Disclaimer
This Academic Bulletin is intended as a guideline for students and should not be construed as an offer to contract or as a contract between Campbell University, Incorporated, and any student or a warranty of any entitlements, programs, regulations, or benefits set forth herein. Campbell University, Incorporated, its agents, officers, and employees may rescind or modify any benefit, program, regulation, or entitlement set forth herein at any time, for any reason, with or without notice. This Academic Bulletin supercedes all previous editions of the document.
Introduction

Administration

Campbell University

Jerry M. Wallace, ThM, MS, EdD
President
Mark L. Hammond, PhD
Provost and Vice President, Academic Affairs
Dennis Bazemore, MDiv, DMin
Vice President, Student Life
Jim Roberts, MPA
Vice President, Business and Treasurer
Ronald W. Maddox, PharmD
Vice President, Health Programs
Britt Davis, DPA
Assistant to the President and Vice President, Institutional Advancement and Marketing

College of Pharmacy & Health Sciences

Ronald Maddox, PharmD
Dean
Robert Greenwood, PhD
Associate Dean, Academic Affairs
Wesley Rich, PhD, MEd
Associate Dean, Administration
W. Mark Moore, PharmD, MBA, MS
Associate Dean, Admissions & Student Affairs
Michael L. Adams, PharmD, PhD
Assistant Dean, Graduate & Interprofessional Education
Byron May, PharmD
Chair, Department of Pharmacy Practice
Emanuel Diliberto, Jr., PhD
Chair, Department of Pharmaceutical Sciences
William Pickard, MS
Chair, Department of Clinical Research
Thomas Colletti, DHSc, MPAS, PA-C
Chair, Department of Physician Assistant Practice
Wesley Rich, PhD, MEd
Chair, Department of Public Health
Gregory Dedrick, PT, ScD
Director, Physical Therapy Program
Nancy Duffy, DNP
Director, Nursing Program

Mission Statement

Campbell University

The mission of Campbell University is to graduate students with exemplary academic and professional skills who are prepared for purposeful lives and meaningful service. The University is informed and inspired by its Baptist heritage and three basic theological and biblical presuppositions: learning is appointed and conserved by God as essential to the fulfillment of human destiny; in Christ all things consist and find ultimate unity; and the Kingdom of God in this world is rooted and grounded in Christian community. The University embraces the conviction that there is no conflict between the life of faith and the life of inquiry.

To fulfill its mission, the University:

- Presents a worldview informed by Christian principles and perspectives;
- Affirms that truth is revelatory and transcendent as well as empirical and rational, and that all truth finds its unity in Jesus Christ;
- Influences development of moral courage, social sensitivity, and ethical responsibility;
- Gathers a diverse community of learners;
- Delivers academic instruction in the liberal arts and sciences and professional preparation at both undergraduate and graduate levels through traditional, extended campus, and online programs;
- Transfers to students the vast body of knowledge and values accumulated over the ages;
- Encourages students to think critically and creatively;
- Fosters the development of intellectual vitality, physical wellness, and aesthetic sensibility;
- Forges a community of learning that is committed to the pursuit, discovery, and dissemination of knowledge;
- Provides students with servant leadership opportunities;
- Cooperates with other educational institutions to expand learning opportunities for students;
- Offers service and other opportunities to the greater community through athletics, continuing education, and cultural enrichment programming.

College of Pharmacy & Health Sciences

The mission of Campbell University College of Pharmacy & Health Sciences (CPHS) is to educate students in a Christian environment to be health care professionals who will function effectively as a part of an interdisciplinary team of health care providers to meet existing and future health care needs and who will provide leadership to their profession and professional organizations.

History

Implicit in Campbell University’s motto, Ad Astra Per Aspera, to the stars through difficulties, adopted during the dark days of Reconstruction, are beliefs, aims, and objectives that have guided this institution through ever-changing circumstances. Campbell’s rise from a community school of 21 students to eminence as a great southern academy and later to its present standing among the state’s largest church-related senior universities is illustrative of what perseverance can accomplish in scaling the heights.

Campbell University was founded as Buies Creek Academy on January 5, 1887, by James Archibald Campbell, a North Carolina preacher who believed that no student should be denied admission because of lack of funds. In 1926, the school attained junior college status and changed its name from Buies Creek Academy to Campbell Junior College. In 1961, Campbell became a senior college. The name was changed to Campbell University on June 6, 1979.

Graduate Programs begun in 1977, with the Master of Education degree. The Master of Science in Government was established in 1982.

The Campbell University School of Law was founded in 1976, and the Lundy-Fetteman School of Business begun in 1983. The Schools of Pharmacy and Education were established in 1985. The Divinity School was established in 1996.

In over 100 years of service, Campbell University has been served by only four presidents:

- James Archibald Campbell 1887–1934
- Leslie Hartwell Campbell 1934–1967
- Norman Adrian Wiggins 1967–2003
- Jerry M. Wallace 2003–Present
Its current total enrollment is more than 9,400 students. The main campus total enrollment is over 3,900 students, which includes over 2,500 undergraduate students and over 1,400 graduate students. In an average year, the student body comes from about 90 North Carolina counties, all 50 states, and over 40 countries. Sixty-six percent of the students come from North Carolina.

Campbell has a faculty-student ratio of 1:19. This guarantees small classes and personal attention for each student. At Campbell, professors teach all classes. Graduate assistants will not be found instructing students. This contributes to the quality education for which Campbell has been well-known.

Accreditation

Southern Association of Colleges and Schools Commission on Colleges

Campbell University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate, Baccalaureate, Masters, Education Specialist, and Doctorate degrees. Contact the Commission on Colleges for questions about the accreditation of Campbell University. The Commission should be contacted only if there is evidence that appears to support the University’s significant non-compliance with an accreditation requirement or standard. Normal inquiries about Campbell University, such as admission requirements, financial aid, educational programs, etc., should be addressed directly to the appropriate office of the University and not to the Commission’s office.

Accreditation Council for Pharmacy Education

Campbell University College of Pharmacy & Health Sciences is a member of the American Association of Colleges of Pharmacy and is fully accredited by the Accreditation Council for Pharmacy Education.

Accreditation Council for Pharmacy Education
20 North Clark Street, Suite 2500
Chicago, IL 60602-5109
Phone: (800) 533-3606
Fax: (312) 664-4652
www.acpe-accredit.org

Accreditation Review Commission on Education for the Physician Assistant

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Physician Assistant Program sponsored by Campbell University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2021. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

Accreditation Review Commission on Education for the Physician Assistant
12000 Findley Road, Suite 240
Duluth, GA 30097
Phone: (770) 476-1224
Fax: (770) 476-1738
arcpa@arc-pa.org

Commission on Accreditation in Physical Therapy Education

Graduation from a physical therapist education program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), is necessary for eligibility to sit for the licensure examination, which is required in all states. Effective November 6, 2013, Campbell University has been granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education. Candidacy is not an accreditation status nor does it assure eventual accreditation. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates the program is progressing toward accreditation.

Process for Filing a Complaint with CAPTE

A formal written complaint may be filed with CAPTE in the format provided on the accreditation website at the address below. Complaints may not be submitted anonymously.

The Commission on Accreditation in Physical Therapy Education
Department of Accreditation
American Physical Therapy Association
1111 North Fairfax Street
Alexandria, VA 22314-1488

CAPTE will take action only when it believes the program may not be in compliance with: 1) Evaluative Criteria for Accreditation, 2) Statement on academic integrity related to program closure, or 3) Statement on academic integrity in accreditation. Copies of these documents can be obtained by contacting CAPTE by email, phone, or online.

North Carolina Board of Nursing

The BSN Program received Initial Approval Status from the North Carolina Board of Nursing (NCBON) in January 2014. The NCBON will return for a second site survey and determine whether the program is in compliance with all rules for nursing programs. We anticipate that the Campbell University Department of Nursing will be receiving Full Approval Status in the spring of 2018. The Southern Association of Colleges and Schools Commission on Colleges accredit Campbell University to award Associate, Baccalaureate and Doctorate degrees. Submission of a Substantive Change Prospectus by the Department of Nursing occurred on May 2, 2014.

The Department of Nursing will seek professional or specialized accreditation from the Commission on Collegiate Nursing Education (CCNE). The CCNE accreditation evaluation consists of a review of the program’s mission, goals, and expected outcomes; and an assessment of the performance of the program in achieving the mission, goals, and expected outcomes through the most effective utilization of available resources, programs, and administration.
Pre-Nursing

Admissions Contact
Campbell University’s Admissions Office
Phone: 1-800-334-4111 ext. 1290
Website: www.campbell.edu

Program Contact
Department of Nursing
Phone: 910-893-1940
Email: nursing@campbell.edu

Pre-Nursing is a non-degree program, specifically designed to prepare students for entry into Campbell University’s recently launched, competitive College of Pharmacy & Health Sciences’ (CPHS) nursing program. Potential Bachelor of Science in Nursing (BSN) students must be admitted to Campbell University as a Pre-Nursing student before submission of an application for upper level coursework is considered.

The Pre-Nursing plan of study provides a foundation of science and art upon which the nurse is able to develop clinical judgments, challenge assumptions, develop a broad knowledge base, visualize a systems approach and appreciate the values of diversity and professionalism.

Curriculum
The following curriculum is a guideline for required courses in the program. Students are free to work with their assigned advisor to create the most effective course schedule to complete the prerequisites. Students must receive a “C” or higher on all coursework in order to use credit hours as prerequisites for the Nursing program.

Freshman Year
Semester 1
Courses
Credit Hours
CUC100 – CU Connections 0.5
ENGL 101 – Academic Writing 3
HIST 111 – Western Civilization I 3
BIOL 111 – Basic Biology 4
NURS 100 – Nursing 1
PE 185 – Lifetime Wellness 2
MATH 111 (or greater) 3

Semester 2
Courses
Credit Hours
CUC 100 – CU Connections 0.5
ENGL 102 – Academic Writing & Lit. 3
PSYC 222 – General Psychology 3
BIOL 2XX – Clinical Microbiology 4
RELG 125 – Intro to Christianity 3
A/M/T 131 – Intro to Art, Music, or Theater 3

Sophomore Year
Semester 1
Courses
Credit Hours
CUC 200 – CU Connections 0.5
ENGL 2XX – Literature 3
SOCI 225 – Principles of Sociology 3
BIOL 220 – Human Anatomy & Physiology I 4
RELG 224 – Christian Ethics** 3
PSYC 260 – Developmental Psych. 3

**RELG 224 Christian Ethics is strongly recommended as the 2nd of two required courses in religion.

Semester 2
Courses
Credit Hours
CUC 200 – CU Connections 0.5
ENGL 2XX – Literature 3
HIST 112 – Western Civilization II 3
BIOL 223 – Human Anatomy & Physiology II 4
COMM 261 – Team & Small Group Communication 3
PE 111 – Physical Education 1
MATH 160 – Statistics 3

While the Pre-Nursing curriculum is designed to help potential nursing students succeed, students may find that nursing is not a good fit for their academic aspirations. Campbell University has a variety of exceptional programs to consider as alternative possibilities to nursing. There are options in the health sciences, as well as in fields of education, law, divinity, fine arts, business, and more. Please explore our website to get more information.
Pre-Pharmacy Program

Curriculum
Students must receive a “C” or higher on all coursework in order to use credit hours as prerequisites for the PharmD program.

Freshman Year*
Semester 1
Courses Credit Hours
CHEM 111/111L – General Chem. 4
BIOL 111/111L – Basic Biology 4
ENGL 101 – Academic Writing 3
RELG 125 – Intro to Christianity 3
PE 185 – Lifetime Wellness 2
CUC 100 – CU Connections 0.5

Semester 2
Courses Credit Hours
CHEM 113/113L – General Chem. 4
BIOL 221/221L – Human A & P 4
ENGL 102 – Academic Writing & Lit. 3
MATH 122 – Calculus 4
A/M/T 131 – Intro to Music, Art or Theater 3
CUC 100 – CU Connections 0.5

*Pharmacy Seminar Course (PHAR 100, 1 Credit Hour) is highly recommended for students to complete during their freshman year; however, it is not required.

Sophomore Year
Semester 1
Courses Credit Hours
CHEM 227/227L – Organic Chem. 4
BIOL 334/334L – Microbiology 4
PHYS 221/221L – Physics I 4
HIST 111 – Western Civilization I 3
ECON 200 – Economics 3
CUC 200 – CU Connections 0.5

Semester 2
Courses Credit Hours
CHEM 228 – Organic Chemistry 4
PHYS 222/222L / BIOL XXX – Physics II or Biology 4
LANG 201 – Foreign Language 3
HIST 112 – Western Civilization II 3
ENGL 2XX – Literature 3
CUC 200 – CU Connections 0.5

Pharmacy Scholar Early Assurance Guarantee

High School Qualifications and Application Process
1. The candidate must be enrolled as a student in the Pre-Pharmacy Program at Campbell University.
2. The candidate must be a graduate from an accredited high school in the United States and earn a 3.5 GPA or greater in high school coursework.
3. The candidate will apply for the Pharmacy Scholar Early Assurance Guarantee through the Campbell University Pre-Pharmacy Office during the fall semester of the freshman year.
4. Transfer students are ineligible for the guarantee program.

Pharmacy Scholar Early Assurance Guarantee Options
1. Pre-Pharmacy Focused Pathway: (Six Year Pathway)
   a. Successful candidates must earn a 3.6 or higher cumulative GPA upon application to the Doctor of Pharmacy program
   b. Successful candidates must obtain a percentile score of 60 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).
2. Accelerated Bachelor of Science Pathway: (Seven Year Pathway)
   a. Successful candidates must earn a 3.5 or higher cumulative GPA upon application to the Doctor of Pharmacy program
   b. Successful candidates must obtain a percentile score of 60 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).
   c. Successful candidates will plan to earn a Bachelor of Science in General Sciences in a 3 + 1 pathway through completion of the requirements as defined in the Academic Bulletin.
3. Advanced Development Pathway: (Eight Year Pathway)
   a. Successful candidates must earn a 3.4 or higher cumulative GPA upon application to the Doctor of Pharmacy program
   b. Successful candidates must obtain a percentile score of 55 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).
   c. Successful candidates will plan to earn a Bachelor of Science in Clinical Research or a Bachelor of Science in Pharmaceutical Sciences through completion of the requirements as defined in the Academic Bulletin.
   d. Graduates will complete an internship semester and gain invaluable, real-world experience and professional development while earning their degrees.

Pharmacy Scholar candidates must apply to the Doctor of Pharmacy program utilizing the Early Decision process. The candidate’s Campbell University academic advisor must endorse the candidate’s application to the Doctor of Pharmacy program. Candidates must successfully fulfill all requirements for admission including an acceptable interview. All acceptances are contingent based upon adequate completion of remaining coursework, matriculation requirements and conduct as defined in the CPHS honor code.
Department of Clinical Research
Campbell University
College of Pharmacy & Health Sciences
180 Main Street
Buies Creek, NC 27506
910-814-5755

Mission Statement
The mission of the Department of Clinical Research is to educate and train students to meet existing and future clinical research needs; and, to provide leadership to the clinical research industry. The Department of Clinical Research supports the broad mission of Campbell University and the College of Pharmacy & Health Sciences.

Academic Programs
The Department of Clinical Research offers a Bachelor and Master of Science in Clinical Research degrees as well as a minor. The Master of Science in Clinical Research degree is offered as an online program. The Clinical Research Program is located forty-five minutes from North Carolina’s Research Triangle Park, one of the world’s largest and most dynamic research centers. Many world-class research hospitals and organizations in this area look to Campbell’s clinical research graduates when recruiting new talent.

Bachelor of Science in Clinical Research (BSCR)
The Bachelor of Science in Clinical Research degree is ideally suited to prepare students for entry-level jobs in the clinical research industry. Students in the program are required to complete an internship in the clinical research field, which provides them with networking opportunities, potential jobs, and experiential training. The department collaborates with sites primarily located throughout North Carolina and neighboring states to facilitate their placement. Students may choose an internship site based on their future career goals, including academics, clinical settings or research management sites. Many BSCR graduates gain employment as a direct result of their internship experience.

Online Master of Science in Clinical Research (MSCR)
The Master of Science in Clinical Research degree is an online program. The program is designed to educate students in literature evaluation, study design, research methodologies, data management, and statistical analysis and interpretation. The online environment offers enhanced interaction between peers, faculty and industry professionals. The MSCR program culminates with a research project based on the students’ therapeutic interest. Students may work independently or collaborate with another MSCR student. The faculty serve as research project advisors throughout the entire research project experience. This degree prepares graduates to enter the field in positions including data managers, medical writers, clinical research monitors, study coordinators, regulatory affairs specialists, Institutional Review Board (IRB) administrators and project specialists. In addition, many graduates pursue professional degrees within the medical and health sciences fields.

4+1 Program
The Department of Clinical Research provides an avenue for students to earn both their Bachelor of Science and Master of Science in Clinical Research degrees. While the traditional time to earn both degrees is six years, the 4+1 program places students on a fast track toward completing two degrees in five years by utilizing two summer sessions. By virtue of pursuing both degrees, the program offers students a competitive edge in the job market and rapid career advancement.

Clinical Research Minor
Students pursuing degrees in multiple disciplines will benefit from additional education in Clinical Research to augment their major field of study. These disciplines/programs include: Nursing, Biology, Chemistry, Exercise Science, Pre-Med, Pre-Law, Healthcare Management, Business Administration, and Psychology. To complete the Clinical Research minor, students must complete 19.5 credit hours of prescribed clinical research courses.

Admission Policies
The MSCR program is a year round program, entirely online, with applicants considered for fall, spring and summer semesters. While the Department operates on rolling admission, individuals should submit their applications by the following deadlines:

- Fall Admission: June 30
- Spring Admission: October 31
- Summer Admission: March 31

The following requirements and standards are designed to ensure scholastic and professional success in the College’s MSCR degree program. Applications for admission to the MSCR degree program are evaluated by the Department of Clinical Research’s admissions committee. Acceptance into the graduate program is based on the overall record and ability of the applicant.

There are three pathways to admissions to the MSCR program. Applicants may be considered in one of the following categories:

1. Graduate of a Bachelor’s program
These applicants are required to have completed their undergraduate degree, from a regionally accredited college or university, prior to matriculation and enrollment in any graduate coursework. Individuals may apply prior to completion of their undergraduate degree and gain acceptance contingent upon completion of the degree.

2. Campbell University undergraduate student pursuing BSCR/MSCR 4+1
Qualified applicants may apply to the MSCR program with the understanding the students will not have a completed degree prior to enrolling in MS coursework as defined in the academic bulletin. Accepted applicants would complete the BS and MS degrees in a five year period as outlined. Please note: The MS degree cannot be conferred upon the students in this category until the requirements of bachelor’s degree are met.
Admission Requirements

- Bachelor’s degree or higher from a regionally accredited college or university (Exceptions: BSCR/MSCR 4+1 and PharmD/MSCR applicants)
- GPA of 3.0 or higher
- GRE verbal ≥ 50th percentile, quantitative ≥ 50th percentile, analytical writing ≥ 3.0 (a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT scores)
  - GRE School Code: 4575
  - Department Code: 0626
- TOEFL > 100 (internet-based) or IELTS > 7.0, with no individual band score below 6.
  - Institution Code: 5100
- All required academic coursework must be completed at a regionally accredited college or university. All prerequisite courses must be completed with earned grades of “C” or higher.

Prerequisites

- Anatomy & Physiology (must be completed prior to enrolling in CLNR 519 Physical & Clinical Assessment)
- Statistics (must be completed prior to enrolling in the Biostatistics course sequence)
- Science Courses (12 hours including 2 lab courses must be completed prior to matriculation)

Application Process

1. Complete application with required $50 fee
2. Submit all official college transcripts
3. Submit GRE scores (a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT scores) and TOEFL/IELTS scores (if applicable)
4. Submit two professional/academic letters of recommendation
5. Qualified applicants will be contacted for an interview

*It is strongly recommended the PharmD/MSCR Dual Degree students plan to start their MSCR curriculum in the Summer Term.

Policies

1. Matriculating students may enroll in MSCR courses before they have completed all program pre-requisites. However, students must complete pre-requisite coursework specified for any MSCR course prior to enrollment as indicated in the pre-requisite section above.
2. Those who have earned a terminal doctoral degree (e.g. PhD, MD, DO, DPT or PharmD) at a regionally accredited institution in the United States are not required to submit a GRE or other test scores.
3. Students requesting a leave of absence of greater than one semester must notify the department chairman in writing. The chairman will evaluate requests on an individual basis and determine the length of the granted leave of absence, not to exceed two semesters.

Note: A maximum of six credit hours based on previous didactic coursework may be requested for exemption or transfer by submitting the appropriate form (with supporting documentation) to the Course Director. Subsequent approval by the Department Chairman and the Associate Dean of Academic Affairs is required.

International Students

1. International applicants are eligible for admission if they have completed a bachelor’s degree or higher. International applicants must have their transcripts evaluated by WES or AACRAO to be considered for admission.
2. This program is completely online with no residency required; therefore, international applicants are not eligible to receive US student visas.
3. If English is not the applicant’s native language, applicants must submit official scores for the TOEFL (>100 (internet based)) or IELTS (>7.0, with no individual band score below 6). Applicants who have completed their undergraduate degree in English in the U.S. are not required to submit English proficiency test scores.

International Students

Refund Policy

An admissions deposit of $200 is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for a student, who attends any class and subsequently withdraws, drops any course(s) or are suspended from CPHS for any cause. Upon matriculation, the admissions deposit is applied toward the student’s tuition.

Academic Standards

BS in Clinical Research

Academic standards for undergraduate programs are specified in Campbell University’s Undergraduate Academic Bulletin.

MS in Clinical Research

Students in the MSCR program are subject to:
1. Maintain minimum cumulative grade point average of 3.0.
2. All grades of D or F must be repeated and receive a grade of C or higher
3. Failure to maintain any of the above will result in a probationary period not to exceed one academic year. In addition, students must complete an academic contract to acknowledge their academic probation.
4. Student must complete all coursework within five years of entering the program.
Policies & Procedures
A maximum of six credit hours based on previous didactic coursework may be requested for exemption or transfer by submitting the appropriate form (with supporting documentation) to the Course Director. Subsequent approval by the Department Chairman and the Associate Dean of Academic Affairs is required. Transfer Credit from equivalent coursework may be conditionally granted. When requesting a transfer, students must include:

- Previous course name and grade level number
- Semester course was taken
- Educational institution where course was taken
- Syllabus for the course
- Transcript with grade for course (in applicant file at Campbell)

When transferring, the Course Director will make a recommendation regarding possible equivalency directly to the Chairman of the Department and the Associate Dean for Academic Affairs. Final decisions regarding course equivalencies are made jointly by the Chairman of the Department of Clinical Research and the Associate Dean for Academic Affairs. The total number of transfer credits granted per student will follow the policies of Campbell University’s College of Pharmacy & Health Sciences and the Southern Association of Colleges and Schools Commission on Colleges.

Grade Appeals
Students in the MSCR program who feel they have a just reason for appealing a grade in a CPHS course must first appeal to the Course Director. If the issue cannot be adequately resolved with the director, then the student may appeal to the Department of Clinical Research’s Academic Standards and Student Affairs Committee. If the student feels the Committee’s decision is unjust, the student can then appeal to the Chair of the Department. If the student feels the Chair’s resolution is not just, the student must then submit a written petition to the Associate Dean for Academic Affairs at CPHS within seven days of the student’s receipt of notification of the Chairs decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The Associate Dean for Academic Affairs’ decision is final.

The MSCR program will not approve a request to participate in Commencement Ceremonies unless all credit hours have been completed.

Curriculum

BS in Clinical Research

Freshman Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 – General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 – Freshman Comp. I</td>
<td>3</td>
</tr>
<tr>
<td>RELG 125 – Intro. to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 100 – Pre-Pharmacy Sem.*</td>
<td>1</td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total | 15.5 |

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113 – General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221 – Human A &amp; P</td>
<td>4</td>
</tr>
<tr>
<td>MATH 122 – Calculus</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 – Freshman Comp. II</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total | 17.5 |

Sophomore Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 101 - Intro to Clinical Research**</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 227 – Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL XXX – Biology Elective^</td>
<td>3/4</td>
</tr>
<tr>
<td>PHYS 221 – General Physics I*</td>
<td>4</td>
</tr>
<tr>
<td>HIST 111 – Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>PE 111 – Exercise Activity</td>
<td>1</td>
</tr>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total | 15.5-16.5 |

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL XXX – Biology Elective^</td>
<td>3/4</td>
</tr>
<tr>
<td>HIST 112 – Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>A/M/T 131 – Intro. to Art, Music or Theatre</td>
<td>3</td>
</tr>
<tr>
<td>ECON XXX – Econ. Elective</td>
<td>3</td>
</tr>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total | 16.5-17.5 |

Junior Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 326 – Princ. of Clin. Biochem</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 341 – Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 363 – New Product Develop.</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 364 – Princ. of Clin. Research</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 324 – Intro. to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 451 – Sci. &amp; Technical Writing</td>
<td>1.5</td>
</tr>
<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total | 15.5 |

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 328 – Intro. to Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>CLNR 330 – Regulatory Affairs I</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 365 – Managing &amp; Monitoring Clin. Trials I</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 442 – Interpersonal Skills</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 379 – Physical &amp; Clin. Assessment</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 334 – Scientific Lit. Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>ENGL XXX – Literature I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total | 16 |

Senior Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 465 – Managing &amp; Monitoring Clin. Trials II</td>
<td>2</td>
</tr>
<tr>
<td>RELG XXX – Religion</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 440 – Regulatory Affairs II</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 450 – Data Management</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 336 – Scientific Lit. Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>ENGL XXX – Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LANG 201 – Intermed. Foreign Lang I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total | 16 |

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 420 – Senior Internship***</td>
<td>14</td>
</tr>
<tr>
<td>CLNR 416 – Senior Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

Total | 15 |

Total credit hours earned | 127.5-129.5 |

*Courses not required for BSCR degree; however strongly recommended for pre-pharmacy requirements.

**Course is not required for BSCR degree; however, it is recommended.

*** All BSCR students must submit and pass a criminal background check and drug screen. Students must have all necessary immunizations in order to be placed on
The Department of Clinical Research provides an option for students to earn both their Bachelor of Science and Master of Science in Clinical Research degrees. While the traditional time to earn both degrees is six years, the 4+1 program places students on a fast track toward completing two degrees in five years by utilizing two summer sessions. By virtue of pursuing both degrees, the program offers students a competitive edge in the job market and rapid career advancement.

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111  – General Chemistry I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RELG 125 - Intro. to Christianity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHAR 100 – Pre-Pharmacy Sem.*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113 – General Chemistry II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 221 – Human A&amp;P</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENGL 102 - Academic Writing + Lit.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 122 – Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 101 - Intro. to Clinical Research</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 227 – Organic Chemistry I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL XXX – Biology Elective^</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>PHYS 221 – General Physics I**</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HIST 111 – Western Civilization I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PE 111 – Exercise Activity</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16.5-17.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL XXX – Biology Elective^</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>HIST 112 – Western Civilization II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>A/M/T 131 – Intro to Art, Music, or Theatre</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON XXX – Econ. Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16.5-17.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 326 – Principles of Clinical Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 341 – Medical Terminology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CLNR 363 – New Product Development</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 364 – Principles of CR</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 324 – Intro. to Biostatistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 451 – Scientific &amp; Technical Writing</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 328 – Intro. to Pharmacology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CLNR 442 – Interpersonal Skills</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 338 – Scientific Lit. Seminar</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 525 – Medical Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 20X – Lit. I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 517/518 – Biostatistics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer 1</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 519 – Physical &amp; Clinical Assessment w/ Lab</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 561 – Healthcare Economics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 552 – Scientific Comm.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 520 – Data Management</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>LANG 201 – Intermed. Foreign Lang. I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 20X – Lit. II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 568 – Project Management</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 559 – Managing &amp; Monitoring Clinical Trials</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 566 – Advanced Study Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 8</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELG XXX – Religion</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 530 – Regulatory Affairs</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CLNR 606 – Clinical Research Seminar</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer 2</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 420 – Senior Internship***</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>CLNR 416 – Senior Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CLNR 504 - Special Research in CR</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 9</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 690 – Research Project I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CLNR 691 – Research Project II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 10</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 694 – Research Project III</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 695 – Research Project IV</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours earned 159.5-161.5

^ Biology electives must be Bio-Medical electives. (Examples include, but are not limited to, Advanced Physiology, Biomedical Ethics, Developmental Anatomy, Cellular & Molecular Biology (pre-requisite for Microbiology & Immunology) (pre-requisite for Medical Microbiology), Cytology/Histology, Bioinformatics, Genetics, Immunology, Advanced Cell & Molecular Biology, and Biochemistry).

NOTE: Please refer to our website at www.campbell.edu/cphs for the most up to date curriculum information.

*Biology electives must be Bio-Medical electives. (Examples include, but are not limited to, Advanced Physiology, Biomedical Ethics, Developmental Anatomy, Cellular & Molecular Biology (pre-requisite for Microbiology & Immunology) (pre-requisite for Medical Microbiology), Cytology/Histology, Bioinformatics, Genetics, Immunology, Advanced Cell & Molecular Biology, and Biochemistry).

**Course is not required for BSCR degree; however strongly recommended for pre-pharmacy requirements.

***Course is not required for BSCR degree; however it is recommended.
### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 505</td>
<td>Princ. of Clin. Research</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 515</td>
<td>New Product Development</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 517</td>
<td>Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 518</td>
<td>Intro. to Biostatistical Modeling</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 519/L</td>
<td>Physical &amp; Clinical Assessment with Lab</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 520</td>
<td>Adv. Data Management</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 525</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 530</td>
<td>Regulatory Affairs</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 552</td>
<td>Scientific Comm.</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 559</td>
<td>Managing &amp; Monitoring Trials</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 561</td>
<td>Healthcare Economics</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 566</td>
<td>Advanced Study Design &amp; Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 568</td>
<td>Project Management</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 606</td>
<td>Clin. Research Seminar</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 690</td>
<td>Research Project I</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 691</td>
<td>Research Project II</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 694</td>
<td>Research Project III</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 695</td>
<td>Research Project IV</td>
<td>2</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Elective Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 504</td>
<td>Special Research in Clinical Research*</td>
</tr>
<tr>
<td>CLNR 510</td>
<td>Pharmacokinetics</td>
</tr>
<tr>
<td>CLNR 528</td>
<td>Pharmacogenetics</td>
</tr>
<tr>
<td>CLNR 529</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>CLNR 539</td>
<td>Medical Genomics</td>
</tr>
<tr>
<td>CLNR 541</td>
<td>Behavioral Medicine</td>
</tr>
<tr>
<td>CLNR 550</td>
<td>Intro. to Public Health</td>
</tr>
<tr>
<td>CLNR 555</td>
<td>Special Populations in Clinical Research</td>
</tr>
<tr>
<td>CLNR 560</td>
<td>Pharmacoeconomics</td>
</tr>
<tr>
<td>CLNR 562</td>
<td>Preclinical Drug Development</td>
</tr>
<tr>
<td>CLNR 573</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>CLNR 574</td>
<td>Integrated Drug Safety</td>
</tr>
<tr>
<td>CLNR 578</td>
<td>Biopharmaceutics*</td>
</tr>
<tr>
<td>CLNR 581</td>
<td>Pharmaceutical Compliance &amp; QA</td>
</tr>
<tr>
<td>CLNR 593</td>
<td>Leadership Development</td>
</tr>
<tr>
<td>CLNR 595</td>
<td>Bioterrorism &amp; Mass Public Health Threats</td>
</tr>
</tbody>
</table>

With approval from the course instructor and associate dean of academic affairs, PHAR courses may serve as electives.

*Permission of instructor required.

Federally supported financial aid requires a minimum of half-time enrollment 2 credit hours per academic term (3 credit hours).

### Course Descriptions

**CLNR 101 - Introduction to Clinical Research**  
Credit: 1 Hour  
This course is designed to provide a broad understanding of clinical research and a basic overview of the clinical research industry. The course provides students with a basic understanding of key clinical research topics allowing students a foundation to continue their pursuit of a degree in clinical research and a career in the clinical research industry.

**CLNR 320 – Regulatory Affairs**  
Credit: 3 Hours  
This introductory course emphasizes the terminology and concepts of the pharmaceutical regulation by the Food and Drug Administration, as it applies to drugs, medical devices, and biological and veterinary product development. The course will include discussion of data submission requirements, quality procedure regulations, marketing considerations. Practical exercises will be representative of tasks assigned to employees seeking entry level positions within the industry.

For students pursuing the Bachelor of Applied Science (BAS) Degree only: Offered all terms

**CLNR 324 – Introduction to Biostatistics**  
Credit: 3 Hours  
This course, which focuses on statistical methods in health sciences, is intended to provide the student with basic knowledge of descriptive statistics, graphing data, probability theory, normal and other common distributions, sampling and estimation, hypothesis testing, ANOVA and other selected statistical methods.

**CLNR 326 – Principles of Clinical Biochemistry**  
Credit: 3 Hours  
This course discusses the basic biochemical principles of quantitative analysis utilized in common clinical laboratory tests. An introduction to interpretation of abnormal clinical laboratory values is presented. Quantitative aspects of nutrition are presented, and regulatory effects of various hormones are described.  
*Prerequisite: CHEM 227 & 228*

**CLNR 328 – Introduction to Pharmacology**  
Credit: 4 Hours  
The basic principles of drug action are covered through discussion of the responses of biological systems to drugs and chemicals. Emphasis is on understanding mechanism of action through detailed exploration of receptor-mediated events.

---

**MS in Clinical Research Online**

Students are required to complete the following courses in addition to 3.5 credits hours of elective courses:

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 505</td>
<td>Princ. of Clin. Research</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 515</td>
<td>New Product Development</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 517</td>
<td>Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 518</td>
<td>Intro. to Biostatistical Modeling</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 519/L</td>
<td>Physical &amp; Clinical Assessment with Lab</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 520</td>
<td>Adv. Data Management</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 525</td>
<td>Medical Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 530</td>
<td>Regulatory Affairs</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 552</td>
<td>Scientific Comm.</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 559</td>
<td>Managing &amp; Monitoring Trials</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 561</td>
<td>Healthcare Economics</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 566</td>
<td>Advanced Study Design &amp; Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 568</td>
<td>Project Management</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 606</td>
<td>Clin. Research Seminar</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 690</td>
<td>Research Project I</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 691</td>
<td>Research Project II</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 694</td>
<td>Research Project III</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 695</td>
<td>Research Project IV</td>
<td>2</td>
</tr>
</tbody>
</table>
(pharmacodynamics). The course considers the quantification of drug action as well as the absorption, distribution, metabolism, and elimination of xenobiotics (pharmacokinetics) and how these and other factors relate to drug action. 

Prerequisite: Anatomy & Physiology & CHEM 227

CLNR 330 – Regulatory Affairs I
Credit: 2 Hours
This course provides the student with an overview of the regulatory affairs universe, with emphasis on requirements for initiating clinical trials, developing pharmaceutical products, and gaining approval for worldwide marketing applications. This is the first of two required regulatory affairs courses in the BSCR program.

CLNR 330 – Regulatory Affairs I
Credit: 2 Hours
This course provides the student with an overview of the regulatory affairs universe, with emphasis on requirements for initiating clinical trials, developing pharmaceutical products, and gaining approval for worldwide marketing applications. This is the first of two required regulatory affairs courses in the BSCR program.

CLNR 332 – Communicating Scientific Research
Credit: 3 Hours
This course is designed to enable students to effectively and accurately write a variety of technical documents used in the clinical research industry. This interactive class introduces students to literature searching and critical analysis techniques. Skills in critical analysis of the scientific literature will be developed in small group discussion of scientific papers chosen by the faculty and students. These skills are applied in the form of written and oral presentations of projects developed by researching the current scientific literature.

CLNR 333 – Clinical Research Ethics
Credit: 2 Hours
The course will focus on biomedical ethics as it relates to clinical research. However, medical ethics in clinical practice may also be addressed. Historical cases as well as current events will be extensively used to highlight key principles of medical ethics. During the course, students will satisfy the requirement of human subjects training required for clinical investigators by the National Institutes of Health. For students pursuing the Bachelor of Applied Science (BAS) Degree only: Offered all terms

CLNR 334 – Scientific Literature Seminar I
Credit: 1 Hour
This course is the first in a two-part series. The skills developed in this class will be further refined in CLNR 336, Scientific Literature Seminar II. This interactive class introduces students to literature searching and critical analysis techniques. Skills in critical analysis of the scientific literature will be developed in small group discussion of scientific papers chosen by the faculty and students. These skills are applied in the form of written and oral presentations of projects developed by researching the current biomedical and pharmaceutical literature.

Prerequisite: CLNR 451

CLNR 336 - Scientific Literature Seminar II
Credit: 1 Hour
This interactive class is a continuation of CLNR 334, Scientific Literature Seminar I. The class focuses on the continued application of skills relating to literature searching and critical analysis techniques, skills that were introduced in CLNR 334. These skills are applied in the form of two solo oral presentations.

Prerequisite: CLNR 334 & 451

CLNR 341 – Medical Terminology
Credit: 1 Hour
This course is designed to introduce students to the language of the clinical research and medical communities. Instruction will engage students and provide them an opportunity to learn, understand, and apply the terminology in context of clinical research and medical settings.

CLNR 360 – Managing and Monitoring Clinical Trials
Credit: 3 Hours
This course is designed to provide both a theoretical and practical overview of the principles of managing and monitoring clinical trials. Lectures will focus on the practical aspects of student set-up activities (i.e., study planning issues, data collection strategies, selecting investigators), study conduct activities (i.e., subject recruitment issues and enrollment strategies, obtaining informed consent, monitoring both patient and safety data quality and integrity and conducting site visits for study initiation, periodic monitoring and multiple site closings), and study termination activities. The course also covers responsibilities of sponsors, clinical monitors, clinical research organizations, investigators, research coordinators and institutional review boards. In-class activities will allow students to gain a greater appreciation of operational issues associated with various clinical research-related regulatory documents by working with case studies related to the content studied. Lectures are based on U.S. regulations and guidelines, as well as international good clinical practices and significant clinical research-related documents.

Prerequisites: CLNR 363 & 364

CLNR 363 – New Product Development
Credit: 2 Hours
New Product Development provides an introductory overview of the process of developing a molecule into a therapeutic agent. This course provides an overview of the process from discovery through regulatory approval and introduction to the market place. A perspective of the interaction required between Research & Development and marketing in order to ensure product success in a regulated environment will be provided. Students will be provided with the background necessary to pursue a wide range of additional courses leading to degrees in clinical research.

CLNR 364 – Principles of Clinical Research
Credit: 2 Hours
This course will provide a broad understanding of clinical research including purpose, terminology, and methodology. The course will explore basic elements of clinical research including such topics as study design, data management, conduct, and the various roles of those involved in industry.

CLNR 365 – Managing & Monitoring Clinical Trials I
Credit: 2 Hours
This introductory course has been designed to provide both a theoretical and practical overview of the principles of managing and monitoring clinical trials. Lectures will focus on the practical aspects of study set-up activities (i.e., study planning issues, data collection strategies, selecting investigators), study conduct activities (i.e., subject recruitment issues and enrollment strategies, obtaining informed consent, monitoring both patient and safety data quality and integrity and conducting site visits for study initiation, periodic monitoring and multiple site closings), and study termination activities. The course also covers responsibilities of sponsors, clinical monitors, clinical research organizations, investigators and institutional review boards. In-class activities will allow students to gain a greater appreciation of operational issues associated with various clinical research-related regulatory documents by working with case studies related to the content studied. Lectures are based on U.S. regulations and guidelines, as well as international good clinical practices and significant clinical research-related documents.

