for their grades and the right of faculty to teach and to express their opinions without fear of retribution. With academic freedom comes a responsibility to respect other’s opinions. Academic honesty is demanded of faculty and students alike.

Requirements for Internship and Licensure

Acceptance to California Northstate College of Pharmacy does not guarantee California licensure.

Internship Registration Requirements

Candidates must be presently enrolled in a school or college of pharmacy recognized by the board or accredited by the Accreditation Council for Pharmacy Education (ACPE), or a graduate

of a school of pharmacy recognized by the board or accredited by the Accreditation Council for Pharmacy Education (ACPE) who also has an application pending to take the California pharmacist licensure examinations.

Complete registration instructions can be downloaded from the California State Board of Pharmacy website at http://www.pharmacy.ca.gov/forms/intern_app_pkt.pdf.

Licensure Requirements

To be licensed as a pharmacist in California, you must:

- Be at least 18 years of age.
- Have obtained a B.S. or a Doctor of Pharmacy degree from a college of pharmacy recognized by the board.
- Have completed 1,500 intern experience hours or verified licensure as a pharmacist in another state for at least one year.
- Have taken and passed the North American Pharmacist Licensure Examination (NAPLEX) and the California Pharmacist Jurisprudence Examination (CPJE)

The registration instructions, requirements, and application form for licensure as a pharmacist in California application may be obtained and downloaded at California State Board of Pharmacy website at http://www.pharmacy.ca.gov/forms/rph_app_pkt2.pdf.

NAPLEX

To take the NAPLEX and/or MPJE, **candidates must meet the eligibility requirements of the board of pharmacy from which they are seeking licensure.** The board will determine your eligibility to take the examinations in accordance with the jurisdiction's requirements. If the board determines that you are eligible to take the examinations, it will notify NABP of your eligibility.

If you have questions concerning eligibility requirements, contact the board of pharmacy in the jurisdiction from which you are seeking licensure.

Registration instructions, requirements, and application form can be obtained and downloaded from the National Association of Boards of Pharmacy website at <http://www.nabp.net/>