Prerequisites: CLNR 363 & 364
CLNR 379 & 379L – Physical & Clinical Assessment with Lab
Credit: 2 Hours
This course is designed to introduce students to the basic principles of medical terminology, history taking, the basic techniques of physical examination and diagnostic test data.
Prerequisite: Anatomy & Physiology

CLNR 416 – Senior Seminar
Credit: 1 Hour
This course is designed to prepare the student for real world practices. The student will learn and review research, presentation and public speaking techniques and utilize these to prepare a research paper and presentation. This course culminates in a presentation day where each student will present their research information and internship experience to the Department of Clinical Research and honored guests.
Co-requisite: CLNR 420

CLNR 420 – Senior Internship
Credit: 14 Hours
This course is an experiential learning system, which allows the BSCR students an opportunity to gain hands on experience in the clinical research profession. Students and participating institutions are matched to provide a comprehensive work experience. The internship is designed for a BSCR candidate to develop strong clinical research skills while improving his/her knowledge in the field of clinical research.
Prerequisite: Completion of all BSCR courses and at least a 2.0 major and cumulative GPA
Co-requisite: CLNR 416

CLNR 440 – Regulatory Affairs II
Credit: 2 Hours
This course builds upon concepts developed in Regulatory Affairs I and provides more detailed and broader coverage of the terminology and concepts that address the regulation of the pharmaceutical industry by the Food and Drug Administration, with an emphasis on the drug, biologic and veterinary product development and approval process.
Prerequisites: CLNR 363, 364 & 330

CLNR 442 – Interpersonal Skills
Credit: 2 Hours
In this course, students will learn about the various factors involved in developing good interpersonal speaking and writing skills including: self-awareness, understanding individual differences, goal setting, listening and providing feedback, teamwork, leadership development and motivating others, delegation, negotiation, conflict resolution, interviewing, and presentation skills. The course will provide a forum for group discussions and writing exercises.

CLNR 450 – Data Management
Credit: 3 Hours
This introductory course covers topics such as the role of data management in clinical trials and the duties of the Clinical Data Coordinator. Topics include organization, collection, review, and tracking of data. Coding of data and standardized terminology are also considered. The course will also include instruction utilizing modern electronic data collection methods.
Prerequisites: CLNR 363 & 364

CLNR 451 – Scientific & Technical Writing
Credit: 1.5 Hours
Scientific and Technical Writing is a required course for Clinical Research majors designed to enable students to effectively and accurately write a variety of technical documents used in pharmaceutical-related industries.

CLNR 456 – Managing & Monitoring Clinical Trials II
Credit: 2 Hours
This course will continue to build upon concepts introduced and developed in CLNR 365, Managing and Monitoring Clinical Trials I. Additional material will be added as appropriate, and students will achieve a greater depth of knowledge and understanding about topics covered in the first course.
Prerequisites: CLNR 363, 364, 365 & 450

CLNR 468: Clinical Project Management
Credit: 2 Hours
This course introduces concepts of clinical project management that should be applied while managing projects in the clinical research industry. The full life cycle of a project will be studied including project initiation, planning, execution, control and closeout. Students will be exposed to the principles of project management as it applies specifically to clinical research. Managing an individual clinical trial will be covered; the broader perspective of managing new drug development projects in the pharmaceutical industry will be a major focus. The project manager integrates basic research, pharmacology, toxicology, chemical development, analytical development, pharmacokinetics, metabolism, clinical research, and marketing aspects for delivering a new product to the marketplace.

For students pursuing the Bachelor of Applied Science (BAS) Degree only: Offered all terms

CLNR 504 – Special Research in Clinical Research
Credit: 1.2 Hours
This course will introduce the graduate student to the scientific inquiry process used in clinical and scientific research. This involves application of the scientific process including but not limited to: literature evaluation, literature search, design of project, development of written and verbal skills, data acquisition and analysis, use of web-based systems and data and project management.

CLNR 505 – Principles of Clinical Research
Credit: 1.5 Hours
This course will provide a broad understanding of clinical research - definition, methodology, conduct and applications. The course will explore the basic elements of clinical research including the hierarchy of clinical trial design, clinical trial conduct, and safety surveillance. Application of clinical trial knowledge to specific medical practice issues will also be explored.

CLNR 510 – Pharmacokinetics
Credit: 2 Hours
Pharmacokinetics involves the rates of liberation, absorption, distribution, metabolism, and excretion of drugs and chemicals in the body. A basic course in pharmacokinetics examines these principles from the mechanistic, mathematical, and graphical perspectives, and provides a scientific approach to rational drug selection and therapy. The principles governing liberation, absorption, distribution, metabolism, and excretion will be presented. The rates or kinetics of these processes, and the mathematical methods associated with pharmacokinetics, will be examined. Application of theoretical principles will be extended to examine drug product equivalency, dosage regimen design, and dosage adjustment in renal and/or liver failure.
This course is co-listed as PHAR 410
Prerequisites: PHAR 304 & 314
Permission of instructor required.

CLNR 515 – New Product Development
Credit: 1.5 Hours
New Product Development provides an introductory overview of the process of developing a molecule into a therapeutic agent, as well as an overview of the process from discovery through regulatory approval and introduction to the market place. This course will provide a perspective of the interaction required between Research & Development and marketing in order to ensure product success in a regulated environment.
It is designed to provide students with the background necessary to pursue a wide range of additional courses leading to degrees in clinical research.

**CLNR 517 – Biostatistical Inference**  
Credit: 2 Hours  
This course is intended to provide students with the basic knowledge of estimation, hypothesis testing, sample size and power analysis, and other selected statistical methods including two sample tests, contingency table inference and odds ratios. Applications of the methodology and interpretation of results is the primary focus of the course.  
Prerequisite: CLNR 324, MATH 160 or approved general Statistics course

**CLNR 518 – Introduction to Biostatistical Modeling**  
Credit: 2 Hours  
This course is intended to provide students with an introduction to, and basic knowledge of, statistical modeling including one-way analysis of variance (ANOVA) and simple and multiple linear and logistic regression. Applications of the methodology and interpretation of results is the primary focus of the course.  
Prerequisite: CLNR 517  
Co-req: CLNR 520

**CLNR 519 & 519L – Physical & Clinical Assessment with Lab**  
Credit: 2 Hours  
This course is designed to introduce the student to medical terminology, medical history taking, basic physical examination techniques, and diagnostic tests commonly used in clinical research protocols.  
Prerequisite: Anatomy & Physiology

**CLNR 520 – Advanced Data Management**  
Credit: 2 Hours  
This advanced course covers in detail topics such as the role of data management in clinical trials and the duties of the Clinical Data Coordinator. Topics include organization, collection, review, and tracking of data. Coding of adverse drug experiences, drugs and disease states, and standardized terminology are also considered.  
Prerequisites: CLNR 505 & 515  
Co-req: CLNR 518

**CLNR 525 – Medical Ethics**  
Credit: 2 Hours  
This course will use a combination of lectures, interactive discussion, case presentations, and student presentations to explore the field of medical ethics. The course will primarily focus on medical ethics as it relates to clinical research. However, medical ethics in clinical practice may also be addressed. Historical cases as well as current events will be extensively used to highlight key principles of medical ethics. During the course, students will satisfy the requirement of human subjects training required for clinical investigators by the National Institutes of Health.

**CLNR 528 – Pharmacogenetics**  
Credit: 2 Hours  
Population genetics, disease state prevalence, and population variances in response to drug therapy are covered in this course. The impact of pharmacogenetics on the future of clinical trials will be considered.  
Prerequisites: CLNR 505, 515 & 518  
This course is co-listed as PHAR 594 and PHSC 564.

**CLNR 529 – Epidemiology**  
Credit: 2 Hours  
This course presents an overview of epidemiology and how the field augments clinical research. The course emphasizes an introduction to the application of epidemiological methods. The primary goal of the course is to orient students to the field of epidemiology and foster an appreciation for the methods used to do observational studies in “real world” settings.  
Prerequisites: CLNR 505 & 518

**CLNR 530 – Regulatory Affairs**  
Credit: 3 Hours  
This course provides the student with an overview of the regulatory affairs universe, with emphasis on requirements for initiating clinical trials, developing pharmaceutical products, and gaining approval for marketing applications. Emphasis will be placed on the practical application of regulations in the commercialization of healthcare products. This will include data submission requirements, quality procedure regulations, marketing considerations, and post-approval requirements including safety reporting.  
Prerequisites: CLNR 505 & 515

**CLNR 539 – Medical Genomics**  
Credit: 2 Hours  
This course starts by teaching basic genomics and molecular biology. Attention then focuses on the benefits of this knowledge in biomedical research and medicine. Examples of topics discussed include pharmacogenomics and toxicology, an awareness of the ethical, legal, and social implications of genomic research, and the potential future implementation of Precision Medicine and Information-based Medicine.

**CLNR 541 – Behavioral Medicine**  
Credit: 2 Hours  
This elective course will examine the pathophysiology, diagnosis, pharmacology, treatment guidelines, and current literature for a variety of psychiatric disorders. The course will cover current controversies surrounding clinical research and evidence-based decisions in psychiatry. Topics will include the following: schizophrenia, bipolar disorder, depression, and other psychiatric disorders.

**CLNR 550 – Introduction to Public Health**  
Credit: 2 Hours  
The course provides a comprehensive examination of the basic and critical issues in public health for pharmacists. The course content includes a basic knowledge base of public health issues, an exploration of the various roles that pharmacy can provide in offering public health services, and examples of unique applications to pharmacy practice. Issues in public health care are examined both from the pharmacy perspective and the traditional public health viewpoint.

**CLNR 552 – Scientific Communications**  
Credit: 2 Hours  
This course briefly reviews fundamental communication skills, and then teaches scientific communication in both written and verbal forms. Regulatory documentation, abstracts, posters, manuscripts, and professional reports are covered. Oral presentation skills are also covered. Interpersonal skills are developed in team project work.

**CLNR 555 – Special Populations in Clinical Research**  
Credit: 2 Hours  
This course will cover topics and issues associated with conducting clinical research in special populations and vulnerable populations. The populations reviewed will include pediatrics/adolescent, geriatrics, obstetrics/women issues, and ethnic minorities. Current regulatory mandates and guidance will be covered and issues unique to each special population will be discussed such as measurement challenges, recruitment, ethics, and IRB issues.

**CLNR 559 – Advanced Managing & Monitoring of Clinical Trials**  
Credit: 3 Hours  
CLNR 559, “Managing and Monitoring Clinical Trials”, provides an in-depth introduction to the principles of managing and monitoring clinical trials. The varied environments in which clinical research is conducted are described and the roles of the different
personnel involved in a clinical trial will be detailed. Students will be introduced to the elements of clinical trial protocols and data collection strategies. The course will provide an overview of regulations relevant to clinical trials including responsibilities of sponsors, investigators, institutional review boards, and contract research organizations. In addition, the course will cover selection of investigators, conduct of investigator meetings, procedure for site monitoring visits (study initiation, periodic monitoring, close-out and study termination), patient enrollment issues, safety monitoring, case report form review, and data management. Students will become familiar with Good Clinical Practices (GCPs), Standard Operating Procedures (SOPs), the quality assurance process (QA), and FDA audits. 

Prerequisites: CLNR 505 & 515

CLNR 560 – Pharmacoeconomics
Credit: 2 Hours
Students will become aware of the various tools, methods, and strategies to evaluate the economic contribution of specific drug therapies at a variety of levels. Rising health care costs will force decisions to be made regarding the overall cost implications as well as the effectiveness of the technology. The application of such pharmacoeconomic analyses to clinical practice and pharmaceutical care will be instrumental to pharmacy's success in our future health care delivery. This course will be presented utilizing a parallel learning model whereby students will be asked to give and receive information about pharmacoeconomics. This course is co-listed as PHAR 561.

CLNR 561 – Healthcare Economics
Credit: 2 Hours
This course will give participants an in-depth international perspective on healthcare economics. This perspective will be delivered by starting at the macro-economic, global level and then narrowing the focus of study to numerous national healthcare systems and landmark case studies. All case studies will be aimed at measuring the economic impact of specific healthcare crises. Each case will be preceded by the description of cultural values that impact healthcare delivery and government response in the event of a healthcare crisis.

CLNR 562 – Preclinical Drug Development
Credit: 2 Hours
This course provides students with an overview of the process of classical and modern drug development. The course will also provide a perspective of the interaction of research, development and marketing activities in a regulated environment. Particular emphasis is placed on promising approaches expected to lead to novel therapies and drug delivery systems within the next decade. A focus on illustrating future therapeutic targets and drug delivery systems is included. Prerequisites: CLNR 505 & 515

CLNR 566 – Advanced Study Design & Analysis
Credit: 3 Hours
This course presents a selection of study designs and statistical analyses that are most relevant to clinical research. The course will also present research question development, endpoints, database utilization and sample size calculation. The course emphasizes the application of these topics beyond just understanding the concepts. The role of clinical research in providing the evidence for Evidence-based Medicine is considered. The primary goal of the course is to present the concepts that are crucial to prepare students for CLNR 690/695 Research Project I/II, and develop the knowledge for the central importance of statistical thinking in clinical research (from initial conceptualization of the study, through design, statistical analysis plans, statistical analysis, and interpretation), rather than to become experts in computation. Prerequisite: CLNR 505, 515 & 518

CLNR 568 – Project Management
Credit: 2 Hours
This course will introduce the generic concepts of professional project management that should be applied while managing projects in several industries. The full life cycle of a project will be studied including project initiation, planning, execution, control and closeout. The project manager's role in developing and maintaining the timeline, budget, and quality of a project will be defined. Students will be exposed to the principles of project management as it applies specifically to clinical research. While managing an individual clinical trial will be covered, the broader perspective of managing new drug development projects in the pharmaceutical industry will be a major focus. In the latter, the project manager integrates basic research, pharmacology, toxicology, chemical development, analytical development, pharmacokinetics, metabolism, clinical research, and marketing aspects for delivering a new product to the marketplace. Prerequisite: CLNR 505 & 515

CLNR 573 – Evidence-Based Medicine
Credit: 2 Hours
This course will trace formulation of relevant questions from clinical cases through the methodology required to search the clinical literature for critical information. Students will be exposed to the process of evaluating the validity and usefulness of this information in order to incorporate it into clinical practice. Prerequisites: CLNR 505, 515 & 518

CLNR 574 – Integrated Drug Safety
Credit: 2 Hours
This course provides students with a comprehensive introduction to the many facets of contemporary pharmaceutical and biologic drug safety. A lifecycle development approach is taken, whereby discussions of drug safety considerations during in silico simulation modeling, drug discovery, in vivo and in vitro nonclinical research, preapproval clinical research, and post marketing surveillance are fully integrated.

CLNR 578 – Biopharmaceutics
Credit: 3 Hours
This course presents the biological and physicochemical factors of the body, drugs and dosage forms that influence drug availability, disposition and pharmacological and toxicological responses. This course is co-listed as PHAR 314. Permission of instructor required

CLNR 581 – Pharmaceutical Compliance & Quality Assurance
Credit: 2 Hours
This course is designed to provide an overview of the process of compliance and quality assurance activities within the Pharmaceutical Industry. Emphasis will be placed on auditing fundamentals, audit processes and tools, quality program management as well as FDA compliance activities. Students may be exposed to a variety of industry experts during the course. Emphasis will also be placed on Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) and Good Clinical Practices (GCP). Students will gain a practical knowledge of Quality as a scientific discipline. Prerequisites: CLNR 505, 515, 530 & 559

CLNR 593 – Leadership Development
Credit: 2 Hours
This course is intended for students who are contemplating a management/leadership career track. The lectures present fundamental skills of organizational behavior and leadership that are essential to effectively managing and leading both direct reports and project teams. The course involves lectures supported by video presentations, group discussion, and role play. Participant materials can be retained by the student for future use/reference in the workplace. The course contains both theoretical content, as well as an examination of processes involved in human behaviors in the healthcare organizational setting. Due to the heavy
emphasis on process, participation and group-intensive instructional approaches are used in the course; there are three primary student goals for the course:
Demonstrate mastery of the content as specified in the course objectives; apply the theories to case studies and Develop an understanding of your own managerial style.

**CLNR 595 – Bioterrorism & Mass Public Health Threats**
Credit: 2 Hours
This course provides an overview of current issues related to bioterrorism and mass threats to public health. Details of specific risks of threat entities and their treatment will be taught. An emphasis is placed on response planning and preparation.
Co-listed as PHAR 595

**CLNR 606 – Clinical Research Seminar**
Credit: 2 Hours
This seminar is intended to assist the student in developing critical thinking skills in clinical research design and analyses of data. The course will reinforce learning of experimental methods in clinical research by analyzing manuscripts in the published literature. Students will learn criteria for quality that will allow them to distinguish those studies with the strongest validity. They will apply statistical methodology and knowledge of study design that they acquired in previous courses. Students will develop an understanding of the limitations of data and study design. The skills developed in this course will assist those students who will be writing their own manuscripts. The course will also prepare students to report on their research project.
Prerequisites: CLNR 505, 515, 518 & 566

**CLNR 690 - Research Project I**
Credit: 1 Hour
This course is the first part of the four-part Research Project course, which comprises CLNR 690, 691, 694, and 695. The student will utilize prior didactic experience in the Clinical Research Program to propose, design, and conduct the research project. The research project must involve patient-oriented research, including epidemiologic and behavioral studies, health outcomes research, and/or health services research. The project will be conducted under the supervision of the Course Director. Students will have an internal faculty advisor who is a full-time faculty member in the Department of Clinical Research, as well as a Statistician faculty member of the Department of Clinical Research assigned to advise them throughout the project. In this course, students will further develop a written Research Proposal, and once approved, will develop this into a full Research Protocol. In later research project courses, the student will ultimately conduct the study and present study results.
Prerequisite: CLNR 690

**CLNR 691 - Research Project II**
Credit: 2 Hours
This course is the second part of the four-part Research Project course, which comprises CLNR 690, 691, 694, and 695. The student will utilize prior didactic experience in the Clinical Research Program to propose, design, and conduct the research project. The research project must involve patient-oriented research, including epidemiologic and behavioral studies, health outcomes research, and/or health services research. The project will be conducted under the supervision of the Course Director. Students will have an internal faculty advisor who is a full-time faculty member in the Department of Clinical Research, as well as a Statistician faculty member of the Department of Clinical Research assigned to advise them throughout the project. In this course, students will further develop a written Research Proposal, and once approved, will develop this into a full Research Protocol. In later research project courses, the student will ultimately conduct the study and present study results.
Prerequisites: All core courses; 3.0 GPA
Co-requisite: CLNR 525 & 606

**CLNR 695 – Research Project IV**
Credit: 2 Hours
This course is the fourth part of the four-part Research Project course, which comprises CLNR 690, 691, 694, and 695. The student will utilize prior didactic experience in the Clinical Research Program to propose, design, and conduct the research project. The research project must involve patient-oriented research, including epidemiologic and behavioral studies, health outcomes research, and/or health services research. The project will be conducted under the supervision of the Course Director. Students will have an internal faculty advisor who is a full-time faculty member in the Department of Clinical Research, as well as a Statistician faculty member of the Department of Clinical Research assigned to advise them throughout the project. In this course, students will validate study data, conduct their statistical analysis, present study results, and write/submit a final Study Report.

_Campbell University College of Pharmacy & Health Sciences reserves the right to make changes in the curriculum or policy of any program as it deems necessary._

---

18  2014-2015 Academic Bulletin
BS in General Science

Contact for Clinical Research concentration
Department of Clinical Research
910-814-5755

Contact for Pharmaceutical Sciences concentration
Department of Pharmaceutical Sciences
910-893-1838

Academic Program
The College of Pharmacy & Health Sciences offers a bachelor of science in general science with a concentration in clinical research or pharmaceutical sciences. This degree option is only offered to Campbell University students that have completed the prescribed pre-pharmacy curriculum, general college curriculum, one year of the BS in pharmaceutical sciences or clinical research curriculum, and one year of the doctor of pharmacy curriculum.

Depending on the major, the respective program director for either clinical research or pharmaceutical sciences will work with these students during the third year of matriculation. After acceptance into the doctor of pharmacy program, students can declare their intent to earn the BS in general science with a concentration. The program director for either department will confirm that the degree requirements have been met.

Students benefit from earning a BS after four years of matriculation, including one year of matriculation after acceptance into the doctor of pharmacy program. A BS degree combined with the doctor of pharmacy may provide graduates with additional opportunities in the future.

Academic Standards
Academic standards for undergraduate programs are specified in the Campbell University’s Undergraduate Academic Bulletin.

Curriculum

BS in general science with a concentration in clinical research

Fall Semester 1
Courses                  Credit Hours
CHEM 111/111L – Gen. Chem. I  4
BIOL 111/111L – Basic Biology  4
ENGL 101 – Freshman Comp. I     3
RELG 125 – Intro. to Christianity  3
PE 185 – Lifetime Wellness  2
CUC 100 – CU Connections  0.5
Total                        16.5

Spring Semester 2
Courses                  Credit Hours
CHEM 113/113L – Gen. Chem. II  4
BIOL 221/221L – Human A & P  4
MATH 122 – Calculus  4
ENGL 102 – Freshman Comp. II  3
A/M/T 131 – Intro. to Art, Music or Theatre  3
CUC 100 – CU Connections  0.5
Total                        18.5

Fall Semester 3
Courses                  Credit Hours
CHEM 227/227L – Organic Chem. I  4
BIOL XXX – Biology Elective  3/4
PHYS 221/221L – Physics I  4
HIST 111 – Western Civilization I  3
LANG 201 – Foreign Language  3
CUC 200 – CU Connections  0.5
Total                      17.5-18.5

Spring Semester 4
Courses                  Credit Hours
CHEM 228 /228L – Organic Chem. II  4
PE 111 – PE Activity  1
BIOL XXX – Biology Elective  3/4
HIST 112 – Western Civilization II  3
ECON XXX – Econ Elective  3
ENGL 2XX – Literature  3
CUC 200 – CU Connections  0.5
Total                      17.5-18.5

Fall Semester 5 (B1 CLNR)
Courses                  Credit Hours
CLNR 326 – Princ. of Clin. Biochem  3
CLNR 341 – Medical Terminology  1
CLNR 363 – New Product Develop.  2
CLNR 364 – Princ. of Clin. Research  2
CLNR 324 – Intro. to Biostats  3
CLNR 451 – Sci. & Technical Writing  1.5
UNIV XXX – Social Science Elective  3
Total                      15.5

Spring Semester 6 (B1 CLNR)
Courses                  Credit Hours
CLNR 328 – Intro to Pharmacology  4
CLNR 330 – Regulatory Affairs I  2
CLNR 442 – Interpersonal Skills  2
CLNR 379 – Physical & Clinical Assessment  2
CLNR 344 – Scientific Lit Seminar I  1
ENGL 20X – Lit. II  3
RELG 2XX – Religion Elective  3
Total                      19

Fall Semester 7 (P1)
Courses                  Credit Hours
PHAR 302 – Anatomy & Physiology  4
PHAR 304 – Biochemistry  4
PHAR 312 – Medical Microbiology  4
PHAR 301 – Pharmaceutical Calculations  2
PHAR 305 – Pharmacy in the US Healthcare System  2
PHAR 309 – Drug Information  1
PHAR 331 – Pharmaceutical Care Skills  1
PHAR 335 – Community Service I  0
Total                       18

Spring Semester 8 (P1)
Courses                  Credit Hours
PHAR 306 – Anatomy & Physiology  4
PHAR 303 – Patient Counseling & Prof. Communications  2
PHAR 310 – Immunology  3
PHAR 308 – Clinical Biochemistry  3
PHAR 314 – Biopharmaceutics  3
PHAR 307 – Pharmacy Marketing & Management  3
PHAR 332 – Pharmaceutical Care Skills Lab  1
PHAR 335 – Community Service I  0
Total                       19

Total credit hours earned 142.5-144.5
BS in general science with a concentration in pharmaceutical sciences

**Fall Semester 1**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111/111L – Gen. Chem. I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111/111L – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 – Freshman Comp. I</td>
<td>3</td>
</tr>
<tr>
<td>RELG 125 – Intro. to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CUC 100 – Campbell Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Spring Semester 2**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113/113L – Gen. Chem. II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221/221L – Human A &amp; P</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 – Freshman Comp. II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122 – Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>A/M/T 131 – Intro. to Art, Music or Theater</td>
<td>3</td>
</tr>
<tr>
<td>CUC 100 – Campbell Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

**Fall Semester 3**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 227/227L – Organic Chem. I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 334/334L – Microbiology &amp; Immunology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221/221L – Physics I</td>
<td>4</td>
</tr>
<tr>
<td>HIST 111 – Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>LANG 201 – Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>CUC 200 – Campbell Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

**Spring Semester 4**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228/228L – Organic Chem. II</td>
<td>4</td>
</tr>
<tr>
<td>PE 111 – Exercise Activity</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 222/222L – General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 2XX – Literature I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 112 – Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>ECON XXX – Econ Elective</td>
<td>3</td>
</tr>
<tr>
<td>CUC 200 – Campbell Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

**Fall Semester 5 (B1 PHSC)**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 323 – General Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 325/325L – General Biochem. Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 210 – Laboratory Safety</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 324 – Intro. to Biostats</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 451 – Scientific &amp; Technical Writing</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 442 – Interpersonal Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>PHSC 220/220L – Quantitative Lab Techniques</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 2XX – Literature II</td>
<td>3</td>
</tr>
<tr>
<td>RELG 2XX – Religion Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

**Spring Semester 5**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 328 – Intro. to Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 410 – Analytical Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 411/411L – Analytical Instrumentation Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 338 – Product &amp; Process Validation</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 326 – Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 327/327L – Molecular Biology Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 334 – Scientific Lit. Seminar I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall Semester 6 (B1 PHSC)**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 302 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 304 – Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 312 – Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 301 – Pharmaceutical Calculations</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 305 – Pharmacy in the US Healthcare System</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 309 – Drug Information</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 331 – Pharmaceutical Care Skills</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 335 – Community Service I</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Spring Semester 8 (P1)**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 306 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 303 – Patient Counseling &amp; Prof. Communications</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 310 – Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 308 – Clinical Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 314 – Biopharmaceutics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 307 – Pharmacy Marketing &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 332 – Pharmaceutical Care Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 335 – Community Service I</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Total credit hours earned**

- **146.5**

**Course Descriptions**

For a list course descriptions please view the clinical research, pharmaceutical sciences and pharmacy sections of this Academic Bulletin.
Bachelor of Science in Nursing (BSN)

Department of Nursing
Campbell University
College of Pharmacy & Health Sciences
P.O. Box 1090
Buies Creek, NC 27519
910-893-1940

Academic Program
The Bachelor of Science in Nursing (BSN) degree at Campbell University provides the students with the training and education necessary to enter the workforce as a registered nurse. The Essentials of Baccalaureate Education for Professional Nursing Practice [American Association of Colleges of Nursing (AACN), 2008]; Nursing Scope and Standards of Practice (2010) and the regulations from the state of North Carolina provide the framework for the liberal arts and pre-licensure nursing education curriculum and the associated clinical experiences. The Essentials address the core knowledge required of nursing professionals and concepts of client centered care, interprofessional teams, evidence-based practice, quality improvement, patient safety, informatics, clinical reasoning, genetics, cultural sensitivity, professional values and practice across the life span. The College of Pharmacy & Health Sciences Department of Nursing is dedicated to helping students become the best healthcare professionals they can be by offering interprofessional education opportunities, top of the line training facilities, and first-hand experience with rural healthcare needs.

Program Philosophy
The mission of Campbell University and the Department of Nursing is to graduate students with exemplary academic and professional skills prepared for purposeful lives and meaningful service as beginning practitioners of nursing. We embrace the concept of a community of learning that is committed to the pursuit, discovery, and dissemination of knowledge. We believe that nursing is a practice discipline that relies on both science and art to provide care that addresses mind, body and spirit.

We believe that:
- The concept of baccalaureate generalist education facilitates the integration of the roles of the nurse as: provider, designer/manager/coordinator of quality, safe care and member of a profession practicing in a variety of healthcare settings.
- A learner-centered environment promotes independence, inquiry, and cultivates the relationship between theory, practice and research.
- The BSN graduate applies scientific principle, nursing process and evidence based practice to clinically reason caring practices that: promote health and well-being, prevent illness and injury across the lifespan in the care of diverse, underserved clients, families, groups and communities.
- The BSN graduate recognizes the value of interprofessional healthcare teams, lifelong learning, interdisciplinary collaboration, professional accountability and responsible use of resources.
- The BSN graduate embraces a holistic, comprehensive practice that includes the relationship between mind, body and spirit.

Mission Statement
The mission statement of the BSN program is consistent with the missions of Campbell University and CPHS. Our program mission contains and supports those aspects of the College and University to include leadership, advocacy, service, professionalism, critical inquiry, and interdisciplinary learning. The evidence for Christian principles are within the shared mission through patient-centered care, compassion, ethics, character, and respecting cultural differences.

Vision
Our graduates will meet future healthcare needs through the provision of safe, effective quality care, lead purposeful lives and provide meaningful service.

Program Objectives
- Function effectively within nursing and interprofessional teams by fostering open communication, respect and shared decision-making to achieve quality outcomes in patient care.
- Collect, analyze, and synthesize data to make clinically-reasoned judgments about evidence-based interventions and evaluation of outcomes for the care of diverse, underserved clients, families, groups and communities.
- Assume accountability for quality and safety for one’s own practice and delegated nursing care.
- Demonstrate knowledge of the influence of policy on social determinants of health and lifestyle variations for interventions related to health promotion, risk reduction and disease prevention for individuals, families, groups, communities and populations across the lifespan and across the continuum of healthcare.
- Use knowledge of organizations and systems leadership to design, manage, coordinate, collaborate and negotiate a plan of care with the client/family, interprofessional health care team, and to allocate physical, fiscal and human resources.

Behavioral/Social Skills and Professionalism
Students in the Campbell University BSN program must demonstrate attributes of empathy, compassion, integrity, collegiality, high moral character, excellent interpersonal communication, listening, and self-motivation; as such qualities are assessed throughout the program. Students must exhibit sound judgment in the care of patients and academic inquiry along with developing appropriate and effective patient relations. Flexibility and cultural sensitivity must be ensured during times of indecision as these occur frequently in clinical and academic settings. Additionally, students must be able to function in a collegial environment demonstrating proper levels of assertiveness, task delegation, along with organization and time management skills. Adequate emotional health is necessary to deal with strenuous environments and work effectively in demanding situations. Students must maintain good general health, self-care and hygiene throughout the program.
Campbell University, Department of Nursing and CPHS Guidelines

1. The preferred minimum cumulative grade is 2.8 as well.
2. A grade of “C” or better must have been earned in the BSN course work and been completed within the previous three years.
3. The admissions process may include a personal interview and each applicant will submit an essay.
4. The admissions committee will evaluate each applicant’s academic performance, essay, service history, special skills and abilities that enhance the nursing profession.
5. Applicants will be notified by the BSN program of an admissions decision through email and an official decision letter to be delivered early in the spring for a fall start. Pre-Nursing students that do not achieve qualified status will be advised as to alternate degree options at Campbell University.
6. Admission and graduation from Campbell University does not guarantee that the student is eligible to sit for the NCLEX-RN exam.

Program Requirements:

1. Verbal and writing abilities are correct, clear and timely
2. Health Care Provider Cardiopulmonary Resuscitation (CPR) Certificate prior to upper division coursework
3. Criminal background check
4. Applicants must have documentation of the following vaccines and health assessments prior to upper division coursework and planned clinical rotations: annual Tuberculin test, Rubella, Rubeola, Mumps and Varicella titer, Tetanus toxoid, Influenza, Hepatitis B and a drug screen. Students may not go to a clinical agency until all immunization requirements are up to date
5. Clinical agencies will require completion of an orientation class to include OSHA Blood borne Pathogens and HIPAA training, Electronic Medical Record documentation and general safety guidelines
6. The student must be able to read, write, speak and comprehend English to communicate effectively, demonstrate manual dexterity (gross/fine), physical strength to transfer/ambulate, push 200 pounds, perform CPR, hear, touch, smell and distinguish color, think critically, and the ability to accept responsibility. The use of an assistive device to demonstrate ability is considered
7. Negative Substance Abuse Screening

BSN Admission

The process of BSN Upper Division admission will be a joint collaborative effort with the College of Pharmacy and Health Sciences (CPHS) Admissions Office. The admissions process includes meeting specific prerequisites for the pre-nursing program. The application for the BSN portion occurs during the fall of your 2nd year. This process requires a competitive application for admission to the degree program

1. The preferred minimum cumulative grade point average (GPA) is a 3.0 on a 4.0 scale with the minimum for admission a 2.8.
2. The preferred minimum science GPA is a 3.0 on a 4.0 scale with the minimum for admission a 2.8 as well.
3. For transfer credit of BSN level courses, the official transcript and copy of the course syllabus must be submitted to the Department of Nursing for determination of course equivalency by a faculty with expertise or the BSN Curriculum Committee. Transfer credit is not granted automatically and is restricted to didactic courses with no clinical component. A letter from the Dean indicating that the student left in good academic and professional standing is required.
4. CPHS reserves the right to make changes in requirements for admission, curriculum, standards for progression, advancement and graduation, fees and rules and regulations.

Upper Division Transfer Credit

The Registrar’s Office is responsible for the transferring of credits from other institutions onto the Campbell University transcript. A transfer student must meet the core requirements and apply to the upper division, through the Apply Yourself College Application website.

1. The cumulative GPA from transferred coursework is considered as part of the holistic competitive application to the BSN Degree Program.
2. A grade of “C” or better must have been earned in the BSN course work and been completed within the previous three years.

Admission Policies

The Campbell University admission requirements are necessary for acceptance and designation of a Pre-Nursing intent. The student will be required to take the prerequisites for the pre-nursing program. The application for the BSN portion occurs during the fall of your 2nd year. This process requires a competitive application for admission to the degree program

1. The cumulative GPA from transferred coursework includes meeting specific prerequisite coursework with a minimum grade of “C”. Coursework may be in progress at the time of application, but completed by the start of the student’s first semester of their third year.
2. The admissions process includes an electronic Apply Yourself College Application website which will open on 9/15/2015. The priority deadline is determined to be 1/15/2016 with the final application deadline date of 4/1/2016. There is a non-refundable application fee of $50.00.
3. The preferred minimum cumulative grade point average (GPA) is a 3.0 on a 4.0 scale with the minimum for admission a 2.8.
4. CPHS reserves the right to make changes in requirements for admission, curriculum, standards for progression, advancement and graduation, fees and rules and regulations.

Program Requirements:

1. Verbal and writing abilities are correct, clear and timely
2. Health Care Provider Cardiopulmonary Resuscitation (CPR) Certificate prior to upper division coursework
3. Criminal background check
4. Applicants must have documentation of the following vaccines and health assessments prior to upper division coursework and planned clinical rotations: annual Tuberculin test, Rubella, Rubeola, Mumps and Varicella titer, Tetanus toxoid, Influenza, Hepatitis B and a drug screen. Students may not go to a clinical agency until all immunization requirements are up to date
5. Clinical agencies will require completion of an orientation class to include OSHA Blood borne Pathogens and HIPAA training, Electronic Medical Record documentation and general safety guidelines
6. The student must be able to read, write, speak and comprehend English to communicate effectively, demonstrate manual dexterity (gross/fine), physical strength to transfer/ambulate, push 200 pounds, perform CPR, hear, touch, smell and distinguish color, think critically, and the ability to accept responsibility. The use of an assistive device to demonstrate ability is considered
7. Negative Substance Abuse Screening

Campbell University, Department of Nursing and CPHS Guidelines

1. The preferred minimum cumulative grade point average (GPA) is a 3.0 on a 4.0 scale with the minimum for admission a 2.8.
2. The preferred minimum science GPA is a 3.0 on a 4.0 scale with the minimum for admission a 2.8 as well.
3. The admissions process may include a personal interview and each applicant will submit an essay.
4. The admissions committee will evaluate each applicant’s academic performance, essay, service history, special skills and abilities that enhance the nursing profession.
5. Applicants will be notified by the BSN program of an admissions decision through email and an official decision letter to be delivered early in the spring for a fall start. Pre-Nursing students that do not achieve qualified status will be advised as to alternate degree options at Campbell University.
6. Admission and graduation from Campbell University does not guarantee that the student is eligible to sit for the NCLEX-RN exam.

Upper Division Transfer Credit

The Registrar’s Office is responsible for the transferring of credits from other institutions onto the Campbell University transcript. A transfer student must meet the core requirements and apply to the upper division, through the Apply Yourself College Application website.

1. The cumulative GPA from transferred coursework is considered as part of the holistic competitive application to the BSN Degree Program.
2. A grade of “C” or better must have been earned in the BSN course work and been completed within the previous three years.
Academic Progression in the BSN Program
Student Progression within the BSN Degree varies from the standard grade scale and progression and remediation effort for undergraduate students. This academic rigor is essential for the assumption that the CU BSN graduate is a safe and effective care provider.

Grading Scales
Campbell University Dept. of Nursing
A 90-100 A 93-100
B 80-89 B 85-92
C 70-79 C 75-84
D 60-69 D 68-74
F <60 F <67

1. Courses must be completed in the prescribed sequence and within 6 years of matriculation.

2. A student must earn a grade of 2.0 (75) in each nursing course.

3. Rounding of Grades- the calculation of a grade will be based on rounding a score ranging from number + 0.5 below the number to + .49 above the number to the common whole number. (Example: A grade of 75 = 74.5 through 75.49; 74 = 73.5 through 74.49)

4. In the clinical nursing courses (Fundamentals of Nursing Practice with Older Adults, Adult Health Nursing Practice I and II, Psychiatric and Mental Health Nursing Practice, Population Health and the Focused Client Experience Practicum) 85% of the course is dependent on test/examinations with 15% distribution among other assignments (papers, presentations, clinical paperwork).

5. A student must achieve an average grade of 75% on all test/examinations in order to successfully complete courses. If less than a 75% average is earned, the course grade is computed only on the test/examination average. If the 75% average is earned, all graded course requirements will be computed into the score.

6. A student earning a grade of less than 2.0 must repeat the course. If a student earns less than 2.0 in a second nursing course, the student is dismissed from the program and is ineligible for readmission. A nursing course can be repeated one time only.

7. Two course failures within the upper division results in dismissal from the program with an ineligible status for readmission.

Tuition and Fees
The Board of Trustees annually reviews and approves the tuition and fee schedule. The published information is on the website and updated in March of each year.

There will be additional expenses upon entry to the BSN Degree Program. These may include but are not limited to the following: scrub uniform, lab coat, lab kit, transportation to clinical, cost of NCLEX-RN testing, CPR certification, immunizations, books, supplies and graduation expenses.

Meal Plan
Students have the option to purchase a declining balance meal plan. Students pay for the plan in advance at the Campbell University Business Office to have funds placed on their declining balance account. This account serves multiple campus locations.

Financial Aid
For information on financial aid availability and application procedures, please contact the student financial planning office at (910) 893-1310 or visit www.campbell.edu/admissions/financialaid/

Parking
Students parking on campus are required to purchase a vehicle sticker for $180.00. Registration information, parking maps, and regulations are available at www.campbell.edu/life/parking/

Vehicular Requirements
All students of the nursing program are required to provide his/her own transportation to and from the University as well as to the clinical experience sites.

Criminal Background Check
College of Pharmacy & Health Sciences (CPHS) program applicants are required to self-disclose any misdemeanors or felony convictions, other than minor traffic violations, including deferred adjudications, with the understanding that non-disclosure or falsification may lead to dismissal. Disclosure may prevent enrollment. Additionally, in response to requirements in the professional practice environment stating that facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity, a criminal background check will be completed on all accepted applicants prior to matriculation. A copy is sent to the Director of Clinical Education and kept in a locking file cabinet for 4 years.

Please refer to the General Information section of this bulletin for the criminal background check policy.

Health Insurance
All CPHS students are required to have health insurance coverage. Before registration, students must either provide proof of health insurance or purchase the health insurance available through the University. Any medical costs incurred by students as a result of injury, exposure to infectious diseases or materials, while in training, are the responsibility of the student and his or her health insurance carrier.

Professional Liability Insurance
Campbell University maintains student liability insurance for all students during their clinical experiences and internships. This coverage is valid only during assigned clinical activities. All students and faculty members of the Program are covered by a malpractice liability insurance policy in accordance with contractual agreement with Training Sites.

Immunization
Before registration, all students are required to provide a completed medical history form and proof of immunization to Student Health Services. A completed physical examination form is required for nursing, physical therapy, physician assistant, and pharmacy students. Students are responsible for maintaining immunizations and records. This is required by CPHS and the BSN program to complete
all required supervised clinical practice experiences within the curriculum. All students must provide proof of adequate immunization/immunity for the following:

- Hepatitis A & B
- Tetanus, diphtheria, pertussis (Tdap)
- MMR
- Polio
- Varicella
- Influenza
- TB skin test* within one month of registration and annually thereafter

Some clinical sites may require more frequent testing. *If the TB test is positive, a chest x-ray is required.

Additional immunizations may be required for certain clinical education experiences (e.g. influenza). See Student Health Services immunization form for further information on timing and sequence of required immunizations at www.campbell.edu/student-services/health-services/medical-forms/). Immunization records are kept on file at Student Health Services. A copy of these records is sent to the Director of Clinical Education to monitor compliance after the first year.

Policies

Infection Control
Please refer to the infection control guidelines in the General Information section of this academic bulletin for more details.

Sexual Harassment Policy
Please refer to the General Information section of this academic bulletin for the sexual harassment policy.

Substance Abuse Screening Policy & Protocol
Substance abuse screening is becoming mandatory in many healthcare facilities prior to participating in patient care. Due to this trend, a negative substance abuse screening test is required prior to matriculation into the BSN program. Therefore, applicants to the BSN program will be notified of the substance abuse screening test requirement as part of the application process. Repeated testing may be required as determined by the BSN program or clinical training sites. Clinical education training sites may require CPHS to provide a copy of testing results performed on students. Training sites may set their own standards in regard to who they will admit based on the results of the substance abuse screening test. Students who are unwilling to allow the release of required personal information may not be able to be placed at an affiliated clinical education site, and cannot meet the requirements for graduation. Please refer to the General Information section of this academic bulletin for more details.

Student Health
Nursing students may utilize the Student Health Service for preventive services and personal health concerns. For patient privacy and confidentiality, BSN student must not be treated by BSN faculty who may occasionally cover the clinic. The students should identify themselves as a BSN student when checking into the clinic so that they may be scheduled with a non-faculty provider. More information about health services offered is available at www.campbell.edu/student-services.

Building Access
Access to the Carrie Rich building is regulated using an electronic ID badge system. Access is granted for each individual student by the program director through facilities services. All students will have access to the Carrie Rich building between 6am and midnight 7 days/week. The Wiggins library is open on weekends and has 24 hour study areas.

Dress Code
Business Casual is the appropriate dress for classroom experiences. For men, this includes collared shirts and slacks and for women, knee-length skirts or dress slacks with a tailored blouse. Unacceptable attire is unprofessional, inappropriate and includes: shorts, mini-skirts, visible cleavage, frayed or camouflaged clothing, hats, caps or other head wear (unless for medical/religious reasons) sunglasses, fish net stockings, see-through clothing, crop tops and other bare midriff tops that expose chest, back or midsection, jeans and flip-flops are not allowed.

Clinical Experience Dress Code
While involved in clinical experiences (agency, skill or simulation lab) the following guidelines provide the student with the behavioral expectations.

1. The Campbell University Department of Nursing Uniform and Lab Coat are to be worn for any clinical activity. Students may be required to change into hospital scrubs upon arrival to the clinical setting. In this event, the undergraduate uniform is worn to and from the agency.
2. Shoes must be low heeled and white. For safety, footwear must be non-canvas with an enclosed toe and heel. The shoes can be any style white (professional or athletic) and worn exclusively in the clinical setting.
3. The appropriate picture ID is visible at all times.
4. Hair must be clean and groomed. For men, well maintained facial hair is the expectation. All students with longer hair must be off the face and pulled back into a ponytail.
5. Nails must be short and clean to prevent injury to patients. Artificial nails are not allowed.
6. Students must adhere to the prevailing clinical facility policies regarding jewelry. In general a watch, flat wedding band and single stud earrings are appropriate. Visible body piercing including tongue stud/ring, clear nasal stud or brow jewelry is to be removed prior to patient care and not worn while in uniform. It is not acceptable to cover these areas with flesh-covered materials.
7. Gum or tobacco products are not allowed in any professional care setting.
8. A tattoo must be covered during a clinical experience.
9. Fragrances are not permitted.

Conduct
The enrolled student is accountable for all aspects of the current Student Conduct (Professional, Academic and The Honor Code) as defined in the Undergraduate Academic Bulletin and the General Information section of this academic bulletin for the Honor Code. Nursing students are required to read and sign the Honor Code, attesting that they understand the code that they have read and understand the bulletin, and will abide by it. A signed copy of the code will be kept in the students file.
Academic Standards
A CU academic review convenes in May of each year to review the academic progress of undergraduate students. An “Academic Warning” is issued to any student who incurs a quality point deficit between 10 and 34.5 quality points. The student is referred to campus resources for resolution.

The Department of Nursing (DON) has additional progression requirements and focused remediation efforts designed to protect the student and public in care delivery situations while assuring a greater opportunity for success. Please refer to Student Handbook for the BSN Program or the CPHS Academic Bulletin for details. Reports on academic performance and progress are generated at the mid-term and completion of each semester. The BSN program core faculty meets at the end of each academic term, or as necessary, to discuss the academic performance of all students. Any discussions regarding type of academic deficiency and remedy occurs with development of an Academic Success Plan and draft of a letter from the program director stating the specific academic standing described in the following sections. The letter is provided to the student via email and hard copy by mail. The letter will contain the following:
1. Description of academic standing (remediation, probation, suspension, dismissal)
2. Rationale for academic standing
3. Criteria required to regain good academic standing
4. Contact information of the program director to discuss items outlined in the letter
5. Notification of appeals process

1. Good Academic Standing
Students are considered in good academic standing providing:
- A semester GPA ≥ 75 or 2.0 average cumulative grade point (GPA) based on the BSN grading criteria
- Satisfactory evaluation on the Clinical Evaluation Tool for clinical experiences
- No violations of student Honor Code or Code of Conduct have occurred
- No occurrence of a patient safety violation

2. Remediation
Students who fail to meet academic standards within a given course or clinical experience rotation may be required to remediate coursework and/or attend another clinical. Students will require remediation for:
- Failure to achieve a semester GPA ≥ 75 or 2.0 average cumulative grade point (GPA) based on the BSN grading criteria
- A grade of D or F in any single course
- Students must initiate remediation with the Course Director should a grade of < 80% or failure on any examination within a given course. The course instructor and student document the content of remediation on the Academic Success Plan. Successful remediation must occur within the identified time frame or the student is placed on academic probation. Should a student fail to improve academic and/or behavioral performance issues, they will receive a failing grade for the course. This will necessitate a delay in the graduation date.
- Continuing Needs Improvement or Unsatisfactory ranking on the Clinical Evaluation Tool
- Violations of student Honor Code or Code of Conduct
- Any patient safety issue throughout the curriculum

3. Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress following remediation interventions. A student will be placed on academic probation for:
- Inability to maintain a cumulative GPA of ≥ 75 or 2.0 based on the BSN grading criteria
- Failure to follow through with the Academic Success Plan (remediation)
- Continuing Needs Improvement or Unsatisfactory ranking on the Clinical Evaluation Tool
- A grade of D or F in any single course
- Repeated violations of the student Honor Code or Code of Conduct
- Violations of patient safety
- Accumulation of more than three Academic Success Plans in one semester

A student placed on academic probation will remain so until the end of the semester. Students who fail to complete the criteria for lifting academic probation will be considered for suspension or dismissal from the BSN program. The BSN Curriculum Committee and program director, with notification to the Associate Dean of Academic Affairs, will recommend these actions. A recommendation will be made to the program director to restore good academic standing if:
- A semester GPA ≥ 75 or 2.0 average cumulative grade point (GPA) based on the BSN grading criteria is achieved
- The Academic Success Plan was followed with desired results achieved
- Satisfactory evaluation on the Clinical Evaluation Tool for clinical experiences
- No violations of student Honor Code or Code of Conduct have occurred
- No occurrence of a patient safety violation

4. Academic Suspension
Academic Suspension from the BSN program and CPHS are imposed for a specified period of time and must not exceed one year. Suspension occurs when a student has academic deficiencies which preclude continuation in a normal program of study, but may be expected to be able to complete the requirements for the degree under a modified program of study with or without remedial courses.

A student on academic suspension is not allowed to continue the standard course of study. The BSN Curriculum Committee and program director will specify the length of time of the suspension and remedial work required for reinstatement, with approval from the Associate Dean of Academic Affairs.

5. Academic Dismissal
The BSN Curriculum Committee and program director may recommend academic dismissal to the Associate Dean of Academic Affairs under the following circumstances:
- Fails to make satisfactory progress during the period of probation and or suspension
- A single egregious and/or knowing violation of patient safety, confidentiality, or professionalism
- Two semesters with the accumulation of three or more Academic Success Plans
- A student earning a grade of less than a 75 or 2.0 average cumulative grade point (GPA) based on the BSN grading criteria, must repeat the course. If a student earns less than 2.0 in a second nursing course, student dismissal occurs. This dismissal
results in being ineligible for readmission. A repeat of a nursing course occurs one time only.

- Unsatisfactory clinical performance constitutes a course failure and necessitates repeating the course, if eligible.
- If a student earns less than 2.0 in a second nursing course, student dismissal occurs. This dismissal results in being ineligible for readmission. A repeat of a nursing course occurs one time only.

Academic Status Appeals
At the end of each academic term, the BSN director will notify each student, the Academic Performance and Standards Committee chair and the Associate Dean of Academic Affairs of the BSN students that qualify for academic probation, suspension, or dismissal.

The Academic Performance and Standards Committee (APSC) evaluate each student that is subject to suspension or dismissal in order to make a recommendation whether to retain or promote the student in the professional program. The student may appear in person before the committee. The chair of the APSC notifies students in writing regarding any decision by the committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the College and informs the director of nursing, Associate Dean of Academic Affairs, and Associate Dean of Admissions & Student Affairs. Students have the opportunity to appeal any decision made by the APSC by submitting a written petition to the Associate Dean of Academic Affairs within seven days of their receipt of notification. The petition must contain the specific variance requested, a description of any extenuating circumstances intended to justify granting the variance, and a proposed course of study and/or conditions for consideration should the variance be granted. The decision of the Associate Dean of Academic Affairs is final. Please refer to Student Handbook for the BSN Program or the CPHS Academic Bulletin for details.

Delayed Graduation Policy
If a nursing student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling nursing clinical experiences or matriculation through the curriculum will occur and the student’s graduation may be delayed. Voluntary course withdrawals or a temporary leave of absence may cause a delay in scheduling clinical experiences, progress through the curriculum, and a subsequent delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice, students should contact the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

Attendance
Attendance is mandatory for all class sessions and clinical experiences throughout the BSN curriculum. Repeated violations of unexcused absences are subject to consequences within the Student Honor Code. Please refer to Student Handbook for the BSN Program or the CPHS Academic Bulletin for details.

Graduation Requirements
Recommendation for graduation requires faculty approval and attainment of the following requirements:
1. Successful completion of all courses, requirements, and remediation
2. Successful completion of all clinical experiential training
3. Attendance of graduation week activities that includes licensure preparation courses and comprehensive curriculum review
4. Attendance at the graduation ceremony is expected

The BSN Upper Division Requirements for Graduation
- Completion of the nursing and general education courses prescribed by the faculty.
- Completion of nursing courses with a minimum grade of 2.0 (75) in each course
- Attainment of a minimum 2.0 cumulative GPA (see grading scale variation)
- 25% of semester credit hours in residence at Campbell University
- Attendance at the graduation ceremony is expected.
- A faculty vote is required to approve students for graduation.
- All BSN students are required to complete the BSN Exit Survey on-line in the fourth semester during the Focused Client Care Practicum.

The Department of Nursing appoints a faculty advisor for each student to assist the student with program planning and tracking of prerequisites and upper division requirements. However, the responsibility for assuring that all requirements are met rests solely with the student.
Registered Nurse Licensure Exam Requirements

The North Carolina Board of Nursing (NC-BON) uses the National Council Licensure Examination (NCLEX®) prepared by National Council of State Boards of Nursing (NCSBN) to measure competence for entry-level practice for graduates of Board-approved nursing education programs. The National Council of State Boards of Nursing has contracted with Pearson VUE to administer NCLEX®. For more detailed information about the NCLEX, please visit the National Council of State Boards of Nursing’s website.

Eligibility requirements for examination:
- Completion of a member Board approved RN nursing education program
- Registration with Pearson Vue is required prior to the release of an Authorization to Test (ATT)
- All applicants must complete a criminal background check prior to the issuance of a license

The Board of Nursing determines if the student with a prior criminal conviction is allowed to sit for the NCLEX-RN exam.

Please note that conferring a degree to a student who has completed the curriculum does not guarantee that the Board of Nursing will issue an Authorization to Test.

Curriculum

The Essentials of Baccalaureate Education for Professional Nursing Practice [American Association of Colleges of Nursing (AACN), 2008]; Nursing Scope and Standards of Practice (2010) provide the framework for the development of the liberal arts and pre-licensure nursing education curriculum and the associated clinical experiences. The Essentials address the core knowledge required of nursing professionals and concepts of client centered care, interprofessional teams, evidence-based practice, quality improvement, patient safety, informatics, clinical reasoning, genetics, cultural sensitivity, professional values and practice across the life span.

The practice experience in the final two years enhances the connections with didactic content and facilitates growth across the curriculum. The rationale for sequencing of courses facilitates moving from the simple to the complex. Students begin their nursing courses by learning to assess and plan care for meeting basic needs of the independent community based adult followed by the nursing home resident at variable levels of required skill. Upon completion of the program, students are working as a team member to organize, implement, collaborate and evaluate nursing care for groups of clients/families, community groups and populations. The student evaluations demonstrate increasing expectations in clinical performance.

Freshman Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 111 – Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>NURS 100 – Nursing</td>
<td>1</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>MATH 111 (or greater)</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td>ENGL 102 – Academic Writing &amp; Lit.</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 222 – General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2XX – Clinical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>RELG 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>A/M/T 131 – Intro to Art, Music, or Theater</td>
<td>3</td>
</tr>
</tbody>
</table>

Sophomore Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 200 – CU Connections 0.5</td>
<td></td>
</tr>
<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 225 – Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 220 – Human Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>RELG 224 – Christian Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 260 – Developmental Psych.</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIST 112 – Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 223 – Human Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>COMM 261 – Team &amp; Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>PE 111 – Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>MATH 160 – Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

**RELG 224 Christian Ethics is strongly recommended as the 2nd of two required courses in religion.**

Junior Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 300 - Professional Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 310 - Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NURS 320 - Fundamentals of Nursing Practice w/ Older Adults</td>
<td>6</td>
</tr>
<tr>
<td>NURS 330 - Concepts of Pathophysiology &amp; Pharmacology I</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 350 - Research &amp; Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 360 - Adult Health Nursing Practice</td>
<td>5</td>
</tr>
<tr>
<td>NURS 370 - Psychiatric &amp; Mental Health Nursing Practice</td>
<td>5</td>
</tr>
<tr>
<td>NURS 330 - Concepts of Pathophysiology &amp; Pharmacology II</td>
<td>3</td>
</tr>
</tbody>
</table>
# Senior Year

## Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 400 - Adult Health Nursing Practice II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 410 - Nursing Practice of Women &amp; Children</td>
<td>6</td>
</tr>
<tr>
<td>NURS 420 - Leadership in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 430 - Health Policy</td>
<td>2</td>
</tr>
</tbody>
</table>

## Course Descriptions

### NURS 100 - Success in Nursing Seminar

**Credit:** 1 hour

The design of the course is an introduction to the profession of nursing and to the Campbell University Department of Nursing. This course emphasizes several key concepts necessary to build students’ skill sets for their future endeavors in college as well as their chosen profession as a professional nurse.

### NURS 300 - Professional Nursing Practice

**Credit:** 3 hours

The design of the course is to review the past, present, and future of professional nursing. There is emphasis on discussion of professional values, philosophies, core competencies and the knowledge needed for professional practice.

### NURS 310 - Health Assessment

**Credit:** 3 hours

The course teaches the student assessment of the healthy adult client with consideration of common variations and life span influence. Assessment of the client is within a cultural, spiritual, member of family and community framework.

### NURS 320 - Fundamentals of Nursing Practice with Older Adults

**Credit:** 6 hours

This is the first course designed to introduce students to the role of critical thinking and the nursing process as a mechanism to synthesize knowledge and master basic nursing skills that promote, maintain and restore health in older adult clients.

### NURS 330 - Concepts of Pathophysiology and Pharmacology I

**Credit:** 3 hours

This is the first of two courses that examine the physiologic mechanisms underlying selected alterations in health that occur throughout the life cycle. Integrated within the course are basic pharmacological concepts with emphasis on drug groups and nursing implications.

### NURS 340 - Concepts of Pathophysiology & Pharmacology II

**Credit:** 3 hours

The second course in the series that examine the physiologic mechanisms underlying selected alterations in health that occur throughout the life cycle. Integrated within the course are basic pharmacological concepts with emphasis on drug groups and nursing implications.

### NURS 350 - Research and Evidenced Based Practice

**Credit:** 3 hours

This course examines the steps of the research process, and provides the student with the basic skills and knowledge to evaluate research. Integrated throughout the course are ethical considerations and methods of protection of human subjects.

### NURS 360 - Adult Health Nursing Practice I

**Credit:** 5 hours

This is the first course that emphasizes the care of adults in a broad range of settings with the role of the nurse as a member of the healthcare team. It reinforces the role of critical thinking and the nursing process as a mechanism to synthesize knowledge.

### NURS 370 - Psychiatric and Mental Health Nursing Practice

**Credit:** 5 hours

This course focuses on alterations in mental health and the theories and principles underlying nursing care of this population. Students examine predisposing biological, psychological, and sociocultural factors contributing to the development and continuation of disorders.

### NURS 400 - Adult Health Nursing Practice II

**Credit:** 5 hours

This is the 2nd course that emphasizes the care of adults in a broad range of settings with the role of the nurse as a member of the healthcare team. It reinforces the role of critical thinking and the nursing process as a mechanism to synthesize knowledge.

## Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 450 - Population Health</td>
<td>5</td>
</tr>
<tr>
<td>NURS 460 - Focused Client Experience Practicum*</td>
<td>6</td>
</tr>
<tr>
<td>NURS 470 - Transitions to the Role of Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 480 - Nursing Informatics</td>
<td>2</td>
</tr>
</tbody>
</table>

### NURS 450 - Population Health

**Credit:** 5 hours

### NURS 460 - Focused Client Experience Practicum*

**Credit:** 6 hours

### NURS 470 - Transitions to the Role of Nurse

**Credit:** 3 hours

### NURS 480 - Nursing Informatics

**Credit:** 2 hours
NURS 410 - Nursing Practice of Women and Children
Credit: 6 hours
This course focuses on health care needs of women across the lifespan, with a focus on childbirth and children as unique individuals within the childbearing family. The emphasis is the role of the nurse in health promotion, positive parenting and advocacy for vulnerable clients.

NURS 420 - Leadership in Nursing
Credit: 3 hours
This course provides the student with the opportunity to explore the leadership theories, behaviors and organizational structures that enhance the delivery of safe quality care. The learner reflects on organizational roles, legal responsibilities, and implications for professional nursing practice.

NURS 430 - Health Policy
Credit: 2 hours
This course focuses on health policy and issues that affect consumers of health care and nursing practice within the community. The course examines socioeconomic, environmental, epidemiological, legislative influences, ethical/legal issues, and the impact of health beliefs and practices on health promotion and protection in communities and society.

NURS 450 - Population Health
Credit: 5 hours
The design of the course is to develop student’s knowledge and skills in applying health promotion and disease prevention frameworks, nursing and public health concepts, epidemiology, and environmental health issues in working with populations in the community.

NURS 460 - Focused Client Experience Practicum
Credit: 6 hours
This course is an intensive clinical practicum whereby the student collaboratively works with faculty and a nurse preceptor in a chosen setting. The student synthesizes knowledge and skills from basic and upper-division education to plan, organize, coordinate, and deliver safe, quality care.

NURS 470 - Transitions to the Role of Professional Nurse
Credit: 3 hours
This design of the course is facilitation to practice with evidence based strategies that improve retention of new graduate nurses. The focus is career counseling, resume and portfolio development, the cover letter, behavioral based interviews, presentation skills and communicating value to employers.

NURS 480 - Nursing Informatics
Credit: 2 hours
Nursing Informatics combines knowledge and skills from nursing, computer technology, information and cognitive science to design and implement automated systems that support practice in the delivery of care.
Department of Pharmaceutical Sciences
Campbell University
College of Pharmacy & Health Sciences
PO Box 1090
Buies Creek, NC 27506
(800) 760-9734, ext. 1838

Academic Programs
The Department of Pharmaceutical Sciences offers a bachelor’s and master’s degree in pharmaceutical sciences preparing students for careers in the pharmaceutical and biotechnology industries.

Bachelor of Science in Pharmaceutical Sciences (BSPS)
Students who earn a bachelor of science in pharmaceutical sciences (BSPS) degree are prepared to enter research and technical positions in the pharmaceutical and biotechnology industries, in academic government laboratories, or to pursue postgraduate studies. The BSPS program offers one of the most extensive laboratory-based programs in North Carolina.

Students who declare their major as BSPS must satisfy all the College of Pharmacy & Health Sciences requirements in Campbell University’s Undergraduate Academic Bulletin.

Prior to entering the major, students must complete a minimum of 64 semester hours from the core liberal arts curriculum in addition to the following courses or their equivalents:

- Basic Biology
- Calculus I
- General Chemistry (2 semesters)
- General Physics (2 semesters)
- Human Anatomy and Physiology
- Microbiology
- Organic Chemistry (2 semesters)

Internships
Students complete an extensive internship in the BSPS program during their final semester, providing them with professional level experience and preparation for a career in the pharmaceutical industry. There are hundreds of pharmaceutical research and manufacturing sites located in North Carolina. A majority of these companies are in the Research Triangle Park, which is less than 45 miles away from Campbell University.

Additionally, there are several major research universities and government agencies nearby. Students may choose an internship site based upon their future career goals including academic, research, manufacturing, or regulatory sites. Many BSPS graduates gain employment as a direct result of their internships.

Internship Sites
A representative list of internship sites is as follows; however, students are not limited to completing internships at these organizations:

- Barry-Wehmiller
- BioAglytix
- BiogenIDec
- Carolina Medical Products
- Catalent
- Coviden
- DSM
- Eli, Inc.
- Eisai
- Fujifilm Diosynth
- FDA
- GlaxoSmithKline (RTP and Zebulon)
- Grifols
- Hospira (Clayton and Rocky Mount)
- Liquidia
- Metrics
- Novozymes
- Prometrics
- Purdue Pharma
- Sandoz
- State Bureau of Investigation

Master of Science in Pharmaceutical Sciences (MSPS)
The Master of Science in Pharmaceutical Sciences (MSPS) degree program is designed to enhance an individual’s research and contract service capabilities. Students who complete this degree are prepared for careers in drug discovery, development, and production or further studies at the PhD level.

The degree offers the following five tracks:

Bioprocessing & Biotechnology
The track in Bioprocessing & Biotechnology investigates pharmaceutical agents that are produced by living cells. The particular focus is on cells that are genetically engineered to produce foreign proteins. Areas of study include the growth of engineered cells, isolation of pharmaceutical proteins produced by the cells, and analytical techniques used to assess the identity, quality and potency of the proteins. Career pathways for graduates include bioprocess operation and development.

Industrial Pharmacy
The track in Industrial Pharmacy prepares students for a career in research and development, production, and/or quality control within the pharmaceutical industry. Students engage in research under the guidance of a faculty member and complete courses focusing on formulation development and drug delivery systems.

Pharmaceutical Analysis
The track in Pharmaceutical Analysis trains students to develop and validate analytical methods using a wide variety of analytical instruments, and perform proper analytical procedures for various pharmaceuticals from sample preparation and analysis, to data interpretation with statistical significance.

Pharmacology
The track in Pharmacology focuses on the interaction of drugs within biological systems. Students explore how drugs work and/or find new biological targets in order to discover and develop drugs to treat human patients. Students who complete this track are prepared for careers in drug discovery and development.

Multidisciplinary
The Multidisciplinary track allows students to study multiple tracks in the MSPS curriculum. Students completing the Multidisciplinary track concentrate on one track, and have the opportunity to broaden their education by taking advanced laboratory-based courses from one or two additional tracks. Students who complete this track are prepared for careers in diverse areas of the pharmaceutical industry.
Admission

BSPS Admission
This is under the university admissions policy. The students in the pre-pharmacy or equivalent program can declare their major to BSPS degree program.

MSPS Admission
Applications for admission to the MSPS degree program are evaluated by the admissions committee in the Department of Pharmaceutical Sciences. Acceptance into the graduate program is based on the overall record and ability of the applicant. Applicants failing to meet admissions requirements may be considered for admission provided their record is indicative of exceptional ability.

Applicants are only considered for fall enrollment due to the curriculum sequences of the program. Since the program operates on rolling admission and has limited enrollment, individuals are strongly encouraged to submit their applications early in the admissions cycle. Applications received after April 1 have an increased probability of being deferred to a wait list. International applicants must apply by April 1 due to additional process requirements with associated timelines.

There are three pathways to admissions to the MSPS program. Applicants may be considered in one of the following categories:

1. A graduate of a baccalaureate program seeking the MSPS degree: Individuals may apply prior to completion of their undergraduate degree and gain acceptance contingent upon completion of the degree.

2. BSPS/MSPS 5+R program: A Campbell University undergraduate BSPS student seeking the BSPS/MSPS 5 Years + Research option. Campbell BSPS students may apply to the MSPS program in their junior year. These students can take MS courses prior to graduating from the BSPS program. Accepted applicants would complete the BS and MS degrees in an approximate 5 year period as outlined in the curriculum. Please note: Full acceptance into the MSPS program will not be granted until completion of the BSPS degree requirements.

3. Dual MSPS/PharmD program: Individuals who meet the PharmD program admissions requirements may apply for the dual MSPS/PharmD program whether they will earn a bachelor’s degree or not. (See the Dual Degree Programs section of this bulletin for more information.)

Admissions Requirements
• Undergraduate GPA of 3.0 or better
• GRE verbal ≥ 20th percentile, quantitative ≥ 60th percentile, analytical writing ≥ 3.0
• TOEFL ≥ 80 (internet) or IELTS ≥ 6.5 (if applicable)

Prerequisites
• Biochemistry
• Calculus
• General Chemistry I & II
• Organic Chemistry I & II
• Physics I & II
(See Individual tracks for additional prerequisites.)

All prerequisites must be completed with earned grades of C or better.

Note: Exemption from a maximum of six credit hours of didactic coursework based on previous coursework or relevant work experience may be requested to the appropriate course director with subsequent approval by the director of pharmaceutical sciences programs and the associate dean of academic affairs.

Application Process
• Complete application
• Submit the following:
  ☐ All official college transcripts
  ☐ Official GRE scores
  ☐ Official TOEFL or IELTS scores (if applicable)
  ☐ Three letters of recommendation
  ☐ Application fee ($50)

Admission Policies
1. Students who do not meet an admissions requirement may be eligible for provisional acceptance. The admissions committee will review records for all provisional students at the end of their first semester to determine their eligibility to continue in the program. Students accepted provisionally will remain on provisional status until completion of at least seven credit hours of graduate level courses and completion of their baccalaureate degree.

Applicants that are granted provisional acceptance must meet the following requirements in the first semester in order to maintain eligibility:
• Achieve a GPA of at least 3.0 in all graduate-numbered courses
• Achieve a GPA of at least 3.0 in all MSPS program pre-requisite courses
• post matriculation
Earn a grade C or higher in all coursework (graduate or prerequisite courses) with the exception of track-specific courses
Earn a grade B or higher in track-specific courses

2. Those who have earned a PhD, MD, PharmD (terminal doctoral degrees listed by NIH) or a prior MS degree in another chemical or biomedical discipline at an accredited institution in the United States are not required to submit GRE or other test scores.

3. Students not seeking a degree can receive approval to register for courses if they:
  a. Have taken all prerequisites for the desired course(s) and earned a C or higher
  b. Completed an application with required $50 fee (unless currently enrolled at Campbell University)
  c. Submit all official college transcripts (unless a current or former student at Campbell University)
  d. Receive permission from the course instructor(s)

A maximum of 5 credit hours of graduate level courses numbered PHSC 500 or higher may be taken before acceptance. In cases where demand for a class exceeds the enrollment capacity, degree seeking students will have priority over students not seeking a degree. Non-degree seeking students can only register during the first week of classes and may not pre-register for courses. Students must earn a grade of C or higher in MSPS coursework taken prior to admission to be eligible for admission into the program. Admission into the program also requires completion of the admissions requirements not already satisfied.
4. Students taking a leave of absence of greater than one semester must notify the director of pharmaceutical sciences programs in writing.

**International Applicants**

1. International applicants are not eligible for provisional acceptance, if a US student visa is required.
2. International applicants must submit a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.
3. The completed application for admission must be received by the April 1 deadline to be considered for admission.
4. If English is not the applicant’s native language, applicants must also submit official scores for the TOEFL (≥ 80 is minimum acceptable score) or IELTS (≥ 6.5 is minimum acceptable score). Applicants who have completed their undergraduate degree in English in the US are not required to submit English proficiency test scores.

**Refund Policy**

An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for students, who attend any class and subsequently withdraws, drops any course(s) or are suspended from CPHS for any cause.

---

**Academic Standards**

**BS in Pharmaceutical Sciences**
Academic standards for undergraduate programs are specified in the Campbell University's Undergraduate Academic Bulletin.

**MS in Pharmaceutical Sciences**
For Students in the MSPS program:

1. Students must maintain a minimum cumulative grade point average of 3.0 in all MSPS courses. Failure to maintain the cumulative GPA will result in a probationary period, not exceeding one semester, and will result in dismissal at the end of the probationary period if the student has not achieved the required cumulative GPA.
2. Earning any credits of D or F will result in dismissal.
3. Student must complete all coursework within seven (7) years of entering the MSPS program.
4. Student dismissed from the program may appeal to the MSPS Academic Performance and Standards Committee (APSC) to be reinstated.

The Chair of the APSC will periodically review students’ files and forward his/her findings to the Director of Pharmaceutical Sciences Programs. The Director in turn will notify the student in writing concerning his/her standing in the program. A student may appeal the Director’s decision to the Committee (see Rule 4 above). The student must submit a written petition to the Chair of the Committee within two weeks of the student’s receipt of notification of the enforcement action. The Committee’s recommendations are forwarded to the Associate Dean for Academic Affairs of the College of Pharmacy and Health Sciences for a review. The Committee’s Chair will notify the student in writing concerning the Committee’s recommendations. Upon receipt, the student can appeal the decision to the Associate Dean for Academic Affairs for a final review. The Associate Dean’s decision is final.

---

**Grade Appeals**
Students in the Master of Science in Pharmaceutical Sciences (MSPS) program who feel that they have a just reason for appealing a grade in a College of Pharmacy and Health Sciences course must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, then the student should appeal to the course master. If no resolution is achieved at that level, the student should appeal to the appropriate Department Chair. After efforts within the department, a student may appeal to the Graduate Academic Performance and Standards Committee (MSPS program) to seek resolution. If the student feels that the resolution is not just, the student must submit a written petition to the Associate Dean for Academic Affairs of the College of Pharmacy and Health Sciences within seven days of the student’s receipt of notification of the Graduate Academic Performance and Standards Committee (MSPS program) decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the Associate Dean for Academic Affairs of the College of Pharmacy & Health Sciences is final.

---

**Grade Appeals**
Students in the Master of Science in Pharmaceutical Sciences (MSPS) program who feel that they have a just reason for appealing a grade in a College of Pharmacy and Health Sciences course must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, then the student should appeal to the course master. If no resolution is achieved at that level, the student should appeal to the appropriate Department Chair. After efforts within the department, a student may appeal to the Graduate Academic Performance and Standards Committee (MSPS program) to seek resolution. If the student feels that the resolution is not just, the student must submit a written petition to the Associate Dean for Academic Affairs of the College of Pharmacy and Health Sciences within seven days of the student’s receipt of notification of the Graduate Academic Performance and Standards Committee (MSPS program) decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the Associate Dean for Academic Affairs of the College of Pharmacy & Health Sciences is final.

---

**Refund Policy**
An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for students, who attend any class and subsequently withdraws, drops any course(s) or are suspended from CPHS for any cause.
## Curriculum

### BS in Pharmaceutical Sciences

#### Freshman Year

**Semester 1**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 – General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 – Freshman Comp. I</td>
<td>3</td>
</tr>
<tr>
<td>A/M/T 131 – Intro. to Art, Music or Theater</td>
<td>3</td>
</tr>
<tr>
<td>RELG 125 – Intro. to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113 – General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221 – Human A &amp; P</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 – Freshman Comp. II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122 – Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

#### Sophomore Year

**Semester 3**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 227 – Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 334 – Microbiology &amp; Immunology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221 – General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>HIST 111 – Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>PE 111 – Exercise Activity</td>
<td>1</td>
</tr>
<tr>
<td>CUC 200 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Semester 4**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 222 – General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 2XX – Literature I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 112 – Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 200 – Econ./Soc. Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>CUC 100 – CU Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

#### Junior Year

**Semester 5**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 323 – General Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 325/325L – General Biochem. Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 210 – Laboratory Safety</td>
<td>1</td>
</tr>
<tr>
<td>LANG 201 – Intermed. Foreign Lang.</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 324 – Intro. to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 451 – Scientific &amp; Technical Writing</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 220/220L – Quantitative Lab Techniques</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 442 – Interpersonal Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>ENGL 2XX – Literature II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17.5</strong></td>
</tr>
</tbody>
</table>

**Semester 6**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 328 – Intro. to Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 410 – Analytical Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 411/411L – Analytical Instrumentation Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 338 – Product &amp; Process Validation</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 326 – Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 327/327L – Molecular Biology Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 334 – Scientific Lit. Seminar I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Senior Year

**Semester 7**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 418 – Industrial Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 419/419L – Industrial Pharmacy Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 438 – Pharmaceutical Methods &amp; Bioprocessing</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 439L – Pharmaceutical Methods &amp; Bioprocessing Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 336 – Scientific Lit. Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>RELG XXX – Religion Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Semester 8**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Internship* PHSC 420</td>
<td>12-14</td>
</tr>
<tr>
<td>Senior Seminar PHSC 416</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13-15</strong></td>
</tr>
</tbody>
</table>

**Total credit hours earned** 131.5-133.5

*Internship sites may require a criminal background check before beginning the internship. Summer internships earn 12 credit hours rather than 14 credit hours.

Please visit www.campbell.edu/cphs for the most up-to-date curriculum information.
### MS in Pharmaceutical Sciences

Five tracks are available in the MSPS curriculum so students may customize their degree.

### Core Curriculum

All students must complete courses in the core curriculum in addition to one set of track courses.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 508 – Drug Dev. and Pharm. Regulations</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 512 – Fundamentals of Cellular Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 523 – Graduate Experimental Design &amp; Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 534/536 – M.S. Seminar I &amp; II</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 574 – Biopharmaceutics</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 610 – Research Proposal</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total** 17

### Track Curriculum

#### Bioprocessing & Biotechnology

*Prerequisites: Microbiology, Molecular Biology*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 526/526L – Protein Analysis &amp; Bioassays/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 538/538L – Bioprocessing I: Upstream Technologies/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 539/539L – Bioprocessing II: Downstream Operations/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 620 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX - Elective(s)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 19

#### Industrial Pharmacy

*Prerequisites: Analytical Instrumentation*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 412L – Analytical Lab Survey</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 514/515/515L – Industrial Pharmacy</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 528/529L – Adv. Pharm. Analysis-Separation/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 530/531L – Adv. Pharm. Analysis-Spectroscopy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 620 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX - Elective(s)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 20

### Pharmaceutical Analysis

*Prerequisites: Analytical Instrumentation*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 526/526L – Protein Analysis &amp; Bioassays/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 590/590L – Adv. Pharm. &amp; Toxicology/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 592 – Adv. Cellular &amp; Molecular Pharm.</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 510 – Pharmacokinetics</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 620 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX - Elective(s)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 19

### Pharmacology

#### Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 510, PHSC 412L, PHSC 540, PHSC 542, PHSC 543L</td>
<td></td>
</tr>
<tr>
<td>PHSC 412L – Analytical Lab Survey</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 514/515/515L – Industrial Pharmacy</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 528/529L – Adv. Pharm. Analysis-Separation/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 530/531L – Adv. Pharm. Analysis-Spectroscopy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 620 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX - Elective(s)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 20

### Multidisciplinary

*Prerequisites: depends on advanced coursework selected*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 510, PHSC 412L, PHSC 540, PHSC 542, PHSC 543L</td>
<td></td>
</tr>
<tr>
<td>PHSC 526/526L – Protein Analysis &amp; Bioassays/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 590/590L – Adv. Pharm. &amp; Toxicology/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 592 – Adv. Cellular &amp; Molecular Pharm.</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 510 – Pharmacokinetics</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 620 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX - Elective(s)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 19

### Electives

Electives must be PHSC or PHAR courses 500 or above. PHAR are courses must be approved by course instructor and associate dean of academic affairs. Students may also apply courses from other MSPS tracks.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 504 – Adv. Research in Pharm. Sciences</td>
<td>1-4</td>
</tr>
<tr>
<td>PHSC 510 – Pharmacokinetics</td>
<td>1-3</td>
</tr>
<tr>
<td>PHSC 512 – Practical Compounding Techniques</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 534 – Herbal Medicine</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 550 – Alternative Medicine</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 518 – General Toxicology/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 522 – Molecular Modeling</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 532 – Introduction to Radiopharmaceuticals</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 558 – Essentials of Toxicology</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 564 – Pharmacogenetics</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 565 – Advanced Experimental Design</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 577, 581, 583 – Pharmacology &amp; Medicinal Chemistry II, III or IV</td>
<td>3 or 4</td>
</tr>
<tr>
<td>PHSC 578 – Good Regulatory Practices</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 582 – Botanical Medicine Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 593 – Leadership Development</td>
<td>2</td>
</tr>
</tbody>
</table>

Federally supported financial aid requires a minimum of half-time enrollment (3.5 credit hours).

Please visit www.campbell.edu/cphs for the most up-to-date curriculum and tuition information.
5 Years + Research
The Department of Pharmaceutical Sciences offers a 5 Years + Research providing an option for students to earn their BS and MS in pharmaceutical sciences degrees in five years, plus the amount of time it takes to complete a research project.

Admission Requirements
Students working toward a BSPS degree may apply for the 5 Years + Research option if they meet the following:
- Minimum GPA (overall and major) of 3.0 after the fall of the junior year
- GRE verbal ≥ 20th percentile, quantitative ≥ 60th percentile, analytical writing ≥ 3.0

BSPS students interested in completing the 5 Years + Research should apply by March of their junior year to assure a place in the MSPS program.

Curriculum Examples
Below are curriculum examples for the 5 Years + Research option. Students must complete the core courses in addition to one set of track courses. View the BSPS curriculum section for the first three years of undergraduate coursework.

Core Courses
Senior Year of BSPS Program
Students receive provisional acceptance into MSPS program

Semester 7
Courses Credit Hours
PHSC 514 – Industrial Pharmacy 3
PHSC 515/515L – Industrial Pharmacy/Prelab/Lab 1
PHSC 438 – Pharm. Methods & Bioprocessing 3
PHSC 439L – Pharm. Methods & Bioprocessing Lab 1
PHSC 336 – Scientific Literature Seminar II 1
PHSC 523 – Graduate Experimental Design & Biostatistics* 4
UNIV XXX – Social Science Elective 3

*Students may take PHSC 523 in place of PHSC 324 during their BSPS junior year (semester 5)

Semester 8
Courses Credit Hours
PHSC 574 – Biopharmaceutics 3
RELG XXX – Religion Elective 3
Summer
PHSC 420 – Senior Internship 12
PHSC 416 – Senior Seminar 1

BSPS degree conferred/GPA qualification required for continuation

Graduate Year
Students receive full acceptance into MSPS program

Semester 9
Courses Credit Hours
PHSC 534 – M.S. Seminar I 1
PHSC XXX – PHSC Elective 3
PHSC 610 – Research Proposal 2

Semester 10
Course Credit Hour
PHSC 536 – M.S. Seminar II 1
PHSC 620 – Research Project 4

Track Courses
In addition to the core courses, students must complete the following courses in their specific track each semester.

Bioprocessing & Biotechnology
Courses Credit Hours
Semester 7
PHSC 526/526L – Protein Analysis & Bioassays/Lab 4
PHSC 508 – Drug Dev. and Pharm. Regulations 2
Semester 8
PHSC 538/538L – Bioprocessing I: Upstream Technologies /Lab 4
Semester 9
PHSC 539/539L – Bioprocessing II: Downstream Processing /Lab 4
PHSC 512 – Fundamentals of Cellular Pharmacology 4
Semester 10
Only core courses this semester

Industrial Pharmacy
Courses Credit Hours
Semester 7
PHSC 508 – Drug Dev. and Pharm. Regulations 2

Semester 8
PHSC 540 – Adv. Physical Pharmacy 3
Semester 9
PHSC 510 – Pharmacokinetics 2
PHSC 512 – Fundamentals of Cellular Pharmacology 4
Semester 10
PHSC 542 – Adv. Topics in Industrial Pharmacy 3
PHSC 543L – Adv. Industrial Pharmacy Lab 1

Pharmaceutical Analysis
Courses Credit Hours
Semester 7
PHSC 528 – Adv. Pharm. Analysis I 3
PHSC 529L – Adv. Pharm. Analysis I Lab 1
Semester 8
PHSC 530 – Adv. Pharm. Analysis II 3
PHSC 531L – Adv. Pharm. Analysis II Lab 1
Semester 9
PHSC 508 – Drug Dev. and Pharm. Regulations 2
PHSC 512 – Fundamentals of Cellular Pharmacology 4
Semester 10
Only core courses this semester

Pharmacology
Courses Credit Hours
Semester 7
PHSC 508 – Drug Dev. and Pharm. Regulations 2
PHSC 512 – Fundamentals of Cellular Pharmacology 4
Semester 8
PHSC 592 – Adv. Cellular & Molecular Pharmacology 3
Semester 9
PHSC 590/590L – Adv. Pharmacology & Toxicology/Lab 3
PHSC 526/526L – Protein Analysis & Bioassays/Lab 4
PHSC 510 – Pharmacokinetics 2
Semester 10
Only core courses this semester

Multidisciplinary
Many options possible; see curriculum for more information.
Cooperative Degree Program

The College of Pharmacy & Health Sciences (CPHS) joined forces with North Carolina State University’s College of Engineering to offer a cooperative degree program for chemical engineering students to earn a master’s degree in addition to their bachelor’s degree at NC State, from start to finish in a total of five years.

Through this partnership, students focusing on biomolecular engineering or biomanufacturing sciences concentrations at NC State can start earning their master’s degree during their senior year. Students graduate with two degrees in only five years.

Program Purpose

This unique program provides students with specialized training that combines chemical engineering with advanced pharmaceutical sciences principles including: aspects of drug design, mechanisms of drug action, dosage form design and formulation, quantitative analysis and quality control, manufacturing, bioprocessing, and regulatory compliance.

Students in the program will complete the curriculum in the Industrial Pharmacy Track of the MSPS program at CPHS.

Admission Requirements

- GPA of at least 3.0
- GRE verbal ≥ 20th percentile, quantitative ≥ 60th percentile, analytical writing ≥ 3.0

Application deadline is December 1 of the student’s junior year

Prerequisites

- Analytical Instrumentation
- Biochemistry
- Calculus
- General Chemistry I & II
- Organic Chemistry I & II
- Physics I & II

Please visit www.campbell.edu/cphs for the most up-to-date curriculum and tuition information.

Course Descriptions

PHSC 210 – Laboratory Safety
Credit: 1 hour
An introduction to chemical, physical, and biological hazards associated with laboratory work. Students are introduced to laboratory worker regulations, methods for laboratory and personnel monitoring, and personal protective equipment and clothing. Note: PHSC 210 is a prerequisite (or co-requisite) to all laboratory courses in pharmaceutical sciences.

PHSC 220/220L – Quantitative Laboratory Techniques/Lab
Credit: 2 hours
This course introduces the general mathematical principles and basic laboratory techniques used in pharmaceutical analyses. The course covers the basic laboratory skills needed to accurately and precisely measure the mass of solid and liquid samples and the volume of liquid samples. The proper skills for the preparation of mixtures and solutions of various analyte concentrations are also covered. Sources of error in measurements and methods for estimation of precision and accuracy of measurements are discussed.

The concepts of concentration, dilution and stoichiometry are reviewed including their use in analysis. In addition, basic acid base theory including acid base titration is reviewed. Students will prepare buffer solutions and the use of buffers will be discussed. The use of spreadsheets in chemical analysis will be introduced.

PHSC 323/325/325L – General Biochemistry/Pre-lab/Lab
Credit: 3/1 hours
This introductory lecture and laboratory course provides an overview of the synthesis and metabolism of amino acids, carbohydrates, lipids, and nucleic acids; enzyme kinetics; bioenergetics; and macromolecular structure and function. Students must attend a weekly pre-lab session.
Prerequisite: PHSC 220/220L, CHEM 227/227L, CHEM 228/228L, PHYS 221/221L.

PHSC 324 – Introduction to Biostatistics
Credit: 3 hours
Statistical methods in health sciences. The course is intended to provide the student with basic knowledge of descriptive statistics, graphing data, probability theory, normal and other common distributions, sampling and estimation, hypothesis testing, ANOVA and other selected statistical methods. This course is co-listed as CLNR 324.

PHSC 326 - Molecular Biology
Credit: 3 hours
Molecular biology: a practical approach. This course is intended to provide the students with an understanding of the tools and techniques used in molecular biology, especially as they apply to the research and pharmaceutical application of modern recombinant DNA technology. The focus will be on the analysis and manipulation of genes and gene products. Both theoretical and practical aspects will be covered. This course provides an introduction to the basic concepts of recombinant DNA technology, such as cloning of genes from DNA libraries; use of various organisms for expression of gene products; analysis of DNA and RNA; and enzymatic modifications of DNA. Application of these techniques will be illustrated by use of homework problems as well as an associated laboratory course.
Prerequisite: Biochemistry with lab

PHSC 327/327L - Molecular Biology Pre-lab/Lab
Credit: 1 hour
This course is intended to provide the student with experience in working with basic techniques used in the construction and manipulation of recombinant DNA molecules. Emphasis will be placed on explaining laboratory results in terms of fundamental concepts in molecular biology. A detailed laboratory notebook will be used to document all lab work, and its contents will be the basis of a final report describing the semester’s work. This course is open to all majors, but priority will be given to Pharmaceutical Sciences majors. Prerequisites: Biochemistry with lab and Microbiology with lab or instructor’s permission.
Co-requisite: PHSC 326
PHSC 328 – Introduction to Pharmacology
Credit: 4 hours
The basic principles of pharmacology and toxicology are covered through discussion of the responses of biological systems to drugs and chemicals. The course also considers the absorption, distribution, metabolism, and excretion of xenobiotics and how these factors relate to drug action. Prerequisite: BIOL 221/221L.

PHSC 334 and 336 – Scientific Literature Seminar I & II
Credit: 1 Hour Each
Students are introduced to literature searching and critical analysis techniques in this series of courses. The courses promote the formulation of critical thinking approaches. Special emphasis is placed on communication techniques. Students apply their knowledge and skill in the form of written and oral presentations developed by researching the current pharmaceutical and biomedical literature. Prerequisite: PHSC 451.

PHSC 338 – Product & Process Validation
Credit: 2 hours
This course introduces students to the principles of good manufacturing practices (cGMP), quality control and quality assurance. The basics of regulatory compliance, the global nature of regulations and the importance of validation in the Pharmaceutical and Biotechnology Industries are discussed. Students learn about the validation of facilities, equipment, utilities, cleaning procedures, computer systems, assays, and processes. The course also illustrates the importance of the team approach to validation and the need for thorough documentation of all associated activities.

PHSC 404 – Research in Pharmaceutical Sciences
Credit: Variable (Maximum 3 hours)
The purpose of this elective course is to introduce pharmaceutical sciences students to methods of basic science and/or clinical research. This involves application of the scientific processes of hypothesis formation, literature evaluation, experimental design, development of technical skills, data acquisition and analysis, and formal presentation of results. Requires permission of instructor.

PHSC 410/411/411L – Analytical Instrumentation/Pre-Lab/Lab
Credit: 3/1 hours
A comprehensive introductory course that provides students with an in-depth study of the theory and operation of scientific instrumentation typically found in pharmaceutical, chemical, and biotechnical research and analytical facilities. Students gain hands-on experience with a variety of spectroscopic and chromatographic instrumentation through structured laboratory experiments. Students must attend a weekly pre-lab session. Prerequisite: PHSC 220/220L, PHYS 222/222L, or by the permission of the instructor.

PHSC 412L – Analytical Laboratory Survey
Credit: 1 hour
The course will emphasize the use and application of basic analytical techniques used in the pharmaceutical industry, such as, spectroscopy and chromatography.

PHSC 414 – Research Seminar
Credit: 1 hour
Used in conjunction with research courses PHSC 404 and 504, research seminar provides students with an opportunity to present original research work.

PHSC 416 – Senior Seminar
Credit: 1 hour
Senior Seminar provides a forum through which students chronicle their internship experiences. Students present an overview of the companies in which they worked and provide a synopsis of their roles in the organizations.

PHSC 418/419/419L – Pharmaceutical Methodology & Bioprocessing/Lab
Credit: 3/1 hours
This survey course introduces student to the preformulation and manufacturing of pharmaceutical dosage forms. Prerequisites: Enrollment is limited to students who have declared Pharmaceutical Science as a major or permission of the course director.

PHSC 420 – Senior Internship
Credit: 12-14 hours
This internship provides practical experience in the pharmaceutical, chemical, or biotechnology industries. Students and participating industrial facilities are matched to provide a comprehensive work experience. Prerequisites: Completion of all BSPS courses and at least a 2.0 cumulative and major GPA.

PHSC 438/439L – Pharmaceutical Methodology & Bioprocessing/Lab
Credit: 3/1 hours
The course will emphasize analysis of active pharmaceutical ingredients, excipients, and products; process design, analysis and purification of macromolecules by means of modern techniques. It includes but not limited to validation of analytical methods, theory and Interpretation of Mass Spectrometry and Nuclear Magnetic Resonance spectra, following guidelines for analysis of various chemicals and dosage forms in the US Pharmacopeia, proper treatments (isolation, purification, and modification) of compounds or bioproducts for analysis, use of large-scale cell culture for pharmaceutical production, and theoretical considerations for purification of cell-produced pharmaceuticals. Students are also provided with practical hands-on experience in the areas mentioned above. Prerequisites: PHSC 410/411/411L.

PHSC 442 – Interpersonal Skills
Credit: 1.5 hours
Skills such as negotiation, written and verbal communication, managing meetings, facilitation, influencing without authority and assertiveness are often key determinants of success in the workplace. In order to teach students how to be more effective in their careers, students will be coached and evaluated on their ability to plan, conduct and/or facilitate meetings, generate effective communications, and foster effective listening, assertion, and influencing skills. Strategies that are successful during conflictive encounters will be stressed. In addition, students will be exposed to effective techniques used in the selection, mentoring, and management of employees including gender and culture differences.

PHSC 451 – Scientific & Technical Writing
Credit: 1 hour
Scientific and Technical Writing is a required course for Pharmaceutical Sciences and Clinical Research majors designed to enable
students to effectively and accurately write and review a variety of technical documents used in pharmaceutical-related industries. 

Prerequisite: ENGL 101 and 102.

PHSC 462 and 466 – Anatomy & Physiology
Credit: 4 hours each
This two-course sequence presents a comprehensive study of the structure and function of all organ systems as well as basic biochemical and biophysical principles of cellular and membrane function. Relevance to clinical states and drug action is also presented in many areas.

The courses are co-listed as PHAR 302 and 306. Permission of instructor.

PHSC 464 – Biochemistry
Credit: 4 hours
A comprehensive course in biochemistry that discusses the metabolism of amino acids, carbohydrates, lipids, and nucleic acids. Principles of enzyme kinetics and regulation, bioenergetics, thermodynamics, and macromolecular structure-function relationships are presented.

This course is co-listed as PHAR 304. Permission of instructor.

PHSC 468 – Clinical Biochemistry
Credit: 3 hours
This course discusses the principles of quantitative analysis utilized in common clinical laboratory tests. An introduction to interpretation of abnormal clinical laboratory values is presented. Quantitative aspects of nutrition are presented, and regulatory effects of various hormones are described. Diseases such as atherosclerosis and diabetes are discussed.

This course is co-listed as PHAR 308. Permission of instructor.

PHSC 470 – Immunology
Credit: 4 hours
This course covers basic immunology and the fundamental principles relating to the immune response in normal and disease states.

This course is co-listed as PHAR 310. Permission of instructor.

PHSC 472 – Medical Microbiology
Credit: 3 hours
The basic medical microbiology concepts are presented. Information necessary to diagnose and manage infected patients are covered. Current, important bacteriologic, virologic, mycotic, and parasitic pathogens and their related diseases are discussed. Clinical presentations, principles of laboratory diagnosis, and preventative measures are emphasized.

This course is co-listed as PHAR 312.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.

PHSC 474 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

This course is co-listed as PHAR 314.
PHSC 522 – Molecular Modeling
Credit: 2 hours
This informal course trains students in the use of high performance computing systems to solve problems in biological modeling. Lecture topics include a review of high performance computing in molecular modeling, electron density calculations, 3D protein representation docking of molecules. Material is presented both in lectures and supervised lab sessions, during which students do interactive programming. The course is designed for students who are interested in viewing and taking a virtual walk through a complex molecule.
This course is co-listed as PHAR 542.

PHSC 523 – Graduate Experimental Design & Biostatistics
Credit: 4 hours
Statistical methods in health sciences: The course is intended to provide the student with basic knowledge of descriptive statistics, probability theory, hypothesis testing, and other selected statistical methods. In addition, the course enables the student to utilize a statistical software program to apply their knowledge of the subject.

PHSC 526/526L – Protein Analysis & Bioassay/Laboratory
Credit: 4 hours
The combined lecture and lab course covers advanced analysis of proteins from a theoretical standpoint and introduces the concept of bioassay. The analytical techniques covered are commonly used as part of the Quality Control for industrial production of proteins. Techniques covered include electrophoresis-based analyses, spectroscopic techniques, immunological assays, and chromatography. Bioassay topics will cover the means of quantifying the biological activity of protein products. The course will combine lectures with hands-on laboratory exercises. Due to limited availability of certain advanced equipment, some exercises may be done as dry-labs and focus on analysis of instructor-provided data.

PHSC 528/529L – Advanced Pharmaceutical Analysis – Separation/Laboratory
Credit: 3/1 hours
The course emphasizes separation techniques used for the analysis of drugs, drug metabolites, toxic substances, and biological fluids and tissues. Theory and applications of gas and liquid chromatography, capillary electrophoresis, appropriate sample preparation techniques, method development, optimization and validation are discussed. Students learn the current state-of-the-art procedures for the isolation, purification, derivatization, and characterization of complex chemical and pharmaceutical samples with practical hands-on lab experiments.

PHSC 530/531L – Advanced Pharmaceutical Analysis – Spectroscopy/Laboratory
Credit: 3/1 hours
The course emphasizes analysis of pharmaceutical compounds and excipients by means of analytical spectrophotometry – applications of spectrophotometric methods of analysis (UV-visible, Infrared, atomic absorption/emission, fluorescence, mass spectrometry, and nuclear magnetic resonance spectroscopy) to pharmaceutically important materials. It covers principles, theories, instrumentation, and interpretations of spectrophotometric data with hands-on lab experiments.

PHSC 532/533L – Advanced Pharmaceutical Analysis – Physical Pharmacy
Credit: 3/1 hours
This course exposes students to Physical Pharmacy theory and uses the current literature as support. This course is highly interactive and students are encouraged to participate in the discussion of the theory and analysis of the current literature or relevant text. Prerequisites: PHSC 412L, PHSC 418/419L or PHSC 514/515/515L or permission of the course director.

PHSC 534 – Masters of Science Seminar I
Credit: 1 hour
This course is the first of a two part series. The skills developed in this course will be further refined in part two of the series. This interactive class introduces students to literature evaluation and critical analysis techniques. Skills in critical analysis of the scientific literature will be developed in group discussion of scientific papers chosen by the faculty.

PHSC 536 – Masters of Science Seminar II
Credit: 1 hour
In this course students will practice literature research and presentation by presenting a research paper in an area outside of their track. The goal of this course is to develop students’ literature searching, writing skills, presentation skills and ability to critically evaluate primary scientific literature. Prerequisite: PHSC 534

PHSC 538/538L – Bioprocessing I: Upstream Technologies/Lab
Credit: 4 hours
This bioprocessing course provides an introduction to the theory and application of biotechnology procedures related to the development of biopharmaceutical products. Students are provided with an overview of prokaryotic and eukaryotic metabolic and genetic regulation, cell culture principles, bioprocess design and validation, and pharmaceutical product generation. Prerequisites: biochemistry, molecular biology (or demonstration of experience) and PHSC 526/526L (Protein Analysis and Bioassay). The course will combine lectures with hands-on laboratory exercises.

PHSC 539/539L – Bioprocessing II: Downstream Operations/Lab
Credit: 4 hours
This course continues the introduction to the theory and application of biotechnology procedures to the development of biopharmaceutical products begun in PHSC 538. Students are provided with an overview of protein purification, biopharmaceutical formulation, and stability of protein therapeutics. Prerequisite: PHSC 526/526L

PHSC 540 – Advanced Physical Pharmacy
Credit: 3 hours
This course exposes students to Physical Pharmacy theory and uses the current literature as support. The course is highly interactive and students are encouraged to participate in the discussion of the theory and analysis of the current literature or relevant text. Prerequisites: PHSC 412L, PHSC 418/419L or PHSC 514/515/515L or permission of the course director.

PHSC 542 – Advanced Topics in Industrial Pharmacy
Credit: 3 hours
This graduate-level course discusses topics in enabling technologies such controlled release, targeted drug delivery, aerosol/pulmonary delivery, lyophilization, and protein/peptide formulation development. Advanced Topics in Industrial Pharmacy emphasizes drug delivery, dosage form design, and manufacture of pharmaceutical dosage forms. This course promotes the
mission of Campbell University by equipping students with superior skills in Industrial Pharmacy which will allow them to function as a pharmaceutical scientist with the highest integrity and service.  

Prerequisites: PHSC 412L, PHSC 418/419/419L or PHSC 514/515/515L or permission of the course director.

PHSC 543L – Advanced Industrial Pharmacy Lab  
Credit: 1 hour  
The emphasis of this graduate-level Advanced IP Laboratory course is on the formulation, manufacture, and analysis of various pharmaceutical dosage forms (including sterile, liposomes, lyophilized, and nano-colloidal products) in a cGMP simulated environment equipped with the most advanced state-of-art manufacturing and analytical equipment. The laboratory requires students to apply knowledge gained from previous courses.  

Prerequisite: PHSC 418/419/419L or PHSC 514/515/515L.

PHSC 558 – Essentials of Toxicology  
Credit: 2 hours  
The General Toxicology course is designed to give the student a broad appreciation of the field of Toxicology. This includes the absorption, distribution, metabolism and elimination of toxics from the body, as well as the mechanisms of specific toxicity to target organs. Significant treatment of the areas of Forensic, Environmental and Clinical toxicology are also undertaken.  

Prerequisites: PHAR 412 or PHSC 512.

PHSC 564 – Pharmacogenetics  
Credit: 2 hours  
The basic principle of pharmacogenetics/pharmacogenomics and their relationship to current drug development are discussed.  

This course is co-listed as PHAR 594 and CLNR 528.

PHSC 565 – Advanced Experimental Design  
Credit: 2 hours  
This course illustrates the application of design of experiment as a tool in research and industry.  

Prerequisite: PHSC 523 or PHAR 528. This course is co-listed as PHAR 566.

PHSC 573 – Introduction to Multivariate Analysis  
Credit: 1 hour  
This course demonstrates the applications of an advanced statistical tool, MVA, as a data evaluation and predictive tool in pharmaceutical research and industrial operations.  

Prerequisite: PHSC 565

PHSC 574 – Biopharmaceutics  
Credit: 3 hours  
This course presents the biological and physicochemical factors of the body, drugs and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses.  

This course co-listed as PHAR 314 and PHSC 474.

PHSC 577 – Pharmacology & Medicinal Chemistry II  
Credit: 4 hours  
Part of the series of PharmD Pharmacology/Medicinal Chemistry courses, PHSC 577 examines the pharmacology/medicinal chemistry of drugs that modulate neuromuscular transmission and the autonomic nervous system. The course will cover drugs used in the treatment of cardiovascular diseases such as hypertension, cardiac arrhythmias and congestive heart failure.  

Prerequisite: PHAR 412 or PHSC 512. This course is co-listed as PHAR 417.

PHSC 578 - Good Regulatory (GXP) Practices  
Credit: 2 hours  
This course will provide in-depth review of cGMP requirements for a bio-/pharmaceutical and other FDA regulates industries. Compliance to 21 CFR Parts 210 & 211 and other requirements is essential for these companies to survive in FDA regulated environment. Compliance is feasible only if employees are knowledgeable of these requirements and practice in their day-to-day activities

PHSC 579/590L – Advanced Pharmacology & Toxicology/Lab  
Credit: 3 hours  
This course is required for the pharmacology track of the MSPS degree, and provides details on the theory and methodologies of modern pharmacology and toxicology. Class
will consist of lecture and lab time to provide the student hands-on experience in a variety of techniques and data analysis. Topics covered will include radioligand binding analysis, in vitro and in vivo functional assays, and toxicological screening methods. Prerequisites: Grade of B or better in PHSC 512.

PHSC 592 – Advanced Cellular & Molecular Pharmacology
Credit: 3 hours
This course involves a detailed treatment of the various receptor/signal transduction systems found in mammalian systems from the perspective of developing them as therapeutic targets. Aspects of ion channel pharmacology, cyclic AMP and inositol phosphate signaling in pathological conditions will be discussed. The pharmacological control of tyrosine kinase signaling pathways and cell cycle regulation in the therapy of neoplastic disease will be addressed as well. The regulation of gene expression by inhibition of transcription or gene knockout/replacement strategies will also be discussed. The coursework for the class will entail lectures and systematic evaluation of the primary literature in the topics being covered. Prerequisite: Grade of B or better in PHSC 512.

PHSC 593 – Leadership Development
Credit: 2 hours
The purpose of this course is to identify and strengthen leadership skills. It uses a development approach focusing on how individuals become effective leaders by addressing the human element of enterprise within significant business situations. Students will strengthen their individual capabilities to advance their organizations strategically by rethinking their approaches to management, leadership, and leadership development. This course enables students to understand how to build and foster relationships as well as emphasizes the importance of those relationships in their professional and personal lives. This course is co-listed as PHAR 593.

PHSC 610 – Research Proposal
Credit: 2 hours
This course is intended to provide students with an understanding and practical experience in rational study design to test a specific hypothesis. Prerequisites: This course is restricted to students who have been accepted into the MSPS program and have completed at least 6 credits of track-specific graduate course work (not including core courses).

PHSC 620 – Research Project
Credit: 4 hours
This course is intended to provide students with an in-depth understanding of research. This is achieved by an intensive, hands-on laboratory experience in research methods and strategies used to test a specific hypothesis. Prerequisites: This course is restricted to MSPS students in the research tracks who have successfully completed PHSC 610 with a grade of B or better, as well as have approval from their research committee. Additionally, the student cannot be on academic probation at the time of enrollment in the course.
Pharmacy

Doctor of Pharmacy Program
Campbell University
College of Pharmacy & Health Sciences
PO Box 1090
Buies Creek, NC 27506
(800) 760-9734 ext. 1690

Admission Policies
The College of Pharmacy & Health Sciences (CPHS) not only strives to produce graduates who possess a broad scientific and medical knowledge base but who also have the ability to effectively communicate this information to their patients. Students are encouraged to serve in leadership roles within the community and professional organizations. The College instills in students the importance of showing empathy, compassion and understanding to their patients.

CPHS is committed to selecting applicants who display these characteristics in order to be an asset to the profession of pharmacy.

The goals of the admissions process are:
- To understand each applicant as a whole person;
- To evaluate the applicant’s potential for success in the doctor of pharmacy program;
- To assess the candidate’s commitment and aptitude as a future practicing pharmacist.

Each applicant’s academic background and achievements, personal statement, Pharmacy College Admissions Test (PCAT) scores, letters of recommendation and work experience within the pharmacy profession will be considered by the Admissions Committee. In addition to academic performance, the Admissions Committee places emphasis on personal merit, leadership, community involvement, maturity, communication skills, diverse pharmacy work, and dedication to professional goals.

Admissions Criteria
Applicants must complete a minimum of 64 credit hours prior to matriculation into the doctor of pharmacy program. All required pre-professional academic work must be completed at an accredited college or university in the United States. All prerequisite courses must be completed with earned grades of “C” or higher.

A minimum grade point average of 2.5 on a 4.0 scale in all coursework attempted will be considered for admission into the program. Students with a bachelor’s degree from an accredited United States institution are only required to complete the economics, math and science prerequisites. The bachelor degree must be conferred prior to matriculation into the program.

Students who have not earned a bachelor’s degree are required to meet the non-science prerequisites as well as the economics, math and science prerequisites. Electives coursework may include basic science, math, or liberal arts courses; however, advanced science coursework (chemistry, biological sciences, pharmaceutical sciences and clinical sciences) are beneficial in building a strong foundation for the doctor of pharmacy program.

Candidates for admission to the College’s Doctor of Pharmacy program must also meet the requirements listed in the Technical Standards for Admission & Matriculation section of this bulletin.

Science and Math Requirements
- Calculus (3 credit hours)
  - Examples: Calculus I, Analytical Geometry, Calculus
- Physics* (4 credit hours)
  - Physics for health professions majors (does not need to be calculus based)
- General Chemistry* (8 credit hours)
- Organic Chemistry* (8 credit hours)
- Biological Sciences* (8 credit hours)
  - Recommended: General Biology, Human Anatomy & Physiology, Microbiology
  - Also appropriate: Immunology, Cell Biology, Genetics, Medical Terminology, Biochemistry (12 hours strongly recommended)

* Physics, General Chemistry, and Organic Chemistry must have a lab associated with the course. When available, lab-based Biological Sciences are preferred.

Non-Science Requirements
- English Composition** (6 credit hours)
  - English courses must be writing intensive. Basic literature courses will not be accepted.
- Humanities** (6 credit hours)
  - Example: Literature, Philosophy, Music, Art, Drama, Foreign Language
- Social Sciences** (6 credit hours)
  - Example: Religion, History, Political Science, Psychology or Sociology
- Economics (3 credit hours)
  - Course must be denoted as an economics course in your university catalog. Economics may count as a social science if the applicant has 64 hours of credit at matriculation.

Electives
- Electives** (12 credit hours)
  - Suggested: Statistics, Pharmaceutical Sciences or Clinical Research courses, advanced biology or chemistry. Several business electives may also meet the requirements of the joint PharmD/MBA program.

**If the applicant has completed his or her bachelor’s degree, these classes are not required.

Application Deadline
Beginning each fall, members of the next class are selected using a modified rolling admissions procedure. Under this system, qualified applicants are admitted into the doctor of pharmacy program on an ongoing basis until the class is filled. Applicants are strongly encouraged to submit all required admissions documents early in the admissions cycle to maximize their admissions potential.

Applications received after November 1 face significantly increased competition for admission and may be placed on a waiting list, regardless of qualifications. The final deadline for applications is March 1; all information must be received by this date.
Application Process
- All material must be received by March 1.
- Complete online PharmCAS application at www.pharmcas.org.
- Submit all official transcripts to PharmCAS.
- Submit Pharmacy College Admission Test (PCAT) scores to PharmCAS.
- Information on the PCAT may be obtained at www.pcatweb.info.
- Submit three letters of recommendation to PharmCAS. At least one letter from a science professor and a pharmacist is strongly preferred.
- Submit supplemental application with required fee of $50 and a passport size photo to CPHS.

The applicant is responsible for ensuring the timely receipt and updating of all required application documentation. A file will not be reviewed by the Admissions Committee until all application materials have been received by the Admissions Office.

PharmCAS
Applicants must submit an application through the Pharmacy College Application Service (PharmCAS) online at www.pharmcas.org. Original official transcripts from all US post-secondary schools (including the planned fall courses) and Pharmacy College Admission Test (PCAT) scores must be submitted to PharmCAS. All college coursework attempted must be submitted to PharmCAS.

For applicants currently enrolled in classes, it is imperative to update newly completed coursework. When fall grades are available the applicant must submit official transcripts to PharmCAS in order to update their application. Transcripts reflecting spring grades must be sent directly to the CPHS Admissions Office. Applicants are also required to submit three letters of recommendations to PharmCAS. At least one letter from a science professor and a pharmacist is strongly preferred.

Applicants gaining acceptance to the Doctor of Pharmacy program are required to submit to a urine drug screen and a criminal background check through the PharmCAS system. Results of these screens which violate policies and procedures of CPHS, Campbell University or one the affiliated institutions may have a negative impact on the candidate’s ability to matriculate into the program.

Supplemental Materials
A supplemental application with the required application fee and passport size photograph must be submitted to CPHS. The supplemental application is available online at www.campbell.edu/cphs. Failure to complete the required supplemental components of the admissions process will delay the review of the application package until all elements are completed.

Interviews
Completed application packages are evaluated by the Admissions Committee to determine the applicant’s potential as a student pharmacist. Based on this evaluation, an invitation to participate in a personal admissions interview may be extended. The interview is designed as a two-way exchange with the goal of mutually enhancing the understanding of both the applicant and the Admissions Committee. Applicants are notified by email of admissions decisions following the interview process.

Early Decision Program
An Early Decision Program is available for eligible applicants. Through this option, applicants select one school as their preference through PharmCAS. The college and the student have the potential to benefit from this program by confirming admissions and enrollment for qualified applicants early in the admissions process.

To be eligible for the Early Decision Program, the applicant must complete the required eight semester hours of organic chemistry, the PCAT examination, a PharmCAS application along with three letters of recommendation, and the supplemental application with fee and photograph.

All materials must be forwarded to the appropriate locations prior to the early decision deadline in order to be considered as an early decision candidate. A decision will be rendered by the deadline specified by PharmCAS.

Valid admissions decisions for an early decision candidate consist of: acceptance, denial or deferral of the applicant to the general applicant pool (applicant becomes eligible to apply to other pharmacy programs while still being considered by their primary preference).

Tuition and Fees
Tuition and fees are determined annually, for more information visit www.campbell.edu/cphs.

Refund Policy
An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for students who attend any class and subsequently withdraw or are suspended from CPHS for any cause.

Technical Standards for Admission & Matriculation
American Council on Pharmaceutical Education (ACPE) is the accrediting body for colleges and schools of pharmacy. ACPE requires that Doctor of Pharmacy curricula meet standards and guidelines which emphasize a strong scientific foundation and practice-based competency. The pharmacy curriculum is designed to develop caring and competent pharmacists, practitioners who assume responsibility for safe and effective medication use in patients. The pharmacy curriculum is also designed to produce pharmacists who are collaborative partners in the care of patients within an interdisciplinary health care system.

Technical Standards refer to non-academic admissions and matriculation criteria that are essential to participation in the Doctor of Pharmacy program. All students must possess the intellectual, ethical, physical, and emotional capabilities required to undertake the full curriculum and to achieve the levels of competence required by the faculty. The technical standards described below are essential functions and therefore prerequisites for entrance, continuation, promotion, and graduation from the Doctor of Pharmacy program.

Candidates for admission to and graduation from the Campbell University College of Pharmacy & Health Sciences’ Doctor of Pharmacy program must possess the following abilities:
Observation
The candidate/student-pharmacist must be able to observe required lectures, demonstrations and experiments, including but not limited to microscopic studies, pharmaceutical lab instruction (technical quality of prepared and compounded materials), and patient care demonstrations (physical observation and physical assessment). A candidate/student-pharmacist must be able to observe a patient accurately at a distance and close at hand, noting non-verbal and verbal signals. Observation necessitates functional use of vision, hearing and somatic senses. The candidate/student-pharmacist must be capable of remaining alert and attentive at all times in the clinical setting.

Communication
A candidate/student-pharmacist must be able to effectively speak, read and write in English. Visual and auditory senses must be intact to detect verbal and nonverbal communication signals. A candidate/student-pharmacist must be able to elicit information from and communicate effectively and sensitively with patients. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

Motor Abilities
A candidate/student-pharmacist must have sufficient motor function to carry out the basic laboratory experiments and physical assessment. The candidate/student-pharmacist must be able to carry out duties within the classroom, laboratory, pharmacy and clinic settings. Motor function must be sufficient to perform fundamental patient care, such as required for disease prevention, drug therapy monitoring and basic physical assessment (eg. blood pressure assessment, palpation for edema, injection of vaccines, etc.). Motor function must also be sufficient to perform drug distribution duties in both a community and hospital pharmacy setting. The ability to stand and/or maneuver in small spaces as well as multi-level (steps) environments must be intact. Candidates/student-pharmacists must have the ability to maintain aseptic technique in the preparation of sterile materials. This will require the ability to work under a laminar flow hood and in sterile rooms. A candidate/student pharmacist must be able to safely and effectively operate various types of laboratory and patient care equipment such as weights and balance, a glucose meter, stethoscope and sphygmomanometer. The candidate/student-pharmacist must be able to execute motor movements reasonably required to provide general care and emergency treatment to patients (eg. student-pharmacists are required to be certified in cardiopulmonary resuscitation). These motor actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing.

Intellectual, Conceptual, Integrative, and Quantitative
Problem solving, the critical skill demanded of pharmacists, requires that a candidate/student-pharmacist be able to learn, retrieve, analyze, sequence, organize, synthesize and integrate information efficiently, and reason effectively. In addition a candidate/student-pharmacist should possess the ability to measure and calculate accurately, to perceive three-dimensional relationships and to understand the spatial relationships of structures.

Behavioral and Social Attributes
A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients and their family members, staff, and colleagues. Each candidate must be able to work effectively as a member of a health-care team. Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, collegiality, interest, and motivation are all personal qualities that are assessed during the admission and education processes.

If you feel you are unable to meet these technical standards, you are encouraged prior to application, to discuss your disability with the Associate Dean of Admissions in order to determine whether or not reasonable accommodations can be made. Candidates pursuing the academic program who lack the ability to appropriately comply with these standards and who do not seek accommodations may place themselves in academic jeopardy.

Campbell University is committed to enabling its students by any reasonable means or accommodations to complete the course of study leading to the Doctor of Pharmacy degree. The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted. Accepted students with a disability who believe they may require special accommodations should contact the Director of Student Support Services immediately upon accepting the offer of admissions. Before matriculation, accepted students must attest in writing that they are able to meet the program’s technical standards.

The above standards mirror Campbell’s PA program technical standards and were modified based on language incorporated from the Technical Standards documents of University of Mississippi, University of Iowa and University of Kentucky schools of pharmacy.
Academic Standards

Retention and Promotion Criteria
Full-time students enrolled in the doctor of pharmacy program at the College of Pharmacy & Health Sciences (CPHS) are expected to make satisfactory academic progress toward completion of the degree requirements. Satisfactory academic progress is defined as successful completion in the prescribed time, maintenance of a 2.2 semester grade point average (SGPA), professionally required course grade point average (PGPA), and a cumulative grade point average (CGPA), and completion of any professional deficiencies and/or required remedial courses in the time and manner prescribed. PGPA calculations are based only on professionally required courses, and do not include grades earned in elective courses.

Students who fail to maintain satisfactory academic progress in the professional program are automatically placed on academic probation. They may be required to participate in academic counseling, be enrolled in a remedial program of study or suspended/dismissed according to the policies described in the subsequent sections. Such actions will be determined by the Academic Performance and Standards Committee, with notification to the associate dean of academic affairs. The student will be notified of these actions by the chair of the Academic Performance and Standards Committee.

Actions taken in these matters are not to be viewed as punitive, but as a recognition that it is unrealistic to continue in a course of study where there is little probability of success. These same standards will be applied to students enrolled in an approved part-time course of study.

1. Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress.

A student will be placed on academic probation for:
• Failure to maintain a minimum SGPA of 2.20;
• Failure to maintain a PGPA of 2.20;
• Failure to maintain a CGPA of 2.20;
• A failing grade in a professionally required course;
• Two or more “D” grades in professionally required courses in one semester;
• Unauthorized failure to complete any degree requirement at the prescribed time.

Depending on the nature of the academic deficiencies and overall academic record, a student placed on academic probation may or may not be permitted to continue in the regular sequence of the professional curriculum. A student failing a course in sequence may be permitted to take the next course in the sequence, if directed by the Academic Performance and Standards Committee as part of a modified course of study, or by gaining written permission from the associate dean of academic affairs.

If a student fails a professionally required course, it must be repeated during the next term the course is offered. A student placed on academic probation is typically given one semester to correct any grade point deficiencies.

The Academic Performance and Standards Committee will review the student’s record at the end of the term of probation:
• If the SGPA and PGPA for that term are 2.20 or above, and the CGPA is 2.20 or above, the student will be released from academic probation. If SGPA and PGPA are 2.20 or above, but the CGPA is below 2.20, the student will remain on academic probation. A student remaining on academic probation for more than two consecutive semesters will be subject to suspension or dismissal.

2. Academic Suspension
Academic Suspension from CPHS occurs when a student:
• Has failed to make satisfactory progress as demonstrated by SGPA or PGPA less than 2.20, or received more than a single “D” grade in a professionally required course during a period of academic probation;
• Has academic deficiencies which preclude continuation in a normal program of study, but may be expected to be able to complete the requirements for the degree under a modified program of study with or without remedial courses;
• Has received a failing grade in any two professionally required courses.

Suspensions are imposed for a specified period of time and must not exceed one year. A student on academic suspension is not allowed to continue the standard course of study. The Academic Performance and Standards Committee will specify the length of time of the suspension, remedial work required for reinstatement, and the program of study required upon re-instatement.

3. Academic Dismissal
Academic dismissal from CPHS will occur when a student:
• Fails to make satisfactory progress during a period of academic probation or suspension;
• Has academic deficiencies which preclude continuation in the prescribed program of study, and may not reasonably be expected to complete the requirements of the degree.

If a student fails to make satisfactory progress during the period of academic probation, and/or fails to correct academic deficiencies, within the prescribed time, that student will be subject to automatic suspension and may be dismissed from CPHS.
Except under very extenuating circumstances, academic dismissal will be recommended if a student:

- Was previously suspended from the College and again failed to make satisfactory academic progress;
- Is on academic suspension under a remedial course of study and again fails to make satisfactory academic progress as demonstrated by SGPA or PGPA less than 2.20, or earns more than a single D-grade in professionally required courses for that term;
- Fails a single professionally required course more than one time, or accumulates more than two failures in professionally required courses;
- Accumulates a grade point deficiency which reasonably precludes the possibility of completing the degree requirements.

A student dismissed from the College may seek re-entry by applying for re-admission using the standard admissions process.

Academic Status Appeals
At the end of each academic term, the Academic Performance and Standards Committee chair reviews the academic performances of all students enrolled in CPHS. The chair notifies each student who does not meet the academic standards as defined by the academic regulations at CPHS. The College’s associate dean of academic affairs is also notified.

Each student subject to suspension or dismissal is evaluated by the Academic Performance and Standards Committee in order to determine whether to retain or promote the student in the professional program. The student may appear in person before the committee. The chair of the Academic Performance and Standards Committee notifies students in writing regarding any decision by the committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the College and informs the associate dean of academic affairs and associate dean of admissions & student affairs.

Students have the opportunity to appeal any decision made by the Academic Performance and Standards Committee by submitting a written petition to the associate dean of academic affairs within seven days of their receipt of notification. The petition must contain the specific variance requested, a description of any extenuating circumstances intended to justify granting the variance, and a proposed course of study and/or conditions for consideration should the variance be granted. The decision of the associate dean of academic affairs is final.

Grade Appeals
Students with a just reason for appealing a grade in a course at CPHS must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, then the student should appeal to the course master. If no resolution is achieved at that level, the student should appeal to the appropriate department chair. After efforts within the department, a student may appeal to the Academic Performance and Standards Committee to seek resolution. If the student feels that the resolution is not just, the student must submit a written petition to the associate dean of academic affairs within seven days of the student’s receipt of notification of the Academic Performance and Standards Committee decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the associate dean of academic affairs is final.

Advancement to a Higher Class
Advancement to a higher class requires:

1. A cumulative grade point average of 2.20 or higher;
2. Completion of all second professional year courses;
3. Exceptions may be granted by the Academic Performance and Standards Committee and/or the associate dean of academic affairs.

To Fourth Professional Year
1. A cumulative grade point average of 2.20 or higher;
2. Completion of all third professional year courses;

Delayed Graduation Policy
If a pharmacy student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling advanced pharmacy practice experiences (APPE) will occur and the student’s graduation will be delayed. Voluntary course withdrawals or a temporary leave of absence will also cause a delay in scheduling APPE and a delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice students should contact the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

Policy examples:

- If a student is forced to withdraw from any or all courses in the fall semester, then he or she returns to a delayed schedule in fall of the next year (delaying graduation by one year). To prevent entering financial aid repayment, or “grace period,” a student may be able to register for six credits (half-time) of elective or required courses in the spring semester. Specific approval of this modified course plan must be obtained from the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

- A single course in each semester of the P-2 year may be repeated simultaneously with full time registration as a P-3 student. Approval must be obtained from the College’s Office of Academic Affairs. A need to repeat two or more courses in either semester of the P-2 year may prevent simultaneous enrollment in any
in either semester of the P-2 year may prevent simultaneous enrollment in any P-3 courses. Progression to the P-3 year will be delayed and graduation will be postponed by one year. Counseling with respect to financial aid considerations must be obtained.

- If a student earns less than a “C” grade in any single P-3 course in the fall semester, he or she may be permitted to continue enrollment in P-3 courses in the spring semester (subject to successful completion of required pre-requisites). However, the student would not be able to complete any P-4 APPE until he or she has successfully completed all P-1, P-2, and P-3 courses, including Introductory Pharmacy Practice Experiences (IPPE), and the Top 300 Drug Review (PHAR 508). Assuming that all courses are passed successfully in the P-3 spring semester, a student would be able to begin APPE after repeating necessary fall courses. This would allow the student to begin APPE in January of the following year, possibly qualifying for graduation in December depending on available APPE sites. In order to forestall educational loan repayment, a student must enroll at least half-time (six credit hours) when repeating fall courses.

- If a student fails any P-3 courses in the spring semester, he or she will be prevented from starting his or her APPE until he or she has successfully repeated the courses the following spring. After the student has successfully completed the required courses, he or she may begin his or her APPE immediately subject to preceptor and site availability. If a student begins these experiences in March, he or she may be able to graduate in December. If the student begins in May, he or she cannot graduate until the following May (one year later). If a student fails any P-3 courses, any APPE schedule in place at that time will be entirely cancelled and re-scheduling of all APPE will be necessary (without exception).

- If a student fails one or more courses, IPPE or APPE rotations, it may be necessary to delay his or her graduation due to limited course offerings or unavailability of appropriate training sites. It currently is not possible for a student to complete a rotation during the months of May or December and also graduate during that month because University graduation certification occurs in the middle of each month.

**Withdrawal**

A student may withdraw from a course without penalty at any time prior to the end of the fourth week of a semester. Withdrawal from a course after that period will result in a grade being assigned.

In the event a student must withdraw from the College, he or she will be responsible for obtaining the required form for withdrawal from the University Registrar. It is also the student’s responsibility to complete the prescribed administrative procedures to assure notification to all individuals and offices that require this information.

In cases of serious illness, injuries, or extreme circumstances which normally would require the student’s withdrawal from the College, the student may fully withdraw from all semester coursework without receiving a grade. Such cases require adequate documentation of the circumstances.

**Attendance**

To receive credit for any course, a student must attend at least 80% of the hours prescribed for the course. Individual professors have the prerogative of imposing a more restrictive policy consistent with the following exceptions:

- Absence due to serious illness, injury, or death in the student’s immediate family;
- Authorized representation of the College or University.

In the above cases, a student may be permitted to make up work missed. It is the student’s responsibility, whenever possible, to notify College officials in advance that he or she will be absent.

**Transfer Students**

CPHS does not accept transfer students directly into the doctor of pharmacy program. The College utilizes a process to evaluate potential students that may differ from other programs.

In addition, there is a great deal of heterogeneity among doctor of pharmacy curricula across the nation. The scheduling difficulties for correcting potential course deficits become extremely complicated. Furthermore, the College could only consider such requests if space becomes available due to a decrease in the number of enrolled students; therefore, CPHS has determined that accepting transfer students with advanced standing is not in the best interest of the student nor the College. The College feels it would not be providing consistent opportunity for all students.

As a result, students currently enrolled in a doctor of pharmacy program in the United States should apply to CPHS as an entry-level student. Interested individuals must follow the procedures for admission. Applicants must be in good academic standing and have a letter from the dean of their institution supporting the request. These admissions decisions will be handled in the same manner as all other applicants to the College by the actions of the Admissions Committee.

Any individual admitted to CPHS who has completed coursework in another doctor of pharmacy program or another graduate/ professional degree may formally request transfer of credits. All accepted transfer students seeking “advanced standing” through the transfer of credits must submit a formal request as outlined in the policy and procedure for course transfer and waiver in the CPHS Academic Bulletin.

All prerequisites must be met prior to matriculation to the doctor of pharmacy program at Campbell University. CPHS reserves the right to make changes in requirements for admission, curriculum, standards for progression, advancement and graduation, fees and rules and regulations.

To apply to the doctor of pharmacy program, please follow the policies and procedures in the admissions portion of the CPHS Academic Bulletin.

**Transfer Credit & Course Waiver Policy**

Students may formally request an evaluation of previously earned professional coursework for transfer credit or the waiver of course requirements of pre-professional and professional courses. Each course transferred or waived must be by written,
affirmative acceptance of the dean.

The process for transfer or course-waiver is not automatic. The review of transfer courses or course-waivers may only be initiated after a student has enrolled or been accepted for enrollment and paid the matriculation deposit for the doctor of pharmacy program. CPHS can only accept transfer of equivalent professional courses from an ACPE accredited institution. A student may transfer equivalent professional courses that meet the requirements of the curriculum.

To be eligible for transfer and replacement of a course in the professional curriculum, the requested course for transfer must meet all of the following requirements:
- Be documented on an official transcript provided by the registrar of the accredited institution
- Have an earned grade of 70% or higher, or a grade of “C” or greater
- Be of the same general content and level of instruction as the equivalent course in the CPHS doctor of pharmacy curriculum at the time requesting transfer
- Be equal or greater in the number of semester credit hours as the course required in the CPHS professional curriculum.

A student granted transfer credit will not be required to enroll or pay tuition and fees for the transferred course; however, full-time tuition is charged to all students enrolled in at least 12 semester hours. Upon approval for transfer, the student will be given credit for the transferred course on the official transcript. Credit hours for transferred courses that exceed the number of credits for the equivalent course at CPHS will not count towards elective credits in the curriculum.

A student may formally request to receive a course-waiver for a required course in the doctor of pharmacy curriculum provided the student successfully completed an upper division or graduate course that:
- Is completed from an accredited institution recognized by CPHS
- Is documented on an official transcript provided by the registrar or equivalent of the accredited institution
- Has an earned grade of 80% or higher, or a grade of “B” or greater
- Be of the equivalent general content and level of instruction as the equivalent course in the CPHS doctor of pharmacy curriculum at the time of the request for waiver
- Be equal or greater in the number of semester credit hours as the course required in the CPHS doctor of pharmacy curriculum.

A student granted a course-waiver would not be required to enroll in the equivalent professional course or be given degree program credit for the waived course. The student will be required to complete an equivalent number of semester credit hours in elective offerings to meet the total degree requirements for the doctor of pharmacy program.

Procedure
1. An enrolled student or deposited applicant must present a signed letter to the associate dean of admissions & student affairs describing the course(s) in the professional curriculum that the student or applicant seeks to transfer or receive course-waiver.

The following should be included with the letter:
- Documentation that the student or applicant has, before submitting the letter, made a request to the registrar of the previous institution to submit official documentation of the course(s) directly to CPHS, and has paid the appropriate fees, if any, to the previous institution to process the document
- Appropriate documentation to support the equivalence of the proposed transfer course or course-waiver as determined by CPHS.

2. Upon receipt of the letter and documentation, the associate dean of admissions & student affairs will communicate the required documentation until such time as CPHS receives the official documentation from the previous institution(s). Upon receipt, the associate dean will transmit the request to the associate dean of academic affairs for evaluation and recommended disposition.

3. The associate dean of academic affairs will maintain the letter and documentation until such time as CPHS receives the official documentation from the previous institution(s). Upon receipt, the associate dean will transmit the request to the associate dean of academic affairs for evaluation and recommended disposition.

4. The associate dean of academic affairs will evaluate the transcript, course(s) and documentation submitted. If the associate dean of academic affairs determines that the submitted documentation is insufficient to determine equivalency, he or she may contact the applicant or previous institution to secure additional information. If the associate dean of academic affairs determines that the submitted documentation is insufficient to determine equivalency, he or she may contact the applicant or previous institution to secure additional documentation, or return the application to the applicant with an explanation of the required documentation to determine equivalency.

5. If the associate dean of academic affairs is not familiar with the content, he or she shall consult with the appropriate course director to determine course equivalency.

6. The associate dean of academic affairs shall make a recommendation to the dean whether to accept or deny the course transfer or course-waiver.

7. The dean shall make the final determination of the acceptance of the course transfer or waiver and communicate his or her decision in writing to the applicant and the Campbell University registrar. The decision of the dean shall be final.
Grading System

The following is the grading scales for the doctor of pharmacy program at CPHS with the assigned quality points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality of Work</th>
<th>4-Point Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior/Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Above average</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Below average</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>IC</td>
<td>Incomplete continued</td>
<td>0</td>
</tr>
<tr>
<td>WF</td>
<td>Failing at time of withdrawal</td>
<td>0</td>
</tr>
<tr>
<td>WP</td>
<td>Passing at time of withdrawal</td>
<td>0</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Passing (graduate only)</td>
<td>0</td>
</tr>
</tbody>
</table>

Grades of “A, B, C, D, F, I, and WF” are included in semester hours attempted and will affect the grade point average. Grades of “IC, WP, AU, and P” will not affect the grade point average. A grade of “I” must be removed by the completion of the work within 30 days after the opening of the next semester; otherwise, it will be recorded as an “F.” A grade of “IC” must be removed by the completion of the work within 120 days.

A student may appeal a grade within a period of one academic year from the semester in which the grade was assigned. No changes to the transcript will be made after a 12-month period unless a professor acknowledges in writing that an error in grade reporting has occurred.

Grade Reports, Records, and Transcripts

A report of grades attained by a student will be mailed to the address designated by the student, at the time of registration, at the end of each semester. Students enrolled at Campbell University who are fulfilling pre-pharmacy requirements will also be provided with a mid-term report.

The official records of each student attending CPHS will be secured in the Office of the Registrar. The Family Educational Rights and Privacy Act (PL93-380) will govern the release of information for this record which contains the transcript from Campbell University, transcripts and transcript evaluations from other educational agencies attended by the student, secondary school transcripts, scholastic aptitude, and other standardized test scores.

The application for admission, general correspondence with the student and, if applicable, letters concerning misconduct or disciplinary actions at Campbell University are kept in the CPHS Office of Admissions & Student Affairs. The transcript and contents of the permanent record may be examined by the student upon appointment with the University’s registrar.

Counseling

During the first professional year orientation, CPHS assigns a faculty member as the class advisor to provide guidance while students are in the College. This faculty member, the associate dean of academic affairs, associate dean of admissions & student affairs and the staff are available to discuss personal and academic problems that may arise and provide guidance and/or referrals to other resources as necessary.

Helpline

A free and confidential helpline is available to all CPHS students providing telephone counseling and a referral service. The number is 866-428-3591.

Students will be asked to provide their CU student I.D. number, address and phone number. Following the call, a secure report is generated by ProtoCall based on the triage assessment. This report will be housed at the ProtoCall facility.

Matriculation Policies

Students enrolled in the doctor of pharmacy program are required to fulfill the following:

- Submit the required non-refundable admissions deposit.
- Submit a signed honor code form indicating that the student has received, read, understands and agrees to adhere to the provisions of the honor code of the Campbell University College of Pharmacy & Health Sciences.
- Submit original transcripts from each college or university where any coursework was completed (undergraduate, graduate, professional, etc.) to the Office of Admissions & Student Affairs prior to the beginning of classes. It is strongly preferred that transcripts are sent at the end of each semester during the application process.
- Complete all prerequisite coursework prior to matriculation with official transcripts submitted as mentioned above.
- Complete the required vaccination and immunization requirements, including the Hepatitis A series, Hepatitis B series, varicella immunity, Tdap and a TB test. The Hepatitis A series is delivered in two injections over a six month period. The Hepatitis B series is delivered in three injections over a six month period. Each student must provide Student Health Services with a completed immunization and medical history form prior to the first day of classes.
- Submit to a criminal background check as described by the following procedure. CPHS applicants are required to self-disclose any misdemeanors and felony convictions, other than minor traffic violations, including deferred adjudications, with the understanding that non-disclosure or falsification may lead to dismissal and disclosure may prevent enrollment. Additionally, in response to requirements in the professional practice environment stating that facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity, a criminal background check will be completed on all accepted applicants prior to matriculation. Please refer to the General Information section at the back of this bulletin for the Criminal Background Check Policy.
- Submit to scheduled and random substance abuse screens each year as necessitated by the College and its affiliates.
- Attend all mandatory orientation sessions as applicable for new and returning students.
- Complete all programmatic standards as required by the College of Pharmacy & Health Sciences.

Graduation Requirements

- Complete all required courses with a passing grade in each course and a 2.20 cumulative GPA
- Ensure appropriate graduation paperwork is filed in the timeframe specified by the university
- Receive an approving recommendation by the CPHS faculty
- Fulfill all financial obligations to the institution
- Attend the applicable commencement ceremony
## Curriculum

### First Year

#### Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 302 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 304 – Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 312 – Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 301 – Pharmaceutical Calculations</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 305 – Pharmacy in the US Healthcare System</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 309 – Drug Information</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 331 – Pharmaceutical Care Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

| PHAR 315 – Intro. to Pharmacy Practice I | 0.5          |
| PHAR 335 – Community Service I         | 0            |

#### Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 306 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 303 – Patient Counseling &amp; Prof. Communications</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 310 – Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 308 – Clinical Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 314 – Biopharmaceutics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 307 – Pharmacy Marketing &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 332 – Pharmaceutical Care Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 316 – Intro. to Pharmacy Practice II</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 335 – Community Service I</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Summer (one month)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 505 – Introductory Pharmacy Practice Experience I</td>
<td>1</td>
</tr>
</tbody>
</table>

### Second Year

#### Semester 3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 412 – Principles of Pharmacology &amp; Medicinal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 417 – Pharmacology &amp; Medicinal Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 408 – Biology of Disease</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 404 – Pharmaceutics I</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 410 – Pharmacokinetcs</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 409 – Intro. to Pharmacy Practice III</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 435 – Community Service II</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 421 – Pharmacology &amp; Medicinal Chemistry III</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 423 – Pharmacology &amp; Medicinal Chemistry IV</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 403 – Financial Mgmt. &amp; Pharmacoeconomics</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 405 – Nonprescription Drug Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 406 – Pharmaceutics II with Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 419 – Intro. to Pharmacy Practice IV</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 435 – Community Service II</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer (one month) Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 507 – Introductory Pharmacy Practice Experience II</td>
<td>1</td>
</tr>
</tbody>
</table>

### Third Year

#### Semester 5

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 501/503 – Therapeutics I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td>PHAR 528 – Experimental Design &amp; Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 511 – Jurisprudence</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 508 – Top 300 Drug Review</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 5XX – Electives</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 515P – Intro. to Pharmacy Practice V</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 564 – Community Service III</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 545/547 – Therapeutics III &amp; IV</td>
<td>6</td>
</tr>
<tr>
<td>PHAR 509 – Therapeutic Drug Monitoring</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 544 – Intro. to Clinical Research Design &amp; Lit. Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 519 – Physical Assessment</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 5XX – Electives</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 516P – Intro. to Pharmacy Practice VI</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 564 – Community Service III</td>
<td>0</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Nine Month Rotations Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 6XX – Advanced Pharmacy Practice Experiences (nine one-month)</td>
<td>36</td>
</tr>
<tr>
<td>PHAR 699 – Prof. Presentation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 690 – Community Service IV</td>
<td>0</td>
</tr>
</tbody>
</table>

Please visit www.campbell.edu/cphs for the most up-to-date curriculum information.

## Course Descriptions

PHAR 301 – Pharmaceutical Calculations
Credit: 2 hours
This course covers mathematics encountered in pharmacy practice.

PHAR 302/306 – Anatomy & Physiology
Credit: 4 hours per class
This two-course sequence presents a comprehensive study of the structure and function of all organ systems as well as basic biochemical and biophysical principles of cellular and membrane function. Relevance to clinical states and drug action is also presented in many areas.

PHAR 303 – Patient Counseling & Professional Communications
Credit: 2 hours
This interactive course is designed to guide pharmacy students in the development of effective counseling and communication skills. Emphasis will be placed on development of effective communication to the level of the patients’ understanding and education for the most commonly used drugs. Using videotape technology and role-playing techniques, students will improve their proficiency and competency in effective patient communications and counseling.

PHAR 304 – Biochemistry
Credit: 4 hours
This is a comprehensive course in biochemistry which discusses the metabolism of amino acids, carbohydrates, lipids, and nucleic acids. Principles of enzyme kinetics and regulation, bioenergetics, thermodynamics, and macromolecular structure-function relationships are presented.
PHAR 305 – Pharmacy in the U.S. Healthcare System
Credit: 2 hours
This course will focus on introducing the pharmacy student to the US Healthcare System and its components, healthcare systems of various foreign countries, the profession of pharmacy and the expanding roles of pharmacy and pharmacists in the healthcare system. Various teaching methods will be used including lectures from faculty and guest speakers, interactive activities in class, internet-based assignments, reading assignments, written reports and group project.

PHAR 307 – Pharmacy Marketing & Management
Credit: 3 hours
This course will present principles of marketing and management as they may be applied in pharmacy practice with a particular emphasis on the managed care environment.

PHAR 308 – Clinical Biochemistry
Credit: 3 hours
This course discusses the principles of qualitative analysis utilized in common clinical laboratory tests. An introduction to interpretation of abnormal clinical laboratory values is presented. Quantitative aspects of nutrition are presented, and regulatory effects of various hormones are described. Diseases such as arteriosclerosis and diabetes are discussed.

PHAR 309 – Drug Information
Credit: 1 hour
This course is designed to introduce the student to sources of drug information and hospital pharmacy functions (e.g. ADR, MUE’s). Practical experience in the Drug Information Center will allow the student the opportunity to practice these skills, evaluate the literature, and communicate this information to other healthcare practitioners.

PHAR 310 – Immunology
Credit: 3 hours
This course covers basic immunology and the fundamental principles relating to the immune response in normal and disease states.

PHAR 312 – Medical Microbiology
Credit: 4 hours
The basic principles of bacteriology, mycology, parasitology, and virology are presented. The pathogenic properties and diseases of medically important species of bacteria, fungi, protozoa, helminthes, and viruses are described.

PHAR 315 – Introduction to Pharmacy Practice I
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 316 – Introduction to Pharmacy Practice II
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 314 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

PHAR 317 – Introduction to Pharmacy Practice III
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 318 – Introduction to Pharmacy Practice IV
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 319 – Introduction to Pharmacy Practice V
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 320 – Introduction to Pharmacy Practice VI
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 321 – Introduction to Pharmacy Practice VII
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 322 – Introduction to Pharmacy Practice VIII
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 323 – Introduction to Pharmacy Practice IX
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 324 – Introduction to Pharmacy Practice X
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 325 – Introduction to Pharmacy Practice XI
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 326 – Introduction to Pharmacy Practice XII
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 327 – Introduction to Pharmacy Practice XIII
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 328 – Introduction to Pharmacy Practice XIV
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 329 – Introduction to Pharmacy Practice XV
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 330 – Introduction to Pharmacy Practice XVI
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career pathways. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio.

PHAR 331/332 – Introduction to Pharmaceutical Care Skills and Professional Practice
Credit: 1 hour per class
This course is meant to introduce the student to a variety of skills, attitudes and behaviors important to contemporary pharmacy practice. In lab sessions, students will learn health screening skills such as taking blood pressure measurements and measuring blood glucose and cholesterol. By participating in a number of lectures, classroom discussions and a service project, the student will become familiar with professional behavior and ethical decision making as well as the significance of giving back to the community.

PHAR 335 – Community Service I
Credit: 0 hours
CPHS requires a commitment to community service. Each student pharmacist is required to provide 80 hours of community service over the four years of enrollment at CPHS. A minimum of 10 hours must be provided each year. In addition to the benefits to the community, this requirement provides the student an opportunity to learn the needs of the community and to develop as a professional.

PHAR 403 – Financial Management & Pharmacoeconomics
Credit: 2 hours
This course is designed to explore the practical applications of financial management in pharmacy practice. Emphasis is placed on quantitative aspects of effective business management and those techniques for decision making in a pharmaceutical care practice site.

PHAR 404 – Pharmaceutics I
Credit: 3 hours
This course is designed to provide the student with a basic understanding of medicinal products’ physical and chemical properties of and how these properties influence the design of dosage forms.
PHAR 405 – Nonprescription Drug Therapy  
Credit: 3 hours  
This course is a study of various nonprescription (OTC) products commonly found in community pharmacy practice. Emphasis is placed on the problem solving process involved in patient assessment, therapeutic intervention, product recommendations, triage of serious health care problems to other health care settings, and patient education regarding health promotion and disease management with nonprescription medications.

PHAR 406 – Pharmaceutics II with Lab  
Credit: 4 hours  
This course enables the student to become proficient in general compounding techniques and a basic knowledge of dosage formulation. A weekly laboratory is designed to enhance the technical capability of students in this area of prognosis.

PHAR 408 – Biology of Disease  
Credit: 5 hours  
This course is designed to acquaint the student with major diseases, their etiology, pathology, clinical manifestations, diagnosis and prognosis.

PHAR 409 – Introduction to Pharmacy Practice III  
Credit: 0.5 hours per class  
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).

PHAR 410 – Pharmacokinetics  
Credit: 2 hours  
This course provides the student with an understanding of basic clinically applicable pharmacokinetic formulas and the assumptions that are involved with their use in therapeutic drug monitoring.

PHAR 412 – Principles of Pharmacology & Medicinal Chemistry  
Credit: 3 hours  
First in a series of Pharmacology/Medicinal Chemistry courses, this course introduces the student to the basic principles of structure activity relationships, pharmacogenetics, and biochemical pharmacology with special emphasis placed on physicochemical properties of functional groups, acid-base chemistry, metabolism, receptor theory, and signal transduction.

PHAR 417 – Pharmacology & Medicinal Chemistry II  
Credit: 4 hours  
This course is designed to provide the pharmacy student with a firm foundation in the various pharmacological agents available to effectively manage various autonomic, cardiovascular and renal diseases and conditions. Particular emphasis will be placed on the cellular and physiological systems that are regulated by these agents to bring about the desired therapeutic outcome. For each class of agents the prototypical drug will be emphasized with regard to mechanism of action, chemical characteristics, pharmacokinetic considerations, adverse effects and drug interactions. For the newer agents in each class significant differences from the prototypical agents will be highlighted.

PHAR 421 – Pharmacology & Medicinal Chemistry III  
Credit: 4 hours  
This course is designed to provide the pharmacy student with a firm foundation in the various therapeutic agents available to effectively manage various paracrine/inflammatory, gastric erosion, endocrine, and central nervous system conditions. Particular emphasis will be placed on the cellular and physiological systems that are regulated by these agents to bring about the desired therapeutic outcome. For each class of agents the prototypical drug will be emphasized with regard to mechanism of action, chemical characteristics, pharmacokinetic considerations, adverse effects and drug interactions. For the newer agents in each class significant differences from the prototypical agents will be highlighted.

PHAR 423 – Pharmacology & Medicinal Chemistry IV  
Credit: 3 hours  
The use of chemotherapeutic agents for the treatment of infections, cancer and immunosuppression has revolutionized modern medicine and led to significant improvements in the quality of life and lifespan in western populations. This course will address the major therapeutics agents in use today and will cover the mechanisms of action and chemical characteristics that impact clinical usage and the types of infectious agents or cancer cells affected. The focus of the course will be on mechanisms of action and usage of each drug. Consideration will also be given to appropriate drug usage in the light of anti-infective or cancer cell resistance, and the use of multi-drug therapies to counter such resistances.

PHAR 435 – Community Service II  
Credits: 0 hours  
CPHS requires a commitment to community service. Each student pharmacist is required to provide 80 hours of community service over the four year of enrollment at CPHS. A minimum of 10 hours must be provided in each year. In addition to the benefits to the community, this requirement provides the student an opportunity to learn the needs of the community and to develop as a professional.
PHAR 444/454 – EMT Training I/II
Credit: 3 hours per class
These courses recognize proficiency achieved in training by a certified instructor for emergency medical technician service. Both courses are required to prepare for EMT certification.

PHAR 501/503 – Therapeutics I/II
Credit: 3 hours per class
These courses are designed to illustrate the appropriate clinical application of pharmacodynamics, pathophysiology, and pharmacokinetics to a variety of common acute and chronic disease states. Emphasis is placed on data collection and decision making required for optimal drug therapy.

PHAR 504 – Special Research in Pharmaceutical Sciences
Credit: Variable (maximum 3 hours)
The purpose of this elective course is to introduce the student pharmacist to methods of basic science and/or clinical research.

PHAR 505/507 – Introductory Pharmacy Practice Experiences (IPPE)
Credit: 1 hour per class
These two, month-long practice experiences are designed to expose the student pharmacist to the practice of pharmaceutical care in the community and hospital settings. These practice experiences introduce the student pharmacist to the operational, clinical and administrative roles of the pharmacist; however, there is a greater emphasis on the drug distribution functions of the pharmacist in these settings. These experiences are usually scheduled during the summers following the first and second professional years.

PHAR 508 – Top 300 Drug Review
Credit: 1 hour
This examination is designed to evaluate the students’ mastery of basic facts concerning the Top 300 most commonly prescribed drug products. Prerequisites: PHAR 505 and 507.

PHAR 509 – Therapeutic Drug Monitoring
Credit: 4 hours
This course provides the knowledge and skills necessary to apply pharmacokinetic principles in the clinical arena. Emphasis is placed on therapeutic monitoring and individualization of drug therapy. Prerequisites: PHAR 301, 314 and 410.

PHAR 510P – Pharmaceutical Care for Patients with Diabetes
Credit: 1 hour (P/F)
This course is a study of pharmacologic and non-pharmacologic approaches to the management of patients with diabetes. Emphasis is placed on problem solving involved in patient assessment, therapeutic intervention, and patient education regarding health promotion and disease management.

PHAR 511 – Jurisprudence
Credit: 3 hours
Discussions and analysis of federal and state law, regulations, standards of practice, case law and ethics related to pharmacy practice and drug development and distribution. Focus is upon analyzing, understanding and applying these issues through case studies and hypotheticals. Considerable emphasis on professionalism and the historical events that have shaped today’s professional pharmacy practice, as well as the drug development and distribution system.

PHAR 512P – Multicultural Health Practices/Health Disparities
Credit: 1 hour
This course will provide the student with a further understanding of racial and ethnic disparities in the quality of care received by minority Americans. Topics that will be covered include cultural competence, health literacy and health disparities.

PHAR 514 – Advanced Topics in Cardiovascular Pharmacology
Credit: 1 hour
The mechanisms by which pharmacological agents modify the contractility of cardiac and smooth muscle will be discussed in this elective course. A special emphasis will be placed on how alteration of calcium ion concentration affects contraction.

PHAR 515P – Introduction to Pharmacy Practice V
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HiPAA training and other requirements).

PHAR 516P – Introduction to Pharmacy Practice VI
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HiPAA training and other requirements).

PHAR 518 – General Toxicology
Credit: 3 hours
This course is designed to give the student a broad appreciation of the field of Toxicology. The student is guided through the mechanisms by which toxicants enter the body and the biotransformation processes that result in the disease-producing entities. The various cellular mechanisms of toxicity and the major target organs affected by toxins will be treated in some detail. Didactic material may be augmented with both in vivo and in vitro experimental laboratories for assessing toxicity. Aspects of environmental, forensic, clinical toxicology, and risk assessment will also be addressed in this course.

www.campbell.edu/cphs
PHAR 519 – Physical Assessment  
Credit: 2 hours  
This course introduces the student pharmacist to the basic principles and techniques of history taking and physical examination. Students in this course will have an opportunity to develop the skills necessary to adequately follow the patient using physical assessment parameters and to monitor drug therapy when appropriate. The student will also have an opportunity to use and demonstrate the skills learned in this class during his or her Advanced Pharmacy Practice Experience rotations.

PHAR 521 – Substance Abuse Education  
Credit: 1 hour  
This course will focus on the acute and maintenance treatment options for patients suffering from substance abuse and dependence. Students will develop the skills necessary to recommend pharmacotherapeutic treatment plans based on their review of guidelines and literature in this area. Classroom sessions will be utilized to discuss assigned readings as well as to work on cases.

PHAR 522 – Practical Compounding  
Credit: 1 hour  
This elective course will expose and demonstrate various aspects of the art and science of compounding. Students will apply and practice their calculation/prescription-preparation skills to formulations used by current practitioners.

PHAR 522P – Practical Compounding Techniques: Sterile Products  
Credit: 1 hour  
This course offers instruction on additional compounding and processing techniques and exercises that include practical applications and thought processes for preparing a sterile dosage form.

PHAR 523 – Special Research Projects in Pharmacy Practice  
Credit: Variable (1–3 hours) (P/F)  
Independent research projects performed under the direction of individual faculty mentor from the Department of Pharmacy Practice. This course will enable the student pharmacist to apply the scientific inquiry process and to utilize critical thinking, problem-solving, verbal, as well as written communication skills while conducting a practice-based research project. Alternatively, this course may be used for other research-related scholarly pursuits such as the production of a manuscript following primary literature investigation and review of a specific area of scientific inquiry that is timely, rigorous and contributes to the medical, pharmacy practice and/or pharmacy social & administrative scientific literature. The student pharmacist will gain experience in:  
- Literature search/evaluation;  
- Protocol design and IRB requirements;  
- Data acquisition and management;  
- Data analysis;  
- Project management and report requirements; and/or scientific writing

PHAR 524 – Toxicology Problems  
Credit: 1 or 2 Hours  
Students will be challenged to analyze and discuss case studies of problems typically encountered in evaluating drug toxicity. The development of critical thinking skills, problem-solving capabilities, and decision-making approaches will be emphasized over specific memorization of facts.

PHAR 525 – Ethics in Pharmacy Practice  
Credit: 2 hours  
As healthcare professionals, pharmacists encounter a variety of problems, which may compromise quality care and patient rights. This course is designed to enable pharmacy students to approach moral dilemmas objectively with a thorough understanding of professional moral responsibility. Students will learn skills in moral reasoning necessary to promote the dignity of clients they serve.

PHAR 526 – Scientific Basis of Drug Selection  
Credit: 2 hours  
This course develops skills needed to critically evaluate current research literature to assess the therapeutic potential of a new and improved modification of an existing drug. The course focuses on calcium channel blockers and beta adrenergic antagonists and agonists as examples of drug classes requiring such assessment.

PHAR 527 – Experimental Design & Biostatistics  
Credit: 4 hours  
This course involves the application of statistical methods in health sciences. The course is intended to provide the student with basic knowledge of descriptive statistics, probability theory, hypothesis testing, and other selected statistical methods useful in the design and evaluation of clinical research investigation.

PHAR 529 – Hematology & Oncology  
Credit: 1 hour  
This course will allow students to develop a better understanding of the treatment of hematology and oncology patients. The course will start with a general review and then focus on many of the disease states that will not be covered in the therapeutics course such as leukemia, lymphoma, myeloma, blood and marrow transplant. Students will learn how to take a diagnosis and develop a treatment plan including chemotherapy regimens and their supportive care issues that go along with the treatment.

PHAR 530 – Biotechnology in Pharmacy  
Credit: 3 hours  
This course is intended to expose students to the basic principles and practical applications of molecular biological techniques to pharmaceutical product development. Experimental, analytical, and production technologies will be discussed along with ethical implications, if appropriate.

PHAR 531 – Strategic Management in Healthcare  
Credit: 1 hour  
This course will introduce the concepts of strategic planning in business and provide examples in the different pharmacy and healthcare settings. Strategic management is a process of evaluation followed by decision making to increase the value of the organization. This requires an approach to strategic decision making which considers the environment in which the organization finds itself, the organization’s own internal capabilities, setting specific performance objectives to achieve the strategy and executing appropriate action plans. The course emphasizes that strategy involves innovation and creativity, both creating and adapting to change. At the end of this course, the student should be able to understand the key influences on the development of an organization’s strategy, analyze those influences, propose appropriate strategic behavior for an organization and demonstrate an understanding of how strategic change can...
occur within an organization.

**PHAR 533 – Introduction to Pharmacy Consulting**  
Credit: 1 hour  
This elective course is designed to introduce students to the practice of consultant pharmacy. Pharmacists are required by the federal government to monitor the drug therapy of every patient in nursing homes. This drug regimen review must be performed on a monthly basis and is an effective method for monitoring the drug therapy received by patients. Studies indicate that clinical pharmacists can improve the quality of patient care in nursing homes. Students will be exposed to the elements of this specialized practice. Prerequisite: PHAR 503.

**PHAR 534 – Herbal Remedies**  
Credit: 1 hour  
This course discusses herbal remedies recently being used as alternative solutions to treat and prevent different diseases.

**PHAR 535 – HIV/AIDS**  
Credit: 1 hour  
This course will discuss the potential future effects of the AIDS epidemic on pharmacy practitioners. The nature of the disease and secondary infections, available treatment modalities, and preventative measures that involve pharmacists will be described and discussed.

**PHAR 536 – Hypertension I**  
Credit: 2 hours  
This course is an in-depth discussion and literature evaluation of agents used to treat hypertension.

**PHAR 537 – Practical Applications in Infectious Diseases Pharmacotherapy**  
Credit: 2 hours  
This course is designed to allow the student with a strong interest in infectious diseases to further develop skills necessary to make rational choices with regard to antimicrobial pharmacotherapy. These skills will be developed primarily through analysis of patient cases. Students will be presented with case problems and assigned readings for each topic at least one week prior to discussion of patient cases. Advanced concepts related to antimicrobial therapy will be emphasized. Prerequisite: PHAR 501 & 503.

**PHAR 538 – Hypertension II**  
Credit: 1 hour  
This course is a further discussion of agents used to treat hypertension. Prerequisite: PHAR 536.

**PHAR 539 – Care of the Diabetic Patient**  
Credit: 2 hours  
This series of classes will deal with specific issues which complicate the day-to-day and long-term management of diabetes. Topics covered will include diabetes survival skills, diabetes in special population groups, diseases which complicate diabetes treatment, and complications of diabetes.

**PHAR 542 – Molecular Modeling**  
Credit: 2 hours  
This informal course trains students in the use of high performance computing systems to solve problems in biological modeling. Lecture topics include a review of high performance computing in molecular modeling, electron density calculations and 3D protein representation docking of molecules. Material is presented both in lectures and supervised lab sessions, during which students do interactive programming. The course is designed for students who are interested in viewing and taking a virtual walk through a complex molecule.

**PHAR 543 – Anticoagulation Management**  
Credit: 1 hour  
This course offers a more detailed (depth and breadth) analysis of venous embolic disease (deep-vein thrombosis and pulmonary embolism) focusing upon the scope of the problem within the healthcare system—appropriate identification of patients at risk, and appropriate efforts to prevent and treat these diseases when necessary. Additionally, there will be a focus upon nationally recognized efforts (The Joint Commission National Patient Safety Goals, The Joint Commission Core Measures for Venous Thromboembolic Disease) to provide efficacy and safety to patients we serve. This course should ready pharmacy students/future pharmacists to position themselves appropriately into the therapeutic management of anticoagulants/antithrombotics in both the hospital and community pharmacy settings.

**PHAR 544 – Introduction to Clinical Research Design & Literature Evaluation**  
Credit: 2 hours  
This course builds upon the basic drug information and statistics skills learned previously. Evaluating the drug and medical literature to determine appropriateness of study design, quality of the data, statistical test selection and application, study limitations, and implications of the study results are some of the areas that will be discussed.

**PHAR 545/547 – Therapeutics III/IV**  
Credit: 3 hours per class  
These courses are designed to illustrate the appropriate clinical application of pharmacodynamics, pathophysiology, and pharmacokinetics to a variety of common acute and chronic disease states. Emphasis will be placed on data collection, analysis, and decision-making required to optimize drug therapy. Prerequisites: PHAR 501/503 strongly suggested.

**PHAR 546 – Anticoagulation Management II**  
Credit: 1 hour  
There is today an overwhelming amount of new information regarding the comparative efficacies of newly developed anticoagulants and antithrombotic drug therapies and their optimal use in life-threatening thromboembolic disease states, specifically those in Acute Coronary Syndrome patients. This consumes over 100 Billion healthcare dollars annually. This course will focus on these emerging uses, evidence, and issues. Focused, succinct review of the critical studies defining the role of these new drug therapies will be the focus of this class and ready the P4 student to be knowledgeable of these important landmark trials defining appropriate drug therapy selection in the setting of cardiology. This elective will benefit those who intend to do cardiology rotations in their P4 year or have cardiology focused practices or post-graduate experiences with cardiology as a focus.

**PHAR 548 - Advanced Nonprescription Drug Therapy**  
Credit: 3 hours  
This is a self-study course which integrates and strengthens the basic knowledge of non-prescription drug therapy learned in Pharm 405 by application in on-line self-study modules, development of a
strategic business plan, and a one day live program. Emphasis is placed on the problem solving process involved in patient assessment, therapeutic intervention, product recommendation(s), triage of serious health care problems to health care settings, and patient education regarding health promotion and disease management with nonprescription medications.

PHAR 550 - Alternative Medicine
Credits: 3 hours
The most commonly available herbs and natural products will be covered concerning their therapeutic effect and the dosage forms. In addition overview of the Eastern therapies will be presented.

PHAR 551 – Legal Topics
Credit: 1 hour
This course is designed to provide an overview of contemporary topics in pharmacy and healthcare law in seminar format. Class discussion will include the application of ethics and values to factual situations involving the use of drugs in healthcare.

PHAR 552 – Medication Therapy Management (MTM)
Credit: 3 hours
This course is designed to provide the student-pharmacist with an understanding of the various platforms and prescription drug plans that provide payment to pharmacists for medication therapy management (MTM) services. Early in the course students will learn the core elements of MTM, patient interview skills and how to navigate and document MTM services via software systems including Mirixa and Outcomes Pharmaceutical Care. Students will conduct patient interviews, MTM assessments and documentation using the SOAP (subjective/objective findings, assessment, recommendations) format. Patient cases will be discussed during class to address appropriateness of therapy and emphasize treatment guidelines, practice standards and various pharmacotherapy principles. Participants in this course will develop a working knowledge of current MTM opportunities for pharmacists and learn the process by which to provide MTM services.

This course is ideal for students interested in expanded services in community pharmacy practice. However the knowledge and skills gained from this course can be applied to any patient care setting.

PHAR 553 – Introduction to Veterinary Pharmacy
Credit: 1 hour
This course is designed to introduce students to the major differences between veterinary and human diseases, therapeutics, and pharmacy practice. Students participating in this class will be better prepared for veterinary prescription processing, customer questions, and OTC recommendations and precautions in the retail setting.

PHAR 554 – Geriatric Assessment
Credit: 3 hours
This course is designed to allow the student to gain familiarity with select instruments used to assess a variety of conditions which commonly occur in the geriatric population. The course will utilize a combination of didactic lectures, case problems, and actual field use of the techniques and instruments reviewed in class. Most class meetings will have an application component to enable the student to further develop the multi-dimensional knowledge and skill-set necessary to comprehensively evaluate and monitor treatment in the older adult.

PHAR 555 – Pain Management Issues
Credit: 1 hour
This course will provide information on pain management. Topics that will be covered include the pathophysiology of pain, pain assessment, pain management guidelines and their application to patient care, therapeutics of pain management using systemic agents, use of alternative and intervention pain management techniques, methods of analgesic administration, and pain management in special populations. Practice-specific application of pain management principals will be discussed.

PHAR 556 – Pain Management Issues
Credit: 1 hour
This course will provide information on pain management. Topics that will be covered include the pathophysiology of pain, pain assessment, pain management guidelines and their application to patient care, therapeutics of pain management using systemic agents, use of alternative and intervention pain management techniques, methods of analgesic administration, and pain management in special populations. Practice-specific application of pain management principals will be discussed.

PHAR 557 – Issues in Critical Care
Credit: 1 hour
This course is designed to introduce critical care principles. This course will illustrate the appropriate clinical application of pathophysiology, pharmacokinetics and pharmacodynamics in the critical care population.

PHAR 558 – Essentials of Toxicology
Credit: 2 hours
This course is designed to give the student a broad appreciation of the field of Toxicology. The student is guided through the mechanisms by which toxicants enter the body and the biotransformation processes that result in the disease producing entities. The various cellular mechanisms of toxicity and the major target organs affected by toxins will be treated in some detail. Didactic material may be augmented with both in vivo and in vitro experimental laboratories for assessing toxicity. Aspects of environmental, forensic, clinical toxicology, and risk assessment will also be addressed in this course.

PHAR 559 - Obstetrics, Gynecology & Women’s Health (OB-GYN & WH)
Credit: variable 1 - 2 hours
The student-driven obstetrics, gynecology, and women’s health elective will help prepare student pharmacists enrolled in the College of Pharmacy & Health Sciences to practice evidence-based care involving a variety of women’s health issues including, but not limited to, preconception care, contraception, drugs in pregnancy and lactation, menopause pharmacotherapy, osteoporosis, and labor and delivery. As a team, students will be assigned a specific topic and will lead a class discussion based on the assigned readings/topic(s). Areas to be covered in the discussion include incidence of disease state (if applicable), pathophysiology, evidence-based guidelines, pharmacotherapy, and any recent or emerging evidence involving the assigned topic. In addition, the students shall identify any community or patient resources of value regarding the assigned topic.

PHAR 560 – Practical Applications in Pediatric Pharmacotherapy
Credit: 1 hour
This course will enhance the pharmacy student’s skills in pediatric pharmacotherapy by promoting the student’s understanding of the unique characteristics of the pediatric population and pediatric disease states. This course promotes the mission of Campbell University by equipping students with superior skills in Pediatrics which will allow them to practice pharmacy with the highest integrity and service to their patients. The goals are to promote the pharmacy students
understanding of the pediatric population with an emphasis on pediatric disease states. This course will focus on medications, fluids, electrolytes and nutrition to manage neonates and pediatric patients.

PHAR 561 – Pharmacoeconomics Credit: 3 hours
This course will provide basic information about the principles of pharmacoeconomics, which has been defined as the description and analysis of costs of drug therapy to society.

PHAR 562 - Community Pharmacy Management Credits: 1 hour
This course provides specific instruction in policies and procedures required to own and manage a community retail pharmacy.

PHAR 563 – Managed Care Credit: 2 hours
This elective course presents an in-depth discussion of integrated healthcare systems with analysis of methods to provide high-quality/low-cost healthcare to large patient populations.

PHAR 564 – Community Service III Credits: 0 hours
CPhS requires a commitment to community service. Each student pharmacist is required to provide 80 hours of community service over the four years of enrollment at CPhS. A minimum of 10 hours must be provided in each year. In addition to the benefits to the community, this requirement provides the student an opportunity to learn the needs of the community and to develop as a professional.

PHAR 565 – Epidemiology Credit: 2 hours
This elective course will provide an introduction to the principles of epidemiology. The course will emphasize basic analytic techniques to investigate and prevent infectious disease outbreaks and hospital infections. Prerequisites: PHAR 310 and 312.

PHAR 566 – Introduction to Nuclear Pharmacy Credit: 1 hour
This course provides basic instruction in principles and techniques applicable to the preparation and dispensing of radioactive pharmaceuticals.

PHAR 567 – Reimbursement for Pharmaceutical Care Services Credit: 1 Hour
Different strategies utilized in the provisions of pharmaceutical care will be discussed. Students will learn how to document patient encounters and how to complete the proper forms necessary for billing and submitting claims. Students will have the opportunity to hear success stories from practicing pharmacists who have implemented pharmaceutical care services and have received reimbursement for their efforts.

PHAR 569 – Healthy Choices Credit: 1 Hour
This course will discuss and encourage aspects of establishing a healthy lifestyle for participants.

PHAR 570/571 – Asthma Management I/II Credit: 1 hour per class
The purpose of this course is to develop the knowledge and skills of student pharmacists so they can provide a high level of comprehensive pharmaceutical care to patients with asthma. This course is a two part series offering one credit hour per class. Part one is during the first five week phase for third year students and part two is offered during the second five week phase in the spring of the third year.

PHAR 575 – Essential Spanish for Pharmacists Credit: 2 hours
This course introduces students to basic and practical information that they can use when providing pharmacy services to Spanish speaking patients. The course covers common situations, such as greeting, patient data collection, prescription dispensing information and administration instructions. Students are not required to be fluent in Spanish.

PHAR 576 – Pharmacy Christian Missions Credit: 1 hour
The course explores the various issues related to pharmacy/medical missions including how the provision of medical and pharmaceutical care can serve as opportunities for the presentation of the Christian Gospel. The activities concerning the planning, preparation, and execution of short term mission trips will be discussed.

PHAR 577/578 – Lipid Management I/II Credit: 1 hour per class
The Lipid Management Elective and Certificate Program will prepare pharmacy students to diagnosis, treat, and monitor the therapy of patients with lipid disorders.

PHAR 581 – Medication Errors: Causes, Prevention, Current Issues Credit: 1 hour
This course is intended to provide the student with an introduction to the problem of medication errors in healthcare. Activities will include discussions of significant medication error research, factors which can contribute to errors, drug categories and abbreviations associated with error risks, error detecting methods, case analysis of errors, and error prevention methods, including the roles of both the patient and technology. Students will also use the Internet to become familiar with various organizations and list services related to patient safety and to identify and discuss pertinent issues and current events related to this area.

PHAR 582 – Botanical Medical Seminar Credit: 1 hour
This course is an investigation of the use of herbal preparations in the rational application in pharmacy. The course is intended to provide the student with a basic knowledge of botanical and herbal preparations. This information will be given in a seminar style where students will be required to read and prepare to discuss articles on these agents. This course is co-listed as PHAR 582.

PHAR 583 – Advanced Pharmacy Marketing & Management Credit: 3 hours
Designed for students interested in pursuing or enrolled in the dual PharmD/MBA degree program. Topics covered will expand upon the basic principles taught in PHAR 307 and offers a recitation and an individual project. Emphasis is placed on the decision-making from a financial management perspective. This course may replace PHAR 307.

PHAR 585 – Drug-Induced Diseases Credit: 2 hours
The Drug Induced Disease Class is designed
to study the adverse effects of certain drugs on each of the body systems. This two-hour elective will explore a different drug-induced disease each week including cardiac, pulmonary, endocrine, etc.

PHAR 587 – Advanced Financial Management and Pharmacoeconomics for Pharmacists
Credit: 3 hours
Healthcare is dramatically changed and an understanding of financial management is critical in the decision making process. This course expands on the basic principles taught in PHAR 403 and offers a recitation and an individual project. Emphasis is placed on the decision-making from a financial management perspective. This course may replace PHAR 403.

PHAR 589 – Advanced Patient Counseling
Credit: 1 hour
This course will provide the students with additional knowledge and skills to be effective patient educators, which will improve the quality of therapeutic interventions provided to patients. A secondary goal for this course will be to increase student interest in the Annual APhA-ASP National Patient Counseling Competition and to enhance Campbell University’s performance at the national competition.

PHAR 590 – Smoking Cessation
Credit: 1 hour
This course will prepare participants to facilitate the process of smoking cessation. Topics that will be covered include: consequences of tobacco abuse, pharmacotherapy of nicotine replacement, assessing readiness for smoking cessation, guiding patients through the quit process, and ways to incorporate smoking cessation counseling into pharmacy practice.

PHAR 591 – Cosmeceuticals
Credit: 1 hour
Cosmeceutical is a pharmaceutical product that provides cosmetic benefits. Like cosmetics, cosmeceuticals are topically applied, but they contain ingredients that influence biological function of the skin. Cosmeceuticals improve appearance by delivering nutrients necessary for healthy skin. This course will provide an overview of the benefits and toxicology of the active ingredients used in cosmeceuticals.

PHAR 593 – Leadership Development
Credit: 2 hours
The purpose of this course is to identify and strengthen leadership skills. It uses a development approach focusing on how individuals become effective leaders by addressing the human element of enterprise within significant business situations. Students will strengthen their individual capabilities to advance their organizations strategically by rethinking their approaches to management, leadership, and leadership development. This course enables students to understand how to build and foster relationships as well as emphasizes the importance of those relationships in their professional and personal lives.

PHAR 594 – Pharmacogenetics
Credit: 2 hour
The basic principles of pharmacogenetics/pharmacogenomics and their relationship to current drug development are discussed. The course is divided into two sections based on the development of this field; Classical pharmacogenetics and clinical pharmacogenetics. The overall goal of this course is integrate a general understanding of the field of pharmacogenetics with current research focused on novel drug discovery. This course is cross listed as PHSC 564 and CLNR 528.

PHAR 595 – Bioterrorism & Mass Public Health Threats
Credit: 3 hours
This course provides an overview of current issues related to bioterrorism and the mass threats to public health. Details of specific risks of threat entities and their treatment will be taught. An emphasis is placed on response planning and preparation.

PHAR 599 – Neurology
Credit: 1 hour
This course will provide the student with a further understanding of neurological disease states and how to manage them including neurological pathophysiology and understanding of neurological exam. Topics that will be covered include neurotransmitters and the drugs that affect them, neuromuscular disorders, neuro oncology, infections of the brain and nervous system, neuropsychiatry, drug abuse and addiction, sleep disorders, genetic neurological disorders, and pediatric and obstetric neurology. Disease state specific medication therapies will be discussed with a focus on guidelines and evidence based medicine.

PHAR 6XX – Advanced Pharmacy Practice Experiences
Credit: 4 hours per rotation
These rotations are designed to provide the students with an environment where they can integrate the academic knowledge gained during pre-clinical years with professional experience to develop clinical expertise in the promotion of rational and efficacious drug therapy. Each individually numbered rotation of four weeks (160 hours) duration is weighted as four semester hours. The selection, sequence and scheduling of these senior rotations will vary according to an individual student’s needs, interests and site availability. Campbell University has affiliation agreements for a diverse offering of electives ranging from additional experiences in general community and hospital practices to sub-specialties in hospital (administration, intensive care, cardiology, neurology, and emergency medicine), to clinics and long-term care (ambulatory care, surgical centers, skilled and assisted living communities) to community practice (compounding, medication therapy management services, and community management).

PHAR 604 – Advanced Community: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to provide future pharmacists with an understanding of how the practice of pharmacy is conducted in the community setting and to further develop their professional attitudes, judgment, and skills needed to function in this practice setting. The setting for this type of APPE is select community pharmacy environments (chain and independent) in which pharmaceutical care services are provided in addition to traditional dispensing and counseling services.

PHAR 605 – Ambulatory Care: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to introduce the student to clinical pharmacy practice in a patient-care setting through the management of common disease states. The setting for this type of APPE provides
the opportunity for patient-care activities in medical practice sites such as physician offices and community health centers.

PHAR 606 – Geriatrics: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to introduce the student to the philosophies and practice of geriatric medicine through clinically-oriented activities. The setting for this type of APPE provides the opportunity for patient-care with geriatric patients in assisted living, skilled nursing facility or other practice setting that has a large percentage of patients age 65 or older or patients physiologically similar to geriatric individuals.

PHAR 607 – Internal Medicine I: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to expose the student to clinical pharmacy practice in the inpatient setting through clinically-oriented services and patient-specific activities. The setting for this type of APPE allows the student to work with an interdisciplinary team in the hospital setting handling patient care from an acute care perspective.

PHAR 608 – Internal Medicine II: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to build on the exposure students obtain during PH607 for pharmacy practice in the inpatient setting through clinically-oriented services and patient-specific activities. The setting for this type of APPE allows the student to work with an interdisciplinary team in the hospital setting handling patient care from an acute care perspective.

PHAR 609 – Drug Information: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to better prepare future pharmacists to meet their role as a reliable and integral source of drug information through training in drug literature retrieval, evaluation & application. The setting for this type of APPE is within Drug Information Centers or in conjunction with Drug Information Services at various locations such as universities, hospitals, & pharmaceutical companies.

PHAR 610 – Advanced Hospital: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to expand upon the knowledge and skill-set obtained during the Introductory to Hospital Pharmacy Practice Experience (PH507) and to facilitate the student-pharmacist’s exposure to current hospital pharmacy practice. The setting for this type of APPE allows the student-pharmacist to enhance operational/distributive skills as a component of integrated, interdisciplinary patient care within the wider hospital/health system setting.

PHAR 690 – Community Service IV
Credit: 0 hours
CPHS requires a commitment to community service. Each student pharmacist is required to provide 80 hours of community service over the four years of enrollment at CPHS. A minimum of 10 hours must be provided in each year. In addition to the benefits to the community, this requirement provides the student an opportunity to learn the needs of the community and to develop as a professional.

PHAR 699 – Professional Presentation Seminar
Credit: 1 hour
This course requires a student pharmacist to prepare and present a seminar on a timely and relevant therapeutic topic utilizing the latest available electronic technology. This course encourages the student to critically evaluate literature and fosters an environment committed to life-long learning. Effective communication with healthcare professionals is a primary role for the pharmacy professional.

PHAR 705 – Health Care Administration Research Project
Credit: Variable (maximum 3 hours)
This advanced independent study project incorporates aspects of pharmacy practice and business. Instructor permission is required.

Visit www.campbell.edu/cphs for the most up-to-date information. CPHS reserves the right to make changes in the curriculum or policies of any program as it deems necessary.

Requirements for pharmacy internship
Regulations regarding licensure internships require that the experience is obtained after acceptance to the College of Pharmacy & Health Sciences (CPHS). Information pertinent to internship licensing among the various states is available from CPHS. However, it should be noted that the CPHS experiential clerkship program will suffice for the internship requirement in North Carolina.
Experiential Training

Introductory Pharmacy Practice Experiences
Student pharmacists complete introductory pharmacy practice experiences (IPPE) each summer between their academic semesters. Between the P-1 and P-2 years, students complete a one month community rotation and between the P-2 and P-3 years, they complete a one month hospital rotation. Students select their clinical rotation sites via a class lottery system or they may opt to work with the Office of Experiential Education to contract new rotation sites.

Advanced Pharmacy Practice Experiences
In the final year of the curriculum, P-4 students are divided into five geographic areas to complete nine required advanced pharmacy practice experiences (APPE). These regions include:
- Buies Creek/Fayetteville/Lumberton
- Greenville/Wilson
- Triangle
- Wilmington
- Winston-Salem/Greensboro

After geographical areas are established, students may enter preferences for clinical rotation sites and/or preceptors for each of the nine month rotations. Once these preferences are entered, the Office of Experiential Education uses an equitable placement process to assign students their APPE sites. Within the nine rotations, seven rotations are required and two are electives. A lottery is held to assist students in selecting their two elective practice experiences.

During experiential training, students are responsible for travel expenses and housing arrangements. In addition, incidental expenses such as parking at hospitals may be incurred. Information regarding expenses associated with each training site may be obtained from the Office of Experiential Education.

A fair and equitable lottery system is used when assigning both IPPE and APPE training sites; therefore, student pharmacists must be prepared to fulfill training requirements wherever they are assigned.

Clinical Rotation Sites
Within the five geographic regions there are numerous affiliated training sites ranging from large tertiary care hospitals, such as Duke University Medical Center and Wake Forest University Baptist Medical Center, to smaller community hospitals, chain and independent community pharmacies, long-term care facilities as well as clinical research companies.

Clinical rotation sites are established in the following areas of practice (please note, this may not be an all-inclusive list as sites are subject to change):
- Advanced Community Pharmacy*
- Advanced Hospital*
- Ambulatory Care*
- Cardiology
- Community Management
- Drug Information*
- Emergency Medicine
- Geriatrics*
- Hospice Care
- Hospital Management
- Infectious Disease
- Intensive Care
- Internal Medicine I & II*
- Medical Missions
- Neonatology
- Neurology
- Nuclear Pharmacy
- Oncology
- Parenteral and Enteral Nutrition
- Pediatrics
- Pharmacy Administration
- Psychiatry
- Public Health
- Pulmonary Medicine
- Surgery
- Veterinary

*Required rotation

Drug Information Center
Established in 1987 with a grant from GlaxoSmithKline, the Drug Information Center (DIC) is an invaluable asset to the College of Pharmacy & Health Sciences (CPHS) providing experiential training for student pharmacists and a service to health care professionals. The center receives approximately 300 calls per month, with an estimated 60% of inquiries from pharmacists.

The DIC is an optional rotation site for students to complete their required advanced pharmacy practice experience (APPE) in drug information. During the rotation, student pharmacists become competent in data retrieval, literature evaluation, and written and oral communication skills. They respond to inquiries from health care professionals regarding contemporary therapeutic regimens in humans and animals.

Purpose
- To serve the health professions community by answering drug-related questions
- To provide a learning center for student pharmacists and residents, and other health sciences students in drug information skills
- To aid in the promotion of CPHS by offering drug information services throughout the state
- To promote the profession of pharmacy and other health related professions

Services
Most of the drug information services offered by the DIC are provided free of charge. These services include:
- Provision of drug information and supporting documentation to questions posed by health care practitioners
- Provision of consultative services in various areas
- Participation in pharmacy-related research

Hours of Operation
8:30 a.m.–5 p.m., Monday through Friday (Closed Holidays)

Contact
Phone: (800) 327-5467 (NC)
(800) 760-9697 Ext. 2701 (US)
Fax: (910) 893-1476
Residency Programs
The College of Pharmacy & Health Sciences (CPHS) offers a variety of pharmacy residency programs. Residents at CPHS are afforded the opportunity to enhance their clinical, research, teaching and critical thinking skills to meet the demands and changes occurring in the profession of pharmacy.

PGY2 Residencies

Ambulatory Care
Cary Healthcare Associates and Glenaire Retirement Community
The PGY2 residency offered in conjunction with CPHS at Cary Healthcare Associates and Glenaire Retirement Community provides the resident with advanced skills in patient management, therapy modification for special patient groups, acute care triage and chronic disease management. The development of these advanced skills occurs in primary care clinics and pharmacy-managed anticoagulation, lipid, and pharmacotherapy clinics.

The resident will also have involvement in the didactic and clinical training of other health care professionals and students, and gain experience in contributing original research to the professional literature. The program emphasizes providing patient care in Anticoagulation, Asthma, Diabetes Care, Lipid, and Pharmacotherapy clinics associated with medical residency teaching programs and in private practice environments.

The residency consists of a 12-month training program designed to comply with the ASHP requirements for a PGY2 ambulatory care residency. The resident will identify goals for the residency during the first two weeks of the residency. The remaining eleven months will be planned and devoted to meeting these goals with experiences in the following areas. The amount of time spent in each area will depend on the goals of the resident. The resident will participate in a longitudinal geriatrics rotation at Glenaire.

Internal Medicine, Infectious Diseases & Academics
Duke University Hospital
The PGY2 pharmacy residency in adult internal medicine, infectious diseases, and academics at CPHS and Duke University Hospital is designed to prepare role-model practitioners and educators for entry into academic clinical pharmacy practice positions. A major focus of the program prepares the resident to function effectively as a clinical faculty member by emphasizing patient care, service, teaching, scholarly activity and research.

The service component consists of patient care rounds with one of the general adult medicine teams for a minimum of four months. The resident is responsible for providing comprehensive patient-centered care to the patients and medical team, and serve as the primary preceptor for CPHS student pharmacists. Additional time is spent with the Infectious Disease (ID) consult service, ID clinic (HIV) and elective rotations.

Teaching activities consist of clinical precepting for the internal medicine and ID consult services. Didactic teaching experience is obtained through participation in the therapeutics series, ID elective and Drug Literature Evaluation courses at CPHS. The resident participates on various committees, attends faculty and department meetings and retreats, and assists preceptors with course coordination at CPHS.

The resident will undertake at least one major research project and completes a minimum of two manuscripts. The resident has the opportunity of presenting his or her research at the Southeastern Residency Conference and/or other national meetings. Additional opportunities are available for scholarly activities as well as courses on research design, methodology and biostatistics. Many opportunities are available to the resident to prepare and deliver seminars to local, state and national organizations.

PGY1 Residencies

Wilson Community Health Center
CPHS offers a PGY1 residency in conjunction with Wilson Community Health Center (WCHC) that is designed to develop the knowledge, attitudes, and skills needed to provide exemplary pharmaceutical care in the ambulatory care setting.

Diabetes is a focus within the residency, emphasizing the monitoring and management of diabetes and diabetes complications within an interdisciplinary structure, to reduce the burden of diabetes for patients and their families, for the community and for the health care system. The pharmacist-directed program at WCHC is not solely a glycemic control program, but includes many other management programs such as hypertension, dyslipidemia, weight reduction and smoking cessation.

In addition to direct patient care responsibilities, the resident will be involved in the didactic and clinical training of student pharmacists and other health care professionals. The resident will complete an original research project and present the assignment at the Annual Southeastern Residency Conference.

The resident’s time is spent at WCHC, with the option of incorporating up to three months of off-site elective experiences. As the residency progresses, the resident is given primary responsibility for some of the pharmacy programs at WCHC to assure continuity of care and to develop long-term opportunities for therapeutic and lifestyle modification interventions.

East Carolina University, Department of Family Medicine
CPHS offers a PGY1 residency with East Carolina University Department of Family Medicine to develop advanced knowledge, attitudes and skills to provide pharmacotherapy for adult patients with multiple chronic diseases. Care of the elderly is emphasized throughout the residency.

Required clinical rotations are completed in a teaching nursing home, geriatric
clinic and inpatient service working with multi-disciplinary faculty at East Carolina University Department of Family Medicine. Residents also practice in an outpatient pharmacy and drug information center. Electives are available at Vidant Health and with CPHS faculty in other practice settings. Educational sessions are integrated with family medicine residents and geriatric fellows at the practice site as well as pharmacy residents at CPHS.

In addition to clinical responsibilities, the resident will gain skills in research and teaching. The resident will design and implement a research project and present the results. Residents participate in a teaching certificate program at CPHS. Teaching experience includes clinical instruction of advanced pharmacy practice experience students, pharmacy student lectures, in-service presentations, and continuing education seminars.

Harnett Health System
Campbell University and Harnett Health System will offer a PGY1 program one-year residency to develop knowledge and skills to provide pharmacotherapy for inpatients. Upon completion of the residency program, residents should be able to practice as a pharmacist clinician in the inpatient setting or be eligible for PGY2 positions of their choosing in the inpatient setting. The program will offer 2 PGY1 positions, competitive salary and benefits, as well as a travel stipend to ASHP Midyear and the Southeastern Residency Conference.

Hartnett Health System is comprised of two hospitals, six physician offices, and seven outpatient centers.

The resident must complete the following rotations:
- Internal Medicine (2 months)
- Emergency Medicine
- Administration
- Drug Information
- Infectious Disease
- Project and Medication Use Evaluation

The following rotations are electives:
- Pediatrics
- Cardiology
- Ambulatory Care
- Medication Therapy Management
- Information Systems
- Critical Care

Post-Baccalaureate Program
The post-baccalaureate program at the College of Pharmacy & Health Sciences allows pharmacists, who are licensed in the United States and hold a bachelor’s degree in pharmacy from an accredited institution in the United States, to earn a PharmD degree.

The curriculum includes the last two years of studies of the entry-level PharmD program. This includes one year of didactic training followed by an additional nine months of clinical rotations. Depending on the individual’s background, variations in the curriculum may be necessary. Interested individuals should contact the Office of Admissions at 1-800-760-9734, ext. 1690.

Curriculum

First Year
Semester 1
Courses                     Credit Hours
PHAR 501/503 – Therapeutics I & II    6
PHAR 528 – Experimental Design & Biostatistics    4
PHAR 515P – Intro. to Pharmacy Practice V    0.5
PHAR 5XX – Electives     3

Semester 2
Courses                     Credit Hours
PHAR 310 – Immunology*    3
PHAR 545/547 – Therapeutics III & IV     6
PHAR 509 – Therapeutic Drug Monitoring    4
PHAR 544 – Intro. to Clinical Research Design & Lit. Evaluation    2
PHAR 519 – Physical Assessment    2
PHAR 516P – Intro. to Pharmacy Practice VI  0.5

Second Year
Nine Month Rotations**
Courses                     Credit Hours
PHAR 6XX – Advanced Pharmacy Practice Experiences (nine one-month)    36
PHAR 699 – Prof. Presentation Seminar    1

* Electives must be substituted for this course if previously completed.

**Request for exemption from up to three rotations based on prior experience may be submitted to the chair of pharmacy practice.
Department of Physical Therapy Practice
Campbell University
College of Pharmacy & Health Sciences
P.O. Box 1090
Buies Creek, NC 27516
Phone: 1-910-893-1720

Academic Program
The Doctor of Physical Therapy (DPT) Program at Campbell University focuses on an evidence-supported curriculum centered on the patient and clinical practice in rural healthcare. The curriculum utilizes integrated, interdisciplinary education to prepare students to enter one of the most rewarding and fastest growing healthcare professions. Students who complete the program will earn a DPT degree and eligibility to become a candidate for initial licensure in the 53 jurisdictions recognized by the Federation of State Boards of Physical Therapy (FSBPT).

Program Philosophy
The faculty of Campbell University’s Doctor of Physical Therapy program believes in developing graduates ready to practice independently and as part of a comprehensive inter-professional healthcare team. Our educational foundation is broad and focuses on understanding disease processes across the lifespan with acquisition of contemporary examination/evaluation skills and interventions. Inter-professional learning experiences provided throughout the program are designed to integrate profession specific knowledge with other healthcare members that will prepare graduates for real world situations and changes in healthcare delivery. Graduates are effective communicators and teachers adept at using clinical reasoning and integrating evidence into daily clinical practice.

Vision Statement
The vision of the Campbell University’s Doctor of Physical Therapy program is to enable distinguished, ethical, and compassionate physical therapists, prepared for independent autonomous practice in rural communities as part of a multidisciplinary healthcare team, serving as leaders for future professional direction, and influencing health disparities through advocacy of patients and profession.

Mission Statement
The mission of the Campbell University Department of Physical Therapy Program is to educate doctors of physical therapy who deliver compassionate, patient-centered care from a service-oriented, Christian guided view, with a special emphasis on rural healthcare environments. Our graduates use evidence supported practice and sound clinical judgment, respect cultural differences, and model high moral character and professional responsibility consistent with the vision and mission of the College and University.

Program Goals:
The Campbell University physical therapy program will:
1. Graduate service oriented individuals primed to practice evidence supported physical therapy serving the individual, employer, and profession
2. Graduate individuals prepared to practice in rural regions
3. Graduate individuals prepared to serve within a comprehensive healthcare system as members of an interdisciplinary healthcare team

Upon completion of all the requirements at Campbell University’s DPT program, the graduate will be able to:
1. Delivery:
   a. Practice physical therapy competently, ethically, and legally in a caring manner within a variety of practice environments
   b. Practice physical therapy in an interactive fashion using innovative and adaptable evaluation and management skills to diverse patient/client populations in a variety of healthcare settings
   c. Integrate evidence supported and outcomes based practice in a professional manner to enhance the well-being of patients/clients in a variety of healthcare settings
   d. Collaborate as a member of an inter-professional healthcare team, advocating for patient/client and profession, in a variety of healthcare settings with an emphasis on rural areas
   e. Administer, manage, and supervise in a variety of professional settings and regulatory environments

2. Education:
   a. Promote educational principles to facilitate patient/client ownership of their health and well-being
   b. Advocate for the patient/client and the profession in healthcare, community, and legislative settings at the local, state, and federal arenas
   c. Integrate the characteristics of a lifelong learner to professional development

3. Research:
   a. Incorporate research principles, findings, and critical thinking skills into evidence supported practice to benefit consumers

Accreditation
Please refer to the accreditation information in the introduction section of this academic bulletin for complete details on the DPT program status with CAPTE and the process for filing a complaint.

Contingency Process
Students enrolled in the CU DPT program will ultimately be responsible for making arrangements to continue pursuit of physical therapy education should Campbell fail to achieve accreditation. The following items should facilitate transfer of students to another program:
1. Campbell Universities pre-requisite and admissions standards are consistent with other accredited DPT programs in North Carolina and bordering States,
2. two North Carolina programs have January start dates,
3. a list of DPT programs that accept transfer students has been compiled to assist in the process, and
4. accredited DPT programs have been contacted to provide contingency letters to support working with the CU DPT program.

Program administrators and faculty will work with students to identify DPT programs that accept transfer students. Additionally, the program director can write letters of support for students applying for transfer of credit to other institutions. Phone calls can be made, as necessary, to support CU DPT students attempting to transfer should accreditation not be achieved by the program.

www.campbell.edu/cphs
Admission Policies
The DPT program is committed to selecting applicants who have demonstrated academic success and strong critical thinking skills. In order to be an asset to the physical therapy profession, candidates should also possess integrity, compassion, empathy, flexibility, and the ability to multitask. The goals of the admissions process are:
1. To understand each applicant as a whole person;
2. To evaluate the applicant’s potential for success in the DPT program;
3. To assess the candidate’s commitment and aptitude as a future practicing physical therapist.

The DPT program application can be accessed through any of the following methods:
2. CPHS admissions office in Maddox Hall (suite 118) on the main campus

Applications will be accepted for the DPT program beginning February 1 of any given year. Applications and interviews will be considered on a rolling basis. The earlier an applicant applies, the better the chances are for acceptance. The application deadline is September 1 of any given year.

Before your application can be considered, the following items must have been received by the CPHS admissions office:
• A completed application
• Application fee of $50
• Official transcripts from all universities attended
• Graduate Record Examination (GRE) scores (Campbell DPT program code of 4575)
• Three letters of recommendation, two of which must be from a licensed physical therapist

Once a complete application has been submitted, it will be reviewed by the CPHS admissions staff to ensure all criteria are met. If an application meets all admissions criteria, the application will be reviewed by the DPT admissions committee and the applicant may be scheduled for an onsite interview. Notification of onsite interview will be sent to the applicant via email.

Interviews
The interview is designed as a two-way exchange with the goals of discussing and understanding:
• The Campbell University DPT program
• The physical therapy profession
• Educational background
• Communication skills
• Problem-solving skills
• Leadership skills
• Rural healthcare needs
• Inter-disciplinary cooperation
• Work and personal experience

Following the interview process, applicants will be notified by the DPT program of an admissions decision through email and an official decision letter will be mailed. Applicants may be accepted into the program prior to completion of the Bachelor degree or required prerequisite courses, however, all admissions requirements must be met prior to matriculation into the program.

All accepted students will be required to submit to a criminal background check and substance abuse screening test as needed. Accepted students must submit a non-refundable deposit of $1000 to the Universities Business office, as described in the acceptance letter, to secure a position in the DPT program. Once the student has arrived on campus, the deposit is applied toward the first semester’s tuition and fees.

Admissions Criteria
Bachelor’s degree from a regionally accredited institution in the U.S. (must be conferred prior to matriculation into the program)
• Recommended Cumulative GPA of ≥3.0 and math+science GPA of ≥3.0
• Recommended GRE score of >300 (1100 in previous format) taken within the past 5 years
• A minimum of 50 hours of work/volunteer/observation in multiple physical therapy settings
• Completion of pre-requisite courses listed below (all grades must be “C” or higher)

Prerequisites
1. All prerequisites must be completed no later than December 31 of the year prior to matriculation
   a. All pre-professional academic work must be done at a regionally accredited college or university in the United States
2. Science prerequisite course work must be completed within the last 10 years
3. All prerequisite courses must have earned college credit hours
4. All prerequisite courses must have an earned grade of “C” or better

Prerequisite Courses:
• Two semesters of human anatomy and physiology with labs (this may be taken as two combined A&P courses with lab or one anatomy course with lab and one physiology course with lab)-total 8 hours
• One semester of general chemistry with lab-total 4 hours
• Two semesters of general physics (algebra) with lab-total 8 hours
• One semester of upper level biology (300+) with or without lab-total 3-4 hours**
• One semester of statistics (math or psychology)-total 3 hours
• Two semesters of social sciences (psychology, sociology)-total 6 hours
• One semester of math (algebra or higher with trigonometry preferred)-total 3 hours

**Up to 3-4 hours of exercise physiology can be applied to and count for the upper biology requirement. The course must be a 300+ level course.
Work/Volunteer/Observation Experience

The DPT program desires that students demonstrate a well-rounded, contemporary knowledge of the physical therapy profession. In order to demonstrate this, students must complete a minimum of 50 hours in a variety of clinical settings. A diversity of experience will be weighted during the application process. Examples of appropriate experience can include:

- In-Patient facilities
- Rehabilitation facility
- Acute care hospital
- Outpatient facilities
- Neurological rehabilitation
- Pediatric/children
- Industrial rehabilitation
- Orthopedic/sports medicine
  - Hospital based
  - Private practice
- Home health
- Long term care facility
- Skilled nursing facilities
- Assisted living

International Applicants

International applicants who have completed a bachelor’s degree and all prerequisite courses in a regionally accredited institution in the United States are eligible to apply to the program. International applicants may be asked to submit Test of English as a Foreign Language (TOEFL) score directly to the CPHS admissions office if English is a second language.

Financial Information

Tuition and Fees

Tuition and fees are determined annually and are available at http://www.campbell.edu/cphs/admissions/tuition-financial-aid/. Tuition and fees are estimated and are subject to change. Any new tuition and fee schedules will become effective at the beginning of each entering class of the program. Tuition payment will be due the first week of classes. Graduating students are responsible for the purchase of their tam and gown.

Optional Fees

- Parking permit
- Illness insurance

Refund Policy

An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for students who attend any class and subsequently withdraw or are suspended from the DPT program for any cause.

Meal Plan

Students have the option to purchase a declining balance meal plan. Students pay for the plan in advance at the Campbell University Business Office to have funds placed on their declining balance account. This account may be used at Marshbanks dining hall, Shouse dining hall, Oasis grill, Chic-Fil-A, Quiznos, Papa Johns, Jole Mole, Starbucks, the Groc, and Subway.

Financial Aid

For information on financial aid availability and application procedures, please contact the student financial planning office at (910) 893-1310 http://www.campbell.edu/admissions/financialaid/.

Policies and Procedures

Advanced Standing and Transfer of Credit

The DPT program does not offer advanced standing or accept transfer of credit for the DPT degree. All relevant coursework required for graduation must be completed in the Campbell DPT program.

Complaint Procedure

Refer to the General Information section of this academic bulletin for the complaint procedure.

Criminal Background Check

College of Pharmacy & Health Sciences (CPHS) program applicants are required to self-disclose any misdemeanors or felony convictions, other than minor traffic violations, including deferred adjudications, with the understanding that non-disclosure or falsification may lead to dismissal.

Disclosure may prevent enrollment. Additionally, in response to requirements in the professional practice environment stating that facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity, a criminal background check will be completed on all accepted applicants prior to matriculation. A copy is sent to the Director of Clinical Education and kept in a locking file cabinet for 4 years. Please refer to the General Information section of this bulletin for the criminal background check policy.

Health Insurance

All CPHS students are required to have health insurance coverage. Before registration, students must either provide proof of health insurance or purchase the health insurance available through the University. Any medical costs incurred by students as a result of injury, exposure to infectious diseases or materials, while in training, are the responsibility of the student and his or her health insurance carrier.

Professional Liability Insurance

Campbell University maintains student liability insurance for all students during their clinical experiences and internships. This coverage is valid only during assigned clinical activities. All students and faculty members of the Program are covered by a malpractice liability insurance policy in accordance with contractual agreement with Training Sites.

Immunization

Before registration, all students are required to provide a completed medical history form and proof of immunization to Student Health Services. A completed physical examination form is required for physical therapy, physician assistant, and pharmacy students. Students are responsible for maintaining immunizations and records. This is required by CPHS and the DPT program to complete all required supervised clinical practice experiences within the curriculum.
All students must provide proof of adequate immunization/immunity for the following:
- Hepatitis B
- Tetanus, diphtheria, pertussis (Tdap)
- MMR
- Polio
- Varicella
- TB skin test within one month of registration and annually thereafter
  - Some clinical sites may require more frequent testing
  - If the TB test is positive, a chest x-ray is required

Additional immunizations may be required for certain clinical education experiences (e.g., influenza). See Student Health Services immunization form for further information on timing and sequence of required immunizations at http://www.campbell.edu/student-services/health-services/medical-forms/). Immunization records are kept on file at Student Health Services. A copy of these records is sent to the Director of Clinical Education to monitor compliance after the first year.

Infection Control
Please refer to the infection control guidelines in the General Information section of this academic bulletin for more details.

Sexual Harassment Policy
Refer to the General Information section of this academic bulletin for the sexual harassment policy.

Substance Abuse Screening Policy & Protocol
Substance abuse screening is becoming mandatory in many healthcare facilities prior to participating in patient care. Due to this trend, a negative substance abuse screening test is required prior to matriculation into the DPT program. Therefore, applicants to the DPT program will be notified of the substance abuse screening test requirement as part of the application process. Repeated testing may be required as determined by the DPT program or clinical training sites.

Clinical education training sites may require CPHS to provide a copy of testing results performed on students. Training sites may set their own standards in regard to who they will admit based on the results of the substance abuse screening test. Students who are unwilling to allow the release of required personal information may not be able to be placed at an affiliated clinical education site, and cannot meet the requirements for graduation. A copy is sent to the Director of Clinical Education and kept in a locking file cabinet for 4 years.

Procedure
1. A substance abuse screening test will be completed on all accepted applicants to the DPT Program prior to matriculation.
2. The next steps document provided to deposited applicants by the program will include information about these requirements with the contingency that the final decision regarding matriculation will be made after institutional review of the accepted applicant’s substance abuse screening test report.
3. Appropriate authorization, with pertinent identifying information necessary to initiate the test, will be received from each accepted applicant prior to initiating a substance abuse screening test.
4. Students must have the sample collected at the Campbell University’s Student Health Services or at a CPHS approved collection site. CPHS will contract with an outside vendor for the performance of the test. Such tests will be conducted in accordance with the Americans with Disabilities Act and other applicable laws.
5. If the test result is positive, the DPT Program Admissions Committee will review the information and the application. Depending on the decision of the Admissions Committee, the student’s acceptance can be rescinded or advancement to clinical year delayed based on these results.
6. All substance abuse screening tests will be maintained in a secure location to assure confidentiality. Routine access to the information will be limited to a staff member in the Office of Admissions & Student Affairs, the Associate Dean of Admissions & Student Affairs, the DPT Program Director and the University General Counsel.
7. Cost of subsequent tests required by clinical sites will be the responsibility of the student.

Student Health Services
Physical therapy students may utilize the Student Health Service for preventive services and personal health concerns.

For patient privacy and confidentiality, DPT student must not be treated by DPT faculty who may occasionally cover the clinic. The students should identify themselves as a DPT student when checking into the clinic so that they may be scheduled with a non-faculty provider. More information about health services offered is available at http://www.campbell.edu/student-services/health-services.

Building Access
Access to the Carrie Rich building is regulated using an electronic ID badge system. Access is granted for each individual student by the program director through facilities services. All students will have access to the Carrie Rich building between 6am and midnight 7 days/week. The Wiggins library is open on weekends and has 24 hour study areas. The School of Osteopathic Medicine allows badge access to DPT program students between 6am and midnight 7 days/week. Access to the anatomy laboratory will be allowed during similar hours for summer semesters only. The simulation center and other laboratories will be available between 8am and 5pm Monday through Friday. Should access outside of these hours be required, students should contact the program director.

Safety and Emergency Preparedness
In case of emergency, students and faculty may contact security services at ext 1911 (on campus) and 911 (off campus). A TDD line is available at 893-1912. The campus safety department can be reached on campus at ext 1375 and off campus at 910 893-1375. Phones on campus can be used to reach security in an emergency. More information related to campus safety tips, planning, sign up for alerts, and crime statistics can be reached at: http://www.campbell.edu/life/campus-safety/. Campbell University has an emergency preparedness plan that involves notifications sent through text message, email, campus signage, and postings on the University website and social media outlets. By logging into Blackboard, students and faculty can register for campus alerts.

Use and Maintenance of Equipment
Faculty and students will treat all equipment within the DPT program with respect. All teaching laboratories and lecture halls will
be kept in neat working order. No shoes or sharp objects will be allowed on treatment tables. Faculty and students are responsible for replacing linens and cleaning treatment tables after use. Students will not be allowed to use physical agents or exercise equipment to treat fellow students or outside persons as this is a violation of state law and the student honor code. Utilization of equipment for learning and study purposes is allowed outside of scheduled class times. No person should use a piece of equipment for which no training has occurred to avoid accidental injury or equipment damage.

Maintenance of equipment will be the responsibility of program faculty. Equipment will be maintained through clean practices and safe handling along with annual calibration and safety review. A log will be kept in the program directors office of all equipment containing a tag number for each item. This tag will be placed by facilities services and placed in a rotation for annual calibration and safety review.

Environmental Health and Safety
The CPHS has the Environmental Health and Safety Committee that is responsible for updating and maintaining the laboratory safety manual to include policy & procedure, safety, training, storage, and disposal of hazardous chemicals. The Lab Safety Manual can be accessed in the program directors office. Emergency contact numbers are posted in the administrative assistant to the program directors office. Training is supplied and recorded (kept in secure file cabinet in director’s office) for all faculty, students, and staff that participate in scholarship activities involving hazardous chemicals in laboratories. At this time, the DPT program does not contain a laboratory containing hazardous chemicals or materials.

Consent and Release for Classroom/Laboratory Participation
The DPT program has a policy regarding human subject’s participation in demonstration within the classroom or laboratory setting. Students and human subjects sign consent form to participate in laboratory or classroom demonstration. A copy of this form is available from any core faculty member or staff personnel. This form will be signed by students in the first semester of the program. Human subjects may sign as participation is required. Signed forms will be stored in locked file cabinet within student’s personal file. Human subjects outside of the program will have signed copies stored within the course folder for the year of service.

Use of Images or Video Recording
The DPT program has a policy that is to be signed by students and human subjects that participate in classroom, research, or laboratory activities involving photography, recording of images, or video recording. A copy of the form is available from any core faculty member or staff personnel. Signed forms will be stored within individual course folders by year or with associated research documents in a locked file cabinet.

Dress Code
It is expected that students wear appropriate clothing for didactic and laboratory courses and in clinical/experiential training. Laboratory clothing typically needs to allow access for easy manipulation and palpation of body parts. Therefore, wearing shorts, t-shirts, and sports bra or similar is appropriate. Business casual is the dress for guest lecturers, College and University events, clinical experiences, and off-site activities (e.g. slacks/skirt and button down shirt/blouse). For clinical/experiential training, the dress code will be dictated by company policy. E.g. a hospital based rotation may require scrubs while an outpatient clinic may require slacks and a buttoned down shirt. If a company policy does not exist, refer to the clinical education manual for dress code. The following items are never appropriate in any setting:
- Bikini/speedo
- Clothing that exposes breasts
- Pants below hips that expose undergarments
- Any clothing that allows for viewing of undergarments while performing job duties or classroom activities
- Pajamas and slippers

Honor Code
Refer to the General Information section of this academic bulletin for the Honor Code. Physical therapy students are required to read and sign the Honor Code, attesting that they understand the code, that they have read and understand the bulletin, and will abide by it. A signed copy of the code will be kept in the students file.

Counseling
During the first professional year orientation, CPHS DPT assigns each student to a faculty member to provide guidance and advising while students are in the program. The faculty member, director of physical therapy, the associate dean of academic affairs, associate dean of admissions & student affairs and the staff are available to discuss personal and academic problems that may arise and provide guidance and/or referrals to other resources as necessary. If a situation arises that may require medical assistance, these services are offered within student health services (http://www.campbell.edu/student-services/health-services/). Should a student feel a health issue may necessitate accommodation to complete the DPT program or is in need of tutoring or coaching, information can be found at http://www.campbell.edu/student-services/student-support-services/.

Technical Standards for Admission
In accordance with Section 504 of the Vocational Rehabilitation Act of 1973, the administration and faculty of Campbell Universities Doctor of Physical Therapy (DPT) program have established the essential non-academic functions for students to participate.

The admissions committee will consider applicants who demonstrate the ability to perform, or learn, the essential skills listed in this document. Campbell University must confirm patients are not placed in danger by students with impaired intellectual, physical, or emotional functions. Students will be evaluated in all the areas listed below to meet requirements for admission, continuation, promotion, and graduation from the DPT program. The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted.

Upon admission, a student who discloses in writing a properly certified disability may receive reasonable accommodation, however, he/she must be able to perform the essential functions within the curriculum and the described standards listed below. Formal disclosure should be made in the Office of Student Support Services, 227 Main Street, Buies Creek, NC 27506.
Candidates for admission to and matriculation from the Campbell DPT program should possess, at a minimum, the following abilities:

**Behavioral/Social Skills and Professionalism**

Students in the Campbell University DPT program must demonstrate attributes of empathy, compassion, integrity, collegiality, high moral character, excellent interpersonal communication, listening, and self-motivation, as such qualities are assessed throughout the program. Students must exhibit sound judgment in the care of patients and academic inquiry along with developing appropriate and effective patient relations. Flexibility and cultural sensitivity must be ensured during times of indecision as these occur frequently in clinical and academic settings. Additionally, students must be able to function in a collegial environment demonstrating proper levels of assertiveness, task delegation, along with organization and time management skills. Adequate emotional health is necessary to deal with strenuous environments and work effectively in demanding situations. Students must maintain good general health, self-care, and hygiene throughout the program and agree to abide by the American Physical Therapy Associations code of ethics and professional behavior.

**Intellectual/Conceptual, Integrative, and Qualitative Skills**

Students in the Campbell University DPT program must demonstrate the ability to utilize computer technology. Students must be able to interpret and comprehend threedimensional and spatial relationships of body structures. Proper reasoning requires students to measure, calculate, analyze, and synthesize information pertinent to problem solving and establishing a PT diagnosis. The aforementioned skills allow students to create proper assessments and sound judgment necessary for correct decisions in rehabilitative intervention and documentation of patient outcomes. Recognize the impact of disability and dysfunction while integrating the needs of patient/family into the plan of care.

**Communication Skills**

Students in the Campbell University DPT program must be able communicate and comprehend the English language in written, oral, and electronic forms with faculty and classmates in academic settings along with members of healthcare team and patients in clinical/professional settings. Examples of communications skills may include speaking, writing, hearing, and reading. The ability to elicit information regarding mood/affect, alertness, activity, movement, function, and non-verbal behavior are essential.

**Sensory/Observational Skills**

Students in the Campbell University DPT program must be able to observe cadaveric dissection, wounds, burns, pelvis and perineum and other potentially unsettling tasks throughout the curriculum. Students must be able to observe patients to obtain a history directly from the patient or guardian. Such observation requires use of vision, hearing, and other somatosensory modalities.

**Motor Skills**

Students in the Campbell University DPT program must demonstrate adequate strength and endurance along with fine and gross motor skills to perform frequent lifting, twisting, bending, kneeling, pushing/pulling necessary with patient transfers, gait, assessment, and intervention. The ability to safely assist patients with ambulatory activities and stand for prolonged periods of time is essential. Candidates must have sufficient manual dexterity to write, type, grasp, pinch, hold, push, pull, lift, and palpate. Students must be able to ensure patient safety at all times. Students must be able to successfully perform dissection, debridement, auscultation, percussion, and wound/burn management along with performance of cardiopulmonary resuscitation (CPR) and use of an automated external defibrillator (AED). These actions require coordination of many sensory systems (vision, hearing, equilibrium, touch).

**Academic Standards**

Reports on academic performance and progress are generated at the mid-term and completion of each semester. The DPT program core faculty meets at the end of each academic term, or as necessary, to discuss the academic performance of all students. Any discussions regarding type of academic deficiency and remedy occurs with development of an action plan (if remediation is required; see below for remediation process) and draft of a letter from the program director stating the specific academic standing described in the following sections. The letter will be provided to the student via email and hard copy by mail. The letter will contain the following:

1. Description of academic standing (remediation, probation, suspension, dismissal)
2. Rationale for academic standing
3. Criteria required to regain good academic standing
4. Contact information of the program director to discuss items outlined in the letter
5. Notification of appeals process

Core faculty is actively involved in promoting student retention through annual advisement sessions. A modified generic abilities document will be used to guide the process. Advisement can occur more frequently (e.g. professionalism, behavioral, or academic concerns) should the need arise. Mechanisms are in place to encourage students to seek assistance for academic performance using StarFish and Examssoft programs.

**Retention and Promotion Criteria**

Full-time students enrolled in the doctor of physical therapy program at the College of Pharmacy & Health Sciences (CPHS) are expected to make satisfactory academic progress toward completion of the degree requirements. Satisfactory academic progress is defined as successful completion of didactic and experiential training in the prescribed time and maintenance of a ≥ 2.8 cumulative grade point average (GPA).

Students who fail to maintain satisfactory academic progress in the professional program are automatically placed on academic probation. They may be required to participate in academic counseling, be enrolled in a remedial program of study, or suspended/dismissed according to the
policies described in subsequent sections. Students, who fail to maintain good academic standing at the completion of a semester prior to a semester requiring a clinical internship, may not be allowed to participate in the clinical education portion of that semester. The student would need to undergo a remedial course of study, with successful completion, prior to engaging in the internships (DPT 800, 802, 804, 806). In the event remediation is not successful, students cannot progress to the clinical internship. Such actions will be recommended by the DPT Academic Performance & Standards committee and program director, with notification to the Associate Dean of Academic Affairs. The student will be notified of these actions by the director of the DPT program.

Students may need to take leave from the DPT program for non-academic reasons considered and approved by the program director on a case-by-case basis (e.g., medical illness, financial, etc.). Should a student be unable to attend classes for ≥ 2 consecutive weeks for a reason approved by the program director, disengagement from the program will be necessary. Should absence occur during clinical internships, see policies in Clinical Education Manual. The length of disengagement and any requirements for reengagement will be outlined in a letter from the program director along with a face-to-face meeting. The length of disengagement cannot be greater than 3 consecutive semesters.

The following contains a description of the types of academic standing within the DPT program:

1. Good Academic Standing
Students will be considered in good academic standing providing:
- Cumulative GPA ≥ 2.8
- Passing grades for all clinical/experiential training
- No violations of student honor code or code of conduct have occurred.

2. Remediation
Students who fail to meet academic standards within a given course or clinical/experiential rotation may be required to remediate coursework and/or attend another clinical/experiential training. Students will require remediation for any patient safety issue throughout the curriculum.

Students must initiate remediation should a grade of < 70% or failure on any examination within a given course. The content of remediation will be directed by the course instructor within a week of receiving a grade.

Successful remediation of a practical exam must occur in the provided time and only a single attempt is allowed. If the student is not successful he/she may be placed on academic probation or suspension.

Should a student fail to remediate academic performance, or there are any behavioral and/or non-academic reasons preventing them from participating in regularly scheduled clinical experience or internship, this rotation must be remediated prior to graduation from the program. Should a student fail a clinical/experiential rotation, this rotation must be remediated prior to graduation from the program. In most cases, this will need to be completed at the end of the program thereby increasing the length of the program for students in this situation. With fixed date licensure testing, students in this situation may fall out of sequence and will not be able to sit for the licensure examination for several months after graduation. Upon successful completion, the student will graduate assuming all didactic courses have been completed. See Graduation after Deceleration policy.

If the student is unable to successfully pass a clinical/experiential rotation/internship during the program, the student will be out of sequence in the didactic portion and may require temporary disengagement from the program (necessitating placement on academic suspension) until rejoining in the normal curriculum sequence. A student failing more than one clinical/experiential rotation will be dismissed from the program.

3. Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress.

A student will be placed on academic probation for:
- Failure to maintain a cumulative GPA of ≥ 2.8
- A grade of D in any single course
- Failure to complete any degree requirement at the prescribed time without prior approval

Depending on the nature of the academic deficiencies and overall academic record, a student placed on academic probation may or may not be permitted to continue in the regular sequence of the professional curriculum. Students cannot be on academic probation more than twice throughout the program and may not be on probation for more than 2 consecutive semesters.

Students who fail to complete the criteria for lifting academic probation will be considered for suspension or dismissal from the DPT program.

The core DPT Academic Performance & Standards committee and director will review the student’s record each semester and again at the end of the term of probation. A recommendation will be made to the program director to restore good academic standing if:

1. The cumulative GPA returns to 2.8 or above within 2 consecutive semesters of being placed on probation, the student will be released from academic probation.
2. Successfully completed a deficient clinical/experiential training and recommendation for a return term/year for the program

A recommendation will be made to the program director to suspend/dismiss if while on academic probation:

1. A student makes a “D” or below in any course.
2. A student fails to correct academic deficiencies within the prescribed time.

4. Academic Suspension
Academic Suspension from the DPT program and CPHS occurs when a student:
- Has failed to make satisfactory progress as demonstrated by a cumulative GPA greater than 2.80, or received a grade of “D” in any course during a period of academic probation.
- Has academic deficiencies which preclude continuation in a normal program of study, but may be expected to be able to complete the requirements for the degree under a modified program of study with or without remedial courses.

Suspensions are imposed for a specified period of time and must not exceed one year. A student on academic suspension is not allowed to continue the standard course
of study. The DPT program director will specify the length of time of the suspension, remedial work required for reinstatement, and the program of study required upon re-instatement in consultation with the DPT Academic Performance & Standards committee. The CPHS Associate Dean for Academic Affairs may be consulted as needed.

5. Academic Dismissal

Academic dismissal from the DPT program and CPHS may be recommended to the Associate Dean of Academic Affairs by the director of the DPT program and DPT Academic Performance and Standards Committee if a student:

- Makes a F in a single course
- Fails to make satisfactory progress during a period of academic probation or suspension;
- Has an academic deficiency which precludes continuation in the prescribed program of study, and may not reasonably be expected to complete the requirements of the degree.

A student dismissed from the College may seek re-entry by applying for re-admission using the standard admissions process.

Academic Status Appeals

At the end of each academic term, the DPT director will notify the DPT Academic Performance and Standards Committee of all students enrolled in DPT program that qualify for academic probation, suspension, or dismissal. The DPT program director notifies each student who does not meet the academic standards as defined by the academic regulations at CPHS. The College’s Associate Dean of Academic Affairs is also notified for any student at risk of suspension/dismissal.

Each student subject to suspension or dismissal (as recommended by DPT core faculty and program director) is evaluated by the DPT Academic Performance and Standards Committee in order to make a recommendation whether to retain or promote the student in the professional program. The student may appear in person before the committee. The DPT program director notifies students in writing regarding any decision by the committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the College and informs Associate Dean of Academic Affairs and Associate Dean of Admissions & Student Affairs.

Students have the opportunity to appeal any decision made by the DPT Academic Performance and Standards Committee by submitting a written petition to the Associate Dean of Academic Affairs within seven days of their receipt of notification. The petition must contain the specific variance requested, a description of any extenuating circumstances intended to justify granting the variance, and a proposed course of study and/or conditions for consideration should the variance be granted. The decision of the Associate Dean of Academic Affairs is final.

Grade Appeals

Students with a just reason for appealing a grade in a course within the DPT program must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, then the student should appeal to the DPT program Academic Performance and Standards Committee. Should resolution not occur at the committee level, the DPT program director will hear from the DPT Academic Performance and Standards committee chair and the student and render a final decision. If efforts within the department are not satisfactory, a student may appeal via written petition to the Associate Dean of Academic Affairs within seven days of the student’s receipt of notification of the DPT Academic Performance and Standards Committee decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the Associate Dean of Academic Affairs is final.

Delayed Graduation Policy

If a Physical Therapy student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling Physical Therapy clinical experiences or matriculation through the curriculum will occur and the student’s graduation may be delayed.

Voluntary course withdrawals or a temporary leave of absence may cause a delay in scheduling Physical Therapy clinical experiences, progress through the curriculum, and a subsequent delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice, students should contact the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

Withdrawal

A student may withdraw from a course without grade assignment at any time prior to the end of the fourth week of a semester. Withdrawal from a course after that period will result in a grade being assigned.

In the event a student must withdraw from the College, he or she will be responsible for obtaining the required form for withdrawal from the University Registrar. It is also the student’s responsibility to complete the prescribed administrative procedures to assure notification to all individuals and offices that require this information.

In cases of serious illness, injuries, or extreme circumstances which normally would require the student’s withdrawal from the College, the student may fully withdraw from all semester coursework without receiving a grade. Such cases require adequate documentation of the circumstances and approval by program director.

Attendance

Attendance is mandatory for all class sessions and clinical experiences throughout the DPT curriculum. If an absence must occur, students should notify the course instructor within 24 hours or at the earliest possible time. Excused absences may include:

- Absence due to serious illness, injury, or death involving the student or the student’s immediate family;
- Authorized representation of the College or University;
- Individual instructors have the ability to grant approved absence.

In the above cases, a student may be permitted to make up work missed with required documentation (e.g. obituary listing, physician note). It is the student’s responsibility, whenever possible, to notify College officials in advance that he or she will be absent. Repeated violations of unexcused
absences may be subject to consequences within the Student Honor Code.

Graduation Requirements
Recommendation for graduation requires faculty approval and attainment of the following requirements:

- Successful completion of all courses, requirements, and remediation
- Successful completion of all clinical/experiential training
- Attendance of graduation week activities that includes licensure preparation courses and comprehensive curriculum review
- Attendance at the graduation ceremony is expected

Graduation after Deceleration
DPT students who decelerate due to approved medical leave, and are in good academic standing, may walk at the graduation ceremony with their original cohort if they lack no more than six hours of credit (one clinical rotation). The missing credit must be completed no later than March 15 of the original graduation date. Students who lack more than six hours of credit will walk at the next graduation ceremony after completion of their outstanding requirements.

Students who decelerate will receive their degree at the next University awarding period; either the May, August, or December graduation dates. Students may not sit for their FSBPT licensure examination until after the degree has been awarded. With fixed date testing, the FSBPT application is due at least 6 weeks prior to testing date. See https://www.fsbspt.org/ForCandidatesAndLicensees/NPTE/FixedDateTestingInfo/index.asp for available testing dates.

Employment while in the Program
- Outside employment during the DPT program is strongly discouraged.
- Required program activities cannot be altered. Outside obligations cannot interfere or impede class attendance or completion of assignments and program requirements.
- Students must not substitute for faculty or staff by performing any administrative, clerical, or clinical duties while on supervised clinical experiences.

Transfer Students
CPHS DPT does not accept transfer students directly into the DPT program.

Students currently enrolled in another DPT program in the United States seeking admission into the Campbell DPT program will be asked to apply. Interested individuals must follow the procedures for admission. Applicants must be in good academic standing and have a letter from the dean of their institution supporting the request. These admissions decisions will be handled in the same manner as all other applicants to the College by the actions of the Admissions Committee.

All prerequisites must be met prior to matriculation to the DPT program at Campbell University. CPHS reserves the right to make changes in requirements for admission, curriculum, standards for progression, advancement and graduation, fees and rules and regulations.

To apply to the DPT program, please follow the policies and procedures in the admissions portion of the CPHS Academic Bulletin.

Grading System
The following arbitrary grading scale is utilized for the DPT program:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B</td>
<td>80-89.99</td>
</tr>
<tr>
<td>C</td>
<td>70-79.99</td>
</tr>
<tr>
<td>D</td>
<td>60-69.99</td>
</tr>
<tr>
<td>F</td>
<td>59.99 or below</td>
</tr>
<tr>
<td>WP</td>
<td>Withdraw - Passing</td>
</tr>
<tr>
<td>WF</td>
<td>Withdraw - Failing</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

Grades of “A, B, C, D, F, and WF” are included in semester hours attempted and will affect the grade point average. Grades of “WP, P, I, and NP” will not affect the grade point average.

A student may appeal a grade within a period of one semester from the semester in which the grade was assigned. No changes to the transcript will be made after a semester period unless a professor acknowledges in writing that an error in grade reporting has occurred. An instructor or director initiated inquiry/request will be remediated and corrected at any time.

Grade Reports, Records, and Transcripts
A report of grades attained by a student will be mailed to the address designated by the student, at the time of registration and at the end of each semester. The official records of each student attending CPHS will be secured in the Office of the Registrar. The Family Educational Rights and Privacy Act (PL93-380) will govern the release of information for this record which contains the transcript from Campbell University, transcripts and transcript evaluations from other educational agencies attended by the student, secondary school transcripts, scholastic aptitude, and other standardized test scores. The application for admission, general correspondence with the student and, if applicable, letters concerning misconduct or disciplinary actions at Campbell University are kept in the CPHS Office of Admissions & Student Affairs. The transcript and contents of the permanent record may be examined by the student upon appointment with the University’s registrar.

Curriculum
Campbell University’s Doctor of Physical Therapy Program is a 36 month graduate degree program with 26.5 months of didactic education and 9.5 months of supervised clinical internships. Graduates will receive the Doctor of Physical Therapy (DPT) degree upon successful completion. There is a 1 week summative session before graduation. The program starts in January with graduation in December. Most didactic courses are held on the main campus with a few online courses completed while on clinical internships in the final year of study.

The DPT program curriculum is a competency-based graduate education (minimum required skills for physical therapist education and normative model of PT education) curriculum based on a hybrid model pulling from traditional, lifespan, and problem based learning. The sequence of courses is designed to start with foundation courses in the basic sciences, professional development, and early clinical skills. Following the initial foundational coursework, subsequent courses teach clinical assessment and intervention, medical, surgical and pharmacy concepts in patient management from a population based lifespan perspective. Integrated curricular themes in service-
Learning and early clinical experiences, therapeutic exercise, and approach to patient care using a lifespan model is designed to enhance student learning and promote confidence in application of skills and didactic knowledge. Problem based learning courses are designed to enhance student interaction in clinical reasoning, application of concepts/skills, and critical interpretation of evidence. The integrated service learning and clinical experiences are designed to encourage inter-professional interaction and collaboration. Assessment of students in the didactic/classroom years is by written examinations, performance on laboratory practical examinations, reflective journals, professional portfolio, and participation in small group activities.

Four clinical rotations occur throughout the curriculum with a six week introductory internship in the spring of the second year. The remaining three clinical internships occur in the 3rd program year with durations of 10-12 weeks for a total of 38 weeks of clinical training. Students must complete a clinical internship in a rural location. Clinical internships need to be completed in an acute/subacute or hospital, rehabilitation, musculoskeletal, and neuromuscular practice settings. Specialized settings may include burn/wound care, aquatic, industrial/vocational, and VA/military locations. Evaluation of clinical-year students includes a preceptor and student self-assessment of student performance using the clinical performance instrument (CPI), reflective narratives on patient care experience/delivery, case study presentations, and written examinations to prepare for licensure.

All students complete all didactic elements in the program at the same time. All students complete the required clinical experiences. The only elective study available in this curriculum is spring semester of the third year.

### Curriculum Sequence

#### Spring 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 700 - Clinical Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>DPT 702 - Principles of Inquiry</td>
<td>2</td>
</tr>
<tr>
<td>DPT 720 - Health &amp; Wellness</td>
<td>1</td>
</tr>
<tr>
<td>DPT 722 - Professional Development</td>
<td>2</td>
</tr>
<tr>
<td>DPT 724 - Service Learning 1</td>
<td>1</td>
</tr>
<tr>
<td>DPT 750 - Life Span Continuum 1</td>
<td>3</td>
</tr>
<tr>
<td>DPT 752 - Tests, Measures &amp; Mobility</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Summer 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 704 - Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>DPT 706 - Exercise Physiology</td>
<td>2</td>
</tr>
<tr>
<td>DPT 708 - Human Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>DPT 726 - Clinical Experience 1</td>
<td>1</td>
</tr>
<tr>
<td>DPT 754 - Burn and Wound Management</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Fall 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 710 - Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>DPT 712 - Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>DPT 728 - Clinical Education</td>
<td>2</td>
</tr>
<tr>
<td>DPT 730 - Service Learning 2</td>
<td>1</td>
</tr>
<tr>
<td>DPT 756 - Therapeutic Exercise 1</td>
<td>2</td>
</tr>
<tr>
<td>DPT 760 - Hospital Based Practice</td>
<td>4</td>
</tr>
<tr>
<td>DPT 762 - Musculoskeletal Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 764 - Clinical Reasoning 1</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Spring 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 714 - Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>DPT 758 - Neurology Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 766 - Therapeutic Exercise 2</td>
<td>3</td>
</tr>
<tr>
<td>DPT 768 - Cardiopulmonary Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 770 - Orthotics/Prosthetics</td>
<td>2</td>
</tr>
<tr>
<td>DPT 800 - Clinical Internship 1</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Summer 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 732 - Clinical Experience 2</td>
<td>1</td>
</tr>
<tr>
<td>DPT 772 - Life Span Continuum 2 (pediatric)</td>
<td>3</td>
</tr>
<tr>
<td>DPT 776 - Life Span Continuum 2 (adult)</td>
<td>3</td>
</tr>
<tr>
<td>DPT 780 - Life Span Continuum 2 (geriatric)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Fall 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 734 - Service Learning 3</td>
<td>1</td>
</tr>
<tr>
<td>DPT 774 - Life Span Continuum 3 (pediatric)</td>
<td>4</td>
</tr>
<tr>
<td>DPT 778 - Life Span Continuum 3 (adult)</td>
<td>4</td>
</tr>
<tr>
<td>DPT 782 - Life Span Continuum 3 (geriatric)</td>
<td>4</td>
</tr>
<tr>
<td>DPT 784 - Clinical Reasoning 2</td>
<td>1</td>
</tr>
<tr>
<td>DPT 786 - Special Populations</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Spring 3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 736 - Administration &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>DPT 788 - Clinical Reasoning 3</td>
<td>1</td>
</tr>
<tr>
<td>DPT 796-99 - Elective</td>
<td>2</td>
</tr>
<tr>
<td>DPT 802 - Clinical Internship 2 (10 weeks)</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Summer 3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 790 - Licensure Preparation 1 (online)</td>
<td>1</td>
</tr>
<tr>
<td>DPT 792 - Assistive &amp; Adaptive Technology (online)</td>
<td>1</td>
</tr>
<tr>
<td>DPT 804 - Clinical Internship 3 (10 weeks)</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Fall 3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 794 - Licensure Preparation 2 (online)</td>
<td>2</td>
</tr>
<tr>
<td>DPT 806 - Clinical Internship 4 (12 weeks)</td>
<td>6</td>
</tr>
</tbody>
</table>

Please visit www.campbell.edu/pt for the most up-to-date curriculum information.
Course Descriptions

DPT 700 - Clinical Biomechanics
Credit: 4 Hours
This course will discuss and prepare students for clinical application of tissue and structural biomechanics within the musculoskeletal system. A detailed analysis of individual joint systems and applied biomechanics concepts will be discussed. Osteo and arthrokinematic movements within joint systems will be presented and discussed with clinical application in a laboratory environment using surface anatomy/palpation.

DPT 702 - Principles of Inquiry
Credit: 2 Hours
This course is designed to review current concepts of systematic evidence-based practice and will integrate these concepts to physical therapy clinical practice. Students will apply evidence-based practice to a physical therapy related topic of their choosing. Application of these concepts will include critically evaluating relevant evidence in the literature, preparing literature for presentation to other medical professionals and preparing a decision-making algorithm for use in the clinical setting.

DPT 704 - Human Anatomy
Credit: 5 Hours
This one semester integrated study of human anatomy encompasses the gross morphology, developmental and histological aspects of the body along with the introduction to clinical anatomy. The course prepares the students for physical therapy practice with an understanding of functional human anatomy. The unit includes the regional dissections with the emphasis on the musculoskeletal, nervous, circulatory and respiratory systems. The course consists of a series of lectures and labs. The lecture and lab sections are organized in a regional approach.

DPT 706 - Exercise Physiology
Credit: 2 Hours
This course is designed to provide students with an overview of bioenergetics in addition to a study of acute and chronic physiologic adaptations to aerobic, anaerobic and strengthening exercise. The selection and application of therapeutic exercise and prescription will be emphasized in relation to physical impairments (body structure and function) and functional limitations (activities) frequently encountered across the lifespan in physical therapy.

DPT 708 - Human Pathophysiology
Credit: 4 Hours
This course provides a survey of human physiology and covers key concepts related to the function and biological control of cells, tissues, organs and body systems. Basic principles of physiology and pathology are addressed with focus on the coordinated functions and activities of specific body systems: nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems. Emphasis is given to normal system function, interaction and homeostasis, the ways that these contribute to the functions of the body as a whole. Abnormal function, interaction, and pathology will also be addressed along with injury, inflammation, and tissue repair.

DPT 710 - Pharmacology
Credit: 2 Hours
This one semester integrated study of human anatomy encompasses the gross morphology, developmental and histological aspects of the body along with the introduction to clinical anatomy. The course prepares the students for physical therapy practice with an understanding of functional human anatomy. The unit includes the regional dissections with the emphasis on the musculoskeletal, nervous, circulatory and respiratory systems. The course consists of a series of lectures and labs. The lecture and lab sections are organized in a regional approach.

DPT 712 - Neuroscience
Credit: 3 Hours
This course provides students with a foundation in systems level neuroscience in coordination with the neurorehabilitation curriculum. A focus on the understanding of normal function and pathology within the central nervous system (CNS) will occur. Functional and regional neuroanatomy will be presented. The course is organized by coverage of review for axon physiology and neurotransmission, anatomical organization of the CNS, sensory and motor functions, and description of frequently encountered neurological disorders relevant to physical therapy.

DPT 714 - Motor Control
Credit: 3 Hours
This course examines perceptual, motor, and sensory contributions to feedforward and feedback postural control, balance, and movement strategies and promotes critical thinking as students use their understanding to develop educated interventions for movement pathologies with neurologic origins. Specific neurologic pathologies are introduced as patient examples of movement dysfunction from which students will develop and plan treatment strategies. The course is structured in three blocks covering theoretical frameworks of motor control, postural control, and mobility functions.

DPT 720 - Health & Wellness
Credit: 1 Hour
This course provides foundational concepts of health and wellness promotion in the individual and the community, and addresses the role of the physical therapist in health and wellness promotion. The course will address physical, mental, and spiritual facets of wellness and their roles on fitness, nutrition, and body composition. This course will include the relationship between health and wellness on disease and fitness throughout the lifespan from birth to death.

DPT 722 - Professional Development
Credit: 2 Hours
This course will provide students an overview of the physical therapy profession and prepare them for the principles that direct legal and ethical decisions, professional roles, and professional behaviors related to the practice of physical therapy. Past, current, and future modes of the delivery of healthcare will be discussed. Development of skills related to time management and stress, group dynamics, effective study and test taking strategies, and conflict management will be occur. This course includes discussion of the generic abilities, core values, and the evolution of professional growth with components of self-assessment. In addition to role playing activities and group discussion, students will document aspects of professionalism through the use of a professional portfolio throughout the entire curriculum.
DPT 724 - Service Learning 1
Credit: 1 Hour
This course starts a series of integrated service learning and early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Inter-professional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

DPT 726 - Clinical Experience 1
Credit: 1 Hour
This is the first in a series of two integrated clinical learning experiences and associated service courses for students prior to their initial full-time clinical rotation. This course will allow students to: interact in physical therapy and inter-professional activities; practice communication skills; practice tests and measures; physical agents, develop professional behavior; identify legal and ethical components of physical therapy; and observe medical conditions associated with health wellness and pathology. Inter-professional interaction and peer learning will be encouraged with all clinical experiences.

DPT 728 - Clinical Education
Credit: 2 Hours
This course includes lecture, class discussion, and active learning activities regarding documentation practices and standards in physical therapy; professional behavior and communication in the clinical setting, including communication when dealing with the unusual or unexpected patient situations; generational and cultural differences; teaching and learning principles, including learning styles, as applied to student and patient education; and proper use of the CPI as an assessment tool. Activities to prepare the student for clinical internships include an overview of the site-selection process, documentation activities, and interactive learning styles activities.

DPT 730 - Service Learning 2
Credit: 1 Hour
This is the second a series of three integrated service learning courses and associated early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Inter-professional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

DPT 732 - Clinical Experience 2
Credit: 1 Hour
This is the second in a series of two integrated clinical learning experiences and associated service courses that occurs the semester after the initial full-time clinical rotation. This course builds upon students’ previous clinical experiences by allowing them exposure to different practice settings and additional inter-professional activities. Students will enhance their: communication skills; tests and measures skills; physical agents utilization; professional behaviors; ability to identify legal and ethical components of physical therapy; and understanding of medical conditions associated with health wellness and pathology. Inter-professional interaction and peer learning will be encouraged with all clinical experiences.

DPT 734 - Service Learning 3
Credit: 1 Hour
This is the third in a series of three integrated service learning courses and associated early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Inter-professional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

DPT 736 - Administration & Management
Credit: 3 Hours
This course will provide an in-depth study of the organization and administration of physical therapy services, including organizational and administrative principles, employment practices and personnel management, marketing, facility planning, financial stewardship, reimbursement and outcomes. Current payer methodologies and case management will be reviewed. Students will learn the practical aspects of managing physical therapy services, from an initial business plan concept to long term strategic planning. Current regulatory, legal and policy and procedures that impact practice management will also be presented.

DPT 750 - Lifespan Continuum 1
Credit: 3 Hours
This course will provide the student with an overview of human development and aging from birth to death. Specifically, an epidemiological, chronological approach will be presented to develop the learner’s understanding and recognition of normal and abnormal psychosocial milestones throughout the lifespan. The course will also establish the learner’s foundational skills in evaluation and management of the physical therapy patient/client through an introduction to the SOAPIER format as the cornerstone of total patient/client management. The concepts of health, functioning, and pain behaviors will incorporated into an organization of the full biopsychosocial needs of the physical therapy patient/client. A focus on introductory skills in patient documentation, billing, inter-professional communication and rural community resources will be provided.
DPT 754 - Burn & Wound Management
Credit: 2 Hours
The course will cover the basic science of normal physiology of tissue repair related to the pathology of burns and wounds. Psychosocial issues related to wound healing will be discussed. Knowledge of anatomy as well as the integumentary, vascular, neuromuscular and peripheral nervous systems will be required to properly identify various types of wounds including but not limited to: lacerations, ulcers, amputations, punctures, gun-shots, chemical, electrical, and fire wounds. Different tools to measure wounds appropriately will be utilized. Various types of treatment such as debridement, protective garments, splinting devices, surgical intervention and chemical agents will be discussed. The student will also develop skills to prepare a sterile versus a clean environment as well as use personal protective equipment. The development of strategies to deal with special populations related to wounds such as obesity, diabetes, amputees and the indigent will be interwoven throughout this course. Finally the management and business details related to wounds including coding principles will be discussed.

DPT 756 - Therapeutic Exercise 1
Credit: 2 Hours
This course is an introduction to the principles of therapeutic exercise to promote strength, balance, stability, endurance, flexibility and function. The ICF model of enablement, the systems model of motor control and the task oriented approach to movement analysis will be used as frameworks for evaluating simple (not complex) movement dysfunction. This will allow for individualized development of corrective exercise plans to address pain and functional mobility losses for sicker patient populations to include hospital, long-term care, sub-acute and post-operative management.

DPT 758 - Neurology Practice
Credit: 3 Hours
This course addresses evaluation and management skills within the practice of neurological physical therapy. Students will develop a patient profile, apply a diagnostic hypothesis, identify relevant tests and measures to determine the appropriateness of physical therapy management, and classify the patient/client according to the physical therapy diagnosis. Management strategies will address the complete biopsychosocial needs of the patient. Specific approaches to be addressed will include education, activity modification, and physical interventions. Inter-professional communication will address the patient/client presentation lying outside the physical therapy scope of practice.

DPT 760 - Hospital Based Practice
Credit: 4 Hours
This course will present educational material related to patient management encountered in diverse hospital settings. Hospital settings to be discussed will include: general medical, surgical, emergency room, intensive care, progressive care, critical care, sub-acute, rehabilitation, cardiac care, labor and delivery, and orthopedic sections. Items related to patient management to be discussed, analyzed and practiced will include chart review, safe patient handling techniques, discharge planning as well as documentation. The process of practicing autonomously within an integrated interdisciplinary team will be emphasized. Evaluation, assessment and treatment techniques typically encountered by physical therapists will be discussed and practiced for patients across the lifespan. The continuum of care model will be utilized. It will be essential for the student to understand how to operate within a complex environment involving instrumentation, life sustaining equipment, tubes, lines and monitoring machines. It will be important to recognize the value of diagnostic testing, lab values, contraindications and precautions.

DPT 762 - Musculoskeletal Practice
Credit: 3 Hours
This course addresses evaluation and management skills within the practice of musculoskeletal physical therapy. Students will develop a patient profile, apply a diagnostic hypothesis, identify relevant tests and measures to determine the appropriateness of physical therapy management, and classify the patient/client according to the physical therapy diagnosis. Management strategies will address the complete biopsychosocial needs of the patient. Specific approaches to be addressed will include education, activity modification, and physical interventions (manual therapy, therapeutic exercise & modalities). Inter-professional communication will address the patient/client presentation lying outside the physical therapy scope of practice.

DPT 766 - Therapeutic Exercise 2
Credit: 3 Hours
This course discusses the mechanisms and application of therapeutic exercise to normal and abnormal populations with specific focus on special populations and disorders. Therapeutic exercise will be applied in the development of a rehabilitation program and appropriate progression for impairments, pain and selected movement disorders.
DPT 768 - Cardiopulmonary Practice
Credit: 3 Hours
This course addresses evaluation and management skills within the practice of cardiopulmonary physical therapy. Students will develop a patient profile, apply a diagnostic hypothesis, identify relevant tests and measures to determine the appropriateness of physical therapy management, and classify the patient/client according to the physical therapy diagnosis. Management strategies will address the complete biopsychosocial needs of the patient. Specific approaches to be addressed will include education, activity modification, and physical interventions. Inter-professional communication will address the patient/client presentation lying outside the physical therapy scope of practice.

DPT 770 - Orthotics & Prosthetics
Credit: 2 Hours
This course provides an overview and evidence supported approach to orthotic and prosthetic use in patient populations. Gait assessment before and after orthotics and prosthetics intervention will be discussed and practiced. Integumentary, neurological, and vascular considerations will be discussed in patient populations that benefit from orthotics and prosthetics intervention.

DPT 772 - Lifespan Continuum 2 (Pediatrics)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of the pediatric physical therapy patient/client. An epidemiological, chronological approach will be presented to develop the learner’s understanding and recognition of abnormal pathophysiological milestones throughout the pediatric portion of the lifespan continuum. Utilizing a problem-based learning approach, this course will further develop the learner’s skills in examination and interventions aimed at the physical therapy patient/client across the various clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. The concepts of health, functioning, and pain behaviors will be incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. A continued focus on introductory skills in patient documentation, billing, inter-professional communication and rural community resources will be provided.

DPT 774 - Lifespan Continuum 3 (Pediatrics)
Credit: 4 Hours
This course will develop entry-level skills in the evaluation and management of the pediatric physical therapy patient/client and focuses on integration of previously learned skills into an interdisciplinary, inter-professional approach to care. Utilizing a case-based, problem-based learning approach, this course will develop the learner’s skills in advanced reasoning, examination and intervention techniques across the various physical therapy clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. Learners will be expected to critically analyze colleague’s clinical evaluation and management plans and the literature of the pediatric physical therapy patient/client. The concepts of health, functioning, and pain behaviors will be incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. There is a continued focus inter-professional communication and rural community resources.

DPT 776 - Lifespan Continuum 2 (Adult)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of the adulthood physical therapy patient/client. An epidemiological, chronological approach will be presented to develop the learner’s understanding and recognition of abnormal pathophysiological milestones throughout the adulthood portion of the lifespan continuum. Utilizing a problem-based learning approach, this course will further develop the learner’s skills in examination and interventions aimed at the physical therapy patient/client across the various clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. The concepts of health, functioning, and pain behaviors will be incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. A continued focus on introductory skills in patient documentation, billing, inter-professional communication and rural community resources will be provided.

DPT 777 - Lifespan Continuum 3 (Adult)
Credit: 4 Hours
This course will develop entry-level skills in the evaluation and management of the Adulthood physical therapy patient/client and focuses on integration of previously learned skills into an interdisciplinary, inter-professional approach to care. Utilizing a case-based, problem-based learning approach, this course will develop the learner’s skills in advanced reasoning, examination and intervention techniques across the various physical therapy clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. Learners will be expected to critically analyze colleague’s clinical evaluation and management plans and the literature of the Adulthood physical therapy patient/client. The concepts of health, functioning, and pain behaviors will be incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. There is a continued focus inter-professional communication and rural community resources.

DPT 780 - Lifespan Continuum 2 (Geriatric)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of the Geriatric physical therapy patient/client. An epidemiological, chronological approach will be presented to develop the learner’s understanding and recognition of abnormal pathophysiological milestones throughout the Geriatric portion of the lifespan continuum. Utilizing a problem-based learning approach, this course will further develop the learner’s skills in examination and interventions aimed at the physical therapy patient/client across the various clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. The concepts of health, functioning, and pain behaviors will be incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. A continued focus on introductory skills in patient documentation, billing, inter-professional communication and rural community resources will be provided.
DPT 782 - Lifespan Continuum 3 (Geriatric)
Credit: 4 Hours
This course will develop entry-level skills in the evaluation and management of the Geriatric physical therapy patient/client and focuses on integration of previously learned skills into an interdisciplinary, inter-professional approach to care. Utilizing a case-based, problem-based learning approach, this course will develop the learner’s skills in advanced reasoning, examination and intervention techniques across the various physical therapy clinical disciplines utilizing the SOAPIER format as the cornerstone of total patient/client management. Learners will be expected to critically analyze colleague’s clinical evaluation and management plans and the literature of the Geriatric physical therapy patient/client. The concepts of health, functioning, and pain behaviors will incorporated into an integration of the full biopsychosocial needs of the physical therapy patient/client. There is a continued focus inter-professional communication and rural community resources.

DPT 784 - Clinical Reasoning 2
Credit: 1 Hour
This course will further develop the learner's critical thinking and clinical reasoning skills in clinical practice. Utilizing a problem based approach; students will apply their foundational research skills towards asking specific clinical questions, searching the literature and critically appraising the results. Secondly, students will work in collaborative groups to solve simulated clinical cases across the lifespan and clinical specialties within physical therapy. Problem-based and case based learning activities will be utilized with patients and actors for students to develop critical thinking and reasoning skills in development of a physical therapy diagnosis, prognosis, and plan of care. Students will have the opportunity to present cases to the peers and answer questions related to their clinical reasoning processes and resultant plans of care.

DPT 786 - Special Populations
Credit: 4 Hours
This course involves continued study of selected practice settings and patient populations. The first portion of the course addresses unique psychosocial, assessment, management, and documentation/reimbursement needs of women’s and men’s health. Concepts in industrial rehabilitation will be covered to include: employment screening, functional capacity evaluations, rehabilitation requirements, work site analysis, and OSHA reporting requirements related to environmental safety and health. The course ends with discussion of home health care delivery and the unique practice aspects of rural healthcare. Other items for discussion may include military/VA practice settings and rehabilitation considerations of this population.

DPT 788 - Clinical Reasoning 3
Credit: 1 Hour
This course will further develop the learner’s critical thinking and clinical reasoning skills in clinical practice. Utilizing a problem based approach; students will apply their foundational research skills towards asking specific clinical questions, searching the literature and critically appraising the results. Secondly, students will work in collaborative groups to solve simulated clinical cases across the lifespan and clinical specialties within physical therapy. Problem-based and case based learning activities will be utilized with patients and actors for students to develop critical thinking and reasoning skills in development of a physical therapy diagnosis, prognosis, and plan of care. Students will have the opportunity to present cases to the peers and answer questions related to their clinical reasoning processes and resultant plans of care.

DPT 790 - Licensure Preparation 1
Credit: 1 Hour
This course is designed to assist students with formal licensure preparation. Students will review areas of study within the FSBPT content areas and take quizzes with timed limitations that mimic the licensure examination. Questions will be formatted to mimic the licensure examination. Activities may include group discussion, self-study using licensure preparation guides, and self-assessment within FSBPT content areas through quizzes on Blackboard.

DPT 792 - Assistive and Adaptive Technology
Credit: 1 Hour
This course is designed to provide students with an overview of assistive and adaptive technology available to improve independent function in patients with disability. A survey of technologies available for seating, control interfaces, computer access, sensory aids, cognitive aids, augmentative communication, and mobility and transportation technologies will be presented.

DPT 794 - Licensure Preparation 2
Credit: 2 Hours
This course is designed to assist students with formal licensure preparation. Students will review areas of study within the FSBPT content areas and take quizzes with timed limitations that mimic the licensure examination. Questions will be formatted to mimic the licensure examination. Activities may include group discussion, self-study using licensure preparation guides, and self-assessment within FSBPT content areas through quizzes on Blackboard. A week long summative session that includes a licensure preparation course is included prior to graduation.

DPT 800 - Clinical Internship 1
Credit: 3 Hours
Six weeks of full-time experiential training (approximately 240 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 800 may involve general hospital, skilled nursing, outpatient orthopedic, or home health settings to emphasize application of musculoskeletal, cardiopulmonary, and basic care skills learned in the first year.
DPT 802 - Clinical Internship 2
Credit: 5 Hours
Ten weeks of full-time experiential training (approximately 400 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 802 may include acute care, musculoskeletal, neuromuscular, or elective.

DPT 804 - Clinical Internship 3
Credit: 5 Hours
Ten weeks of full-time experiential training (approximately 400 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 804 may include acute care, musculoskeletal, neuromuscular, or elective.

DPT 806 - Clinical Internship 4
Credit: 6 Hours
Twelve weeks of full-time experiential training (approximately 480 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 806 may include acute care, musculoskeletal, neuromuscular, or elective.

Competencies for Graduates

Physical Therapy Programs are held accountable in ensuring students meet the following professional practice expectations at the end of didactic and clinical training. Campbell’s DPT program contains assessment methods to ensure this process by tying examination questions throughout the program to specific practice expectations. The expectations are as follows:

Professional Practice Expectation: Accountability
CC-5.1 Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
CC-5.2 Have a fiduciary responsibility for all patient/clients.
CC-5.3 Practice in a manner consistent with the professional Code of Ethics.
CC-5.4 Change behavior in response to understanding the consequences (positive and negative) of his or her actions.
CC-5.5 Participate in organizations and efforts that support the role of the physical therapist in furthering the health and wellness of the public.

Professional Practice Expectation: Altruism
CC-5.6 Place patient’s/client’s needs above the physical therapist’s needs.
CC-5.7 Incorporate pro bono services into practice.

Professional Practice Expectation: Compassion/Caring
CC-5.8 Exhibit caring, compassion, and empathy in providing services to patients/clients.
CC-5.9 Promote active involvement of the patient/client in his or her care.

Professional Practice Expectation: Integrity
CC-5.10 Demonstrate integrity in all interactions with patients/clients, family members, caregivers, other health care providers, students, other consumers, and payers.

Professional Practice Expectation: Professional Duty
CC-5.11 Demonstrate professional behavior in all interactions with patients/clients, family members, caregivers, other health care providers, students, other consumers, and payers.
CC-5.12 Participate in self-assessment to improve the effectiveness of care.
CC-5.13 Participate in peer assessment activities.
CC-5.14 Effectively deal with positive and negative outcomes resulting from assessment activities.
CC-5.15 Participate in clinical education of students.
CC-5.16 Participate in professional organizations.

Professional Practice Expectation: Communication
CC-5.17 Expressively and receptively communicate in a culturally competent manner with patients/clients, family members, caregivers, practitioners, interdisciplinary team members, consumers, payers, and policymakers.

Professional Practice Expectation: Cultural Competence
CC-5.18 Identify, respect, and act with consideration for patients’/clients’ differences, values, preferences, and expressed needs in all professional activities.

Professional Practice Expectation: Clinical Reasoning
CC-5.19 Use clinical judgment and reflection to identify, monitor, and enhance clinical reasoning to minimize errors and enhance patient/client outcomes.
CC-5.20 Consistently apply current knowledge, theory, and professional judgment while considering the patient/client perspective in patient/client management.

Professional Practice Expectation: Evidence-based Practice
CC-5.21 Consistently use information technology to access sources of information to support clinical decisions.
CC-5.22 Consistently and critically evaluate sources of information related to physical therapist practice, research, and education and apply knowledge from these sources in a scientific manner and to appropriate populations.

CC-5.23 Consistently integrate the best evidence for practice from sources of information with clinical judgment and patient/client values to determine the best care for a patient/client.

CC-5.24 Contribute to the evidence for practice by written systematic reviews of evidence or written descriptions of practice.

CC-5.25 Participate in the design and implementation of patterns of best clinical practice for various populations.

**Professional Practice Expectation: Education**

CC-5.26 Effectively educate others using culturally appropriate teaching methods that are commensurate with the needs of the learner.

**Patient/Client Management Expectation: Screening**

CC-5.27 Determine when patients/clients need further examination or consultation by a physical therapist or referral to another health care professional.

**Patient/Client Management Expectation: Examination**

CC-5.28 Examine patients/clients by obtaining a history from them and from other sources.

CC-5.29 Examine patients/clients by performing systems reviews.

CC-5.30 Examine patients/clients by selecting and administering culturally appropriate and age-related tests and measures. Tests and measures include, but are not limited to, those that assess:
- a. Aerobic Capacity/Endurance
- b. Anthropometric Characteristics
- c. Arousal, Attention, and Cognition
- d. Assistive and Adaptive Devices
- e. Circulation (Arterial, Venous, Lymphatic)
- f. Cranial and Peripheral Nerve Integrity
- g. Environmental, Home, and Work (Job/School/Play) Barriers
- h. Ergonomics and Body Mechanics
- i. Gait, Locomotion, and Balance
- j. Integumentary Integrity
- k. Joint Integrity and Mobility
- l. Motor Function (Motor Control and Motor Learning)
- m. Muscle Performance (including Strength, Power, and Endurance
- n. Neuromotor Development and Sensory Integration
- o. Orthotic, Protective, and Supportive Devices
- p. Pain
- q. Posture
- r. Prosthetic Requirements
- s. Range of Motion (including Muscle Length)
- t. Reflex Integrity
- u. Self-Care and Home Management (including activities of daily living [ADL] and instrumental activities of daily living [IADL])
- v. Sensory Integrity
- w. Ventilation and Respiration/Gas Exchange
- x. Work (Job/School/Play), Community, and Leisure Integration or Reintegration (including IADL)

**Patient/Client Management Expectation: Diagnosis**

CC-5.32 Determine a diagnosis that guides future patient/client management.

**Patient/Client Management Expectation: Prognosis**

CC-5.33 Determine patient/client prognoses.

**Patient/Client Management Expectation: Plan of Care**

CC-5.34 Collaborate with patients/clients, family members, payers, other professionals, and other individuals to determine a plan of care that is acceptable, realistic, culturally competent, and patient-centered.

CC-5.35 Establish a physical therapy plan of care that is safe, effective, and patient/client-centered.

CC-5.36 Determine patient/client goals and outcomes within available resources and specify expected length of time to achieve the goals and outcomes.

CC-5.37 Deliver and manage a plan of care that is consistent with legal, ethical, and professional obligations and administrative policies and procedures of the practice environment.

CC-5.38 Monitor and adjust the plan of care in response to patient/client status.

**Patient/Client Management Expectation: Intervention**

CC-5.39 Provide physical therapy interventions to achieve patient/client goals and outcomes. Interventions include:
- a. Therapeutic Exercise
- b. Functional Training in Self-Care and Home Management
- c. Functional Training in Work (Job School/Play), Community, and Leisure Integration or Reintegration
- d. Manual Therapy Techniques (including Mobilization/Manipulation Thrust and Nonthrust Techniques)
- e. Prescription, Application, and, as Appropriate, Fabrication of Devices and Equipment
- f. Airway Clearance Techniques
- g. Integumentary Repair and Protection Techniques
- h. Electrotherapeutic Modalities
- i. Physical Agents and Mechanical Modalities

CC-5.40 Determine those components of interventions that may be directed to the physical therapist assistant (PTA) upon consideration of: (1) the needs of the patient/client, (2) the PTA’s ability, (3) jurisdictional law, (4) practice guidelines/policies/codes of ethics, and (5) facility policies.

CC-5.41 Provide effective culturally competent instruction to patients/clients and others to achieve goals and outcomes.
CC-5.42 Complete documentation that follows professional guidelines, guidelines required by health care systems, and guidelines required by the practice setting.

CC-5.43 Practice using principles of risk management.

CC-5.44 Respond effectively to patient/client and environmental emergencies in one’s practice setting.

Patient/Client Management Expectation:
Outcomes Assessment
CC-5.45 Select outcome measures to assess individual outcomes of patients/clients using valid and reliable measures that take into account the setting in which the patient/client is receiving services, cultural issues, and the effect of societal factors such as reimbursement.

CC-5.46 Collect data from the selected outcome measures in a manner that supports accurate analysis of individual patient/client outcomes.

CC-5.47 Analyze results arising from outcome measures selected to assess individual outcomes of patients/clients.

CC-5.48 Use analysis from individual outcome measurements to modify the plan of care.

CC-5.49 Select outcome measures that are valid and reliable and shown to be generalizable to patient/client populations being studied.

CC-5.50 Apply principles of prevention to defined population groups.

CC-5.52 Provide culturally competent first-contact care through direct access to patients/clients who have been determined through the screening and examination processes to need physical therapy care.

CC-5.54 Provide culturally competent care to patients/clients referred by other practitioners to ensure that care is continuous and reliable.

CC-5.55 Provide culturally competent care to patients/clients in tertiary care settings in collaboration with other practitioners.

CC-5.56 Participate in the case management process.

Practice Management Expectation:
Management of Care Delivery
CC-5.53 Provide culturally competent first-contact care through direct access to patients/clients who have been determined through the screening and examination processes to need physical therapy care.

CC-5.55 Provide culturally competent care to patients/clients in tertiary care settings in collaboration with other practitioners.

Practice Management Expectation:
Consultation
CC-5.62 Provide consultation within boundaries of expertise to businesses, schools, government agencies, other organizations, or individuals.

Practice Management Expectation:
Social Responsibility and Advocacy
CC-5.63 Challenge the status quo of practice to raise it to the most effective level of care.

CC-5.64 Advocate for the health and wellness needs of society.

CC-5.65 Participate and show leadership in community organizations and volunteer service.

CC-5.66 Influence legislative and political processes.

Practice Management Expectation:
Prevention, Health Promotion, Fitness, and Wellness
CC-5.50 Provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities.

CC-5.51 Promote health and quality of life by providing information on health promotion, fitness, wellness, disease, impairment, functional limitation, disability, and health risks related to age, gender, culture, and lifestyle within the scope of physical therapist practice.
Department of Physician Assistant Practice
Campbell University
College of Pharmacy & Health Sciences
Leon Levine Hall of Medical Sciences
4350 U.S. 421 South
Lillington, NC 27546

Mailing Address
P.O. Box 1090
Buies Creek, NC 27506

Phone
(800) 760-9734, ext. 1210

Academic Program
The Physician Assistant Program at Campbell University focuses on an evidence-based, patient centered, clinically practical curriculum which will prepare students for the opportunity to enter one of the fastest growing health care professions. Students who complete the program will earn a Master of Physician Assistant Practice (MPAP) degree.

Mission Statement
Campbell University’s Physician Assistant (PA) program provides graduate clinical education in a Christian environment in the tradition of faith, learning, and service. Principles of medical science and professional ethical standards inform the education of our students. The program endeavors to meet the future needs of the PA profession and its role in the healthcare delivery system throughout the continuum of care. The program promotes patient centered, evidence-based medicine preparing students to be competent healthcare providers.

Goals
The goals of the Campbell Physician Assistant Program strive to:
1. Provide a structured curriculum that prepares students for evidence-based clinical practice.
2. Provide an educational environment that is conducive to learning.
3. Provide students with the medical knowledge and clinical skills to practice with diverse patient populations within a variety of practice settings and clinical disciplines.
4. Promote a patient-centered approach to health and disease by emphasizing primary care.
5. Prepare students to become members of an interprofessional healthcare team.

Admissions Process
• All submitted material must be received by Jan. 15
• Complete online application available at www.caspaonline.org
• Submit all official college transcripts to CASPA
• Submit three letters of recommendation to CASPA
• Submit GRE scores to CPHS
• Submit supplemental application with required fee of $50 and a passport size photo to CPHS

Admissions Requirements
• Bachelor’s degree from a regionally accredited institution in the U.S.
• Recommended overall GPA ≥ 3.2
• Recommended prerequisites GPA ≥ 3.0
• Recommended GRE score of 1,100 (> 300 revised GRE format) within the past 5 years
• Recommended 1,000 hours of health care experience (HCE) completed no later than December 31 of the year prior to matriculation.
• Three letters of recommendation. Preference is given to applicants with two out of three letters from physicians, PAs, clinical supervisors, and others familiar with your clinical experience. Personal recommendations are discouraged.

Prerequisites
• Bachelor’s degree completed by the end of the spring semester prior to matriculation
• All prerequisites must be completed no later than December 31 of the year prior to matriculation
  • All pre-professional academic work must be done at a regionally accredited college or university in the United States
• There is no advanced standing
• The Program does not accept transfer credit
• All grades must be “C” or better
• No time limit on completed courses

Courses:
• One semester of General Biology
• Two semesters of Human Anatomy and Physiology with labs (this may be taken as two combined A & P courses with lab, or one Anatomy course with lab and one Physiology Course)
• One semester of Microbiology with lab
• One semester of General Chemistry with lab
• One semester of Organic Chemistry or Biochemistry
• One semester of Statistics or Biostatistics
• One semester of Psychology
• One semester of Genetics is recommended
Examples of Qualifying Health Care Experience
- Athletic Trainer
- Emergency Room/Medical Technician
- Laboratory Technologist
- Medical Assistant
- Military Medic
- Nurse
- Nursing Assistant
- Pharmacy Technician
- Phlebotomist
- Physical Therapist
- Physical Therapy Assistant
- Radiological Technologist
- Respiratory Therapist
- Surgical Technician

International Applicants
International applicants who have completed a bachelor’s degree and all prerequisite courses in a regionally accredited institution in the United States are eligible to apply to the program. International applicants may be asked to submit Test of English as a Foreign Language (TOEFL) scores directly to admissions office if English is a second language.

Financial Information

Tuition and Fees
Tuition and fees are determined annually and are available at www.campbell.edu/paprogram. Tuition and fees are estimated and are subject to change. New tuition and fee schedules will become effective at the beginning of each academic year. Graduating students are responsible for the purchase of their cap and gown.

Optional Fees
- Parking permit
- Illness insurance

Refund Policy
If any student attends any class and subsequently withdraws or is suspended from the PA program for any cause, no amount of tuition or fees is reimbursed.

Meal Plan
Students have the option to purchase a declining balance meal plan. Students pay for the plan in advance at the Campbell University Business Office to have funds placed on their declining balance account.

Financial Aid
For specific financial aid information, please contact the student financial planning office at (910) 893-1310.

Policies and Procedures

Advanced Standing and Transfer of Credit
The PA Program does not offer advanced standing or accept transfer of credit for the Master of Physician Assistant Practice degree. All relevant coursework required for graduation must be completed in the Campbell PA Program.

Complaint Procedure
Refer to the General Information section of this academic bulletin for the complaint procedure.

Criminal Background Check
College of Pharmacy & Health Sciences (CPHS) applicants are required to self-disclose any misdemeanors or felony convictions, other than minor traffic violations, including deferred adjudications, with the understanding that non-disclosure or falsification may lead to dismissal and disclosure may prevent enrollment. Additionally, in response to requirements in the professional practice environment stating that facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity, a criminal background check will be completed on all accepted applicants prior to matriculation. Please refer to the General Information section of this bulletin for the criminal background check policy and protocol.

Health Insurance
All College of Pharmacy & Health Sciences (CPHS) students are required to have health insurance coverage. Before registration, students must either provide proof of health insurance or purchase the health insurance available through the University. Any medical costs incurred by students as a result of needle sticks, exposure to infectious diseases or materials, while in training, are the responsibility of the student and his or her health insurance carrier.

Immunization
Before registration, all students are required to provide a completed medical history form, and proof of immunization to Student Health Services. A completed physical examination form is required for physician assistant students. Students are responsible for maintaining immunizations; this is required by CPHS in order to complete all required supervised clinical practice experiences in the PA curriculum.

All students must provide proof of adequate immunization/immunity for the following:
- Hepatitis B
- Tdap
- MMR
- Polio
- Varicella
- TB skin test within one month of registration and annually thereafter
  - Some clinical sites may require more frequent testing
  - If the TB test is positive a chest x-ray is required

See Student Health Service immunization form for further information on timing and sequence of required immunizations (http://www.campbell.edu/content/686/immunizationform.pdf).

Infection Control
Please refer to the infection control guidelines in the General Information section of this Academic Bulletin for more details.

Sexual Harassment Policy
Refer to the General Information section of this Academic Bulletin for the sexual harassment policy.
Substance Abuse Screening Protocol

Substance abuse screening is becoming mandatory at many health care facilities prior to participating in patient care either as a learner or a staff member. In light of this development, a negative substance abuse screening test is required before matriculation into the PA Program, and again before advancement to the clinical year. Therefore, applicants to the PA Program will be notified of the substance abuse screening test requirement as part of the application process. Repeated screening tests may be required as determined by the PA Program or the clinical training site.

Clinical education sites may require the College of Pharmacy & Health Sciences (CPHS) to provide them with a copy of the results of any substance abuse test performed on students immediately prior to and for the duration of their placement at the site. Clinical education sites may set their own standards in regard to who they will admit based on the results of the substance abuse screening or require further screening. Students who are not willing to allow the release of the required personal information may not be able to be placed at an affiliated clinical education site, and thus cannot meet the requirements for graduation.

Procedure
1. A substance abuse screening test will be completed on all accepted applicants to the PA Program prior to matriculation.
2. The letter sent by the program to each accepted applicant, as well as to selected wait-listed applicants will include information about these requirements with the contingency that the final decision regarding matriculation will be made after institutional review of the accepted applicant’s substance abuse screening test report.
3. Appropriate authorization, with pertinent identifying information necessary to initiate the test, will be received from each accepted applicant prior to initiating a substance abuse screening test.
4. Students must have the sample collected at the Campbell University Health Center or at a CPHS approved collection site. CPHS will contract with an outside vendor for the performance of the test. Such tests will be conducted in accordance with the Americans with Disabilities Act and other applicable laws.
5. If the test result is positive, the PA Program Admissions Committee will review the information and the application. Depending on the decision of the Admissions Committee, the student’s acceptance can be rescinded or advancement to clinical year delayed based on these results.
6. All substance abuse screening tests will be maintained in a secure location to assure confidentiality. Routine access to the information will be limited to a staff member in the Office of Admissions & Student Affairs, the Associate Dean of Admissions & Student Affairs, the PA Program Director and the University General Counsel.
7. Tests will be repeated annually and the cost covered by the program; the cost of subsequent tests required by clinical sites will be the responsibility of the student.

Student Health Services
Physician Assistant students may utilize the Student Health Service for preventive services and personal health concerns. For patient privacy and confidentiality, PA students must not be treated by PA faculty who may occasionally cover the clinic. The student should identify themselves as a PA student when checking into the clinic so that they may be scheduled with a non-faculty provider.

Computer and iPad Policy
Computers and iPads distributed by the program are considered program property until graduation. Computers and iPads distributed by the program must be used for program related curriculum, emails, and clinical rotations. The use of alternate devices is not permitted. Program computers and iPads must not be sold. Violation of this policy is considered a breach of professionalism and will result in administrative probation and possible dismissal.

Technical Standards for Admission

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) requires all Physician Assistant (PA) programs to publish technical standards for admission. “Technical Standards” as defined in Section 504 of the Act, “refers to all nonacademic admissions criteria that are essential to participate in the program in question.”

All PA students must possess the intellectual, ethical, physical, and emotional capabilities required to undertake the full curriculum and to achieve the levels of competence required by the faculty. Because these standards describe essential functions that students must demonstrate to meet the requirements of PA education, they are prerequisites for entrance, continuation, promotion, and graduation from the PA program. The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted. The following technical standards are adapted from the AAMC guidelines.

Candidates for admission to and graduation from the Campbell PA Program should possess the following abilities:

Observation
The candidate must be able to observe required demonstrations and experiments in the basic sciences, including but not limited to anatomic dissection, microscopic studies, and patient demonstrations. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the sense of vision, hearing, and somatic sensation.

Communication
A candidate must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive non-verbal communication. A candidate must be able to communicate effectively and sensitively with patients. Communication includes not only speech, but also reading and writing in English. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.
Motor Abilities
A candidate must have sufficient motor function to carry out the basic laboratory techniques and to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers, perform dissection of a human cadaver, and have sufficient motor ability to use a microscope. A candidate should be able to perform a complete physical examination (including pelvic and rectal examination); diagnostic procedures (e.g., venipuncture and basic laboratory tests such as urinalysis).

A candidate must be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of treatment reasonably required of physician assistants are cardiopulmonary resuscitation, the administration of intravenous medication, the application of pressure to stop bleeding, the suturing of simple wounds, assisting in surgical operations, and the performance of simple, general obstetrical and gynecological procedures. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing.

Intellectual, Conceptual, Integrative, and Quantitative Abilities
Problem solving, the critical skill demanded of physician assistants, requires that a candidate be able to learn, retrieve, analyze sequence, organize, synthesize and integrate information efficiently, and reason effectively. In addition a candidate should possess the ability to measure and calculate accurately, to perceive three-dimensional relationships and to understand the spatial relationships of structures.

Behavioral and Social Attributes
A candidate must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients and their family members, staff, and colleagues. Each candidate must be able to work effectively as a member of a health care team.

Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, collegiality, interest, and motivation are all personal qualities that are assessed during the admission and education processes.

Accepted students with a disability who believe they may require special accommodations should contact the Coordinator for Academic Support Services immediately upon accepting the offer of admissions. Before matriculation, accepted students must attest in writing that they have read and are able to meet the program’s technical standards.

Academic Standards
Academic Performance and Standards Committee
The Academic Performance and Standard Committee (APSC) of the Campbell University Physician Assistant program consist of the principal faculty: the program director (chair), medical director, academic coordinators, clinical coordinator, and general faculty members. The committee meets prior to the end of each semester to review the academic standing of each student. Prior to the end of the didactic year the APSC convenes to recommend students for advancement to the clinical year; it convenes again prior to the end of the clinical phase to recommend students for graduation. The committee will also be convened at any point in the program at the recommendation of a faculty member to discuss a student whose performance is at risk for not meeting standards.

Retention and Promotion Criteria
Students enrolled in the Physician Assistant program are expected to make satisfactory academic progress toward completion of degree requirements. Satisfactory academic progress is defined as successful completion of all required courses and completion of all deficiencies and/or required remedial programs in the time and manner prescribed by the Physician Assistant program faculty. Students who fail to maintain satisfactory academic progress will be placed on academic probation. Students on academic probation will be required to participate in academic counseling and/or in a remedial program of study.

Remediation
Students having academic difficulty can request tutoring by contacting the Coordinator for Academic Support Services at no cost. For an appointment call 910-814-5693. Advisors may refer students for tutoring as part of a remediation plan.

1. Exam Remediation
It is required that each student has a satisfactory understanding of all course material presented during the program in order to be a competent clinician. A student who fails an exam with a grade of less than 70% will meet with his/her faculty advisor or course coordinator, as directed by the academic coordinator. The meeting should include a review of the student’s study habits. The student must complete a written or practical remedial exam within two weeks, to ensure content competency. The completed remedial exercise will be placed in the student’s file. The exam grade will not be changed.

2. Unit Remediation
Clinical Medicine I, II, and III courses are composed of several units. In each unit there will be one or more exams. If a student receives a failing unit grade he or she must meet with his or her advisor. The student must successfully pass a remedial written or practical exam within two weeks of unit failure. If the student successfully remediates the unit, the grade will remain unchanged; however, the student will not be placed on academic probation. If the student fails to successfully remediate the material in the prescribed time he/she will be placed on academic probation.

3. Course Grades
Students must successfully complete all required courses of the Physician Assistant program with a minimum grade of 70%. A student who fails any one course will be placed on academic probation. The student will be given one opportunity to remediate the course. The student must successfully pass a remedial written or practical exam within two weeks.
in order to continue in the program. After successful remediation the course grade will be advanced to 70%. Failure to successfully remediate the course in the prescribed manner and time will result in dismissal from the program. Failure of any second course during the didactic year is not remediable and will result in dismissal from the program.

**Remediation Records**
A record of all student remediation exercises will be kept in the student’s file. A record of remediation for each semester is kept in a flow sheet in the program files.

**Academic Probation**
Academic probation is the initial action for a student failing to make satisfactory academic progress. A student will be placed on academic probation for:
1. Failure to successfully remediate an initial course failure, in which the student received a grade of less than 70%, or
2. Failure of one didactic course with a grade of less than 70%, which was successfully remediated.

A student placed on academic probation will be on probation for the semester. A didactic year student on probation will be required to meet with his/her advisor to develop a remedial study plan. The advisor may recommend referral to student services for tutoring, restricting participation in non-academic clubs, and committees or a combination of interventions. Any student who is placed on academic probation for two consecutive semesters will be dismissed from the program.

**Academic Dismissal**
Students will be dismissed from the Physician Assistant program for the following:
1. Failure to successfully remediate an initial course failure, in which the student received a grade of less than 70%,
2. Failure of a second course, or
3. Being placed on academic probation in two consecutive didactic semesters.

Students who are dismissed must return the program provided laptop, iPad mini, identification card, name tags, and the Campbell logo patch.

**Administrative Probation**
Regardless of academic standing, a didactic phase or clinical phase student may be placed on administrative probation at any time for unprofessional behavior or activity. Students on administrative probation will be required to engage in counseling as determined by the APSC and sign a probation contract. Counseling must be satisfactorily completed, as determined by the APSC, in order for the student to be removed from administrative probation.

A didactic phase or clinical phase student will be placed on administrative probation for:
1. Failure to demonstrate appropriate professional attitudes and behaviors, or
2. Documented behaviors that would preclude professional licensure.

**Administrative Dismissal**
A student on administrative probation who fails to complete and/or respond to required counseling in the required time will be dismissed from the program.

A student on administrative probation who fails to comply with the terms of the probation, or who repeatedly demonstrates unprofessional behavior will, upon recommendation of the APSC, be presented to the Campbell University Behavioral Intervention Team (CUBIT). After discussion of the circumstances for probation and dismissal, the CUBIT will either uphold the recommendation for dismissal or recommend further investigation and/or counseling.

Students who are dismissed must return the program provided laptop, iPad mini, identification card, name tags, and the Campbell logo patch.

**Clinical Year Remediation**

**End-of-Rotation Exam Remediation:**
The final grade for clinical rotations is a combination of exam grades, preceptor evaluation, written assignments, and clinical coordinator’s evaluation, as outlined in the course syllabus. During the clinical phase of training, students may only remediate two failed end-of-rotation exams by passing a written remedial exam. If the student fails to successfully remediate either of the two failed end-of-rotation exams, s/he will be placed on academic probation for the remainder of the clinical phase of training. Failure of a third end-of-rotation exam is not remediable and is grounds for dismissal. A student placed on clinical year probation who fails any subsequent clinical course will be dismissed from the program.

**Preceptor Evaluation**
Clinical preceptor grades are an integral part of assessment of clinical year students. Clinical year students who receive a failing grade from a preceptor on any rotation may be placed on probation, after review of the situation by the Academic Performance and Standards Committee (APSC). Students who receive a failing grade from a second preceptor evaluation will be brought before the APSC. The APSC will evaluate the specific circumstances of each preceptor evaluation. If the APSC decides that the evaluations are evidence that the student is unprepared for the rigors of clinical practice, the student will be dismissed from the program.
Course Remediation: Failure of a clinical rotation with a grade of less than 70% requires repeating the rotation and the student will be put on academic probation. Mandatory repeating of the clinical rotation will result in delay of graduation from the program. The student will incur additional tuition costs for the repeat rotation. Failure of a second clinical rotation is evidence that the student is unprepared for the rigors of clinical practice and will result in dismissal of the student from the program.

Clinical Year Probation
Clinical year students on probation will be required to meet with their advisor to develop a comprehensive written remedial study plan to assure comprehension of the core material.
Students will be placed on academic probation for:
1. Failing to successfully remediate an end-of-rotation exam failure, or
2. Failing a clinical rotation with a grade of less than 70%.
3. Failing a preceptor evaluation for any rotation.

Clinical Year Dismissal
Clinical students will be dismissed from the Physician Assistant program for the following:
1. Being placed on clinical year probation twice during the clinical phase of the program,
2. Failure of a second clinical rotation,
3. Failure of two preceptor evaluations, following review by, and on recommendation of the APSC.
4. Failure of a third end-of-rotation exam, or
5. Failure to complete and/or respond to required counseling as a result of administrative probation.

Academic Status Appeals
Any student in the Physician Assistant program has the opportunity to appeal any decision made by the APSC. Students desiring to appeal a decision rendered by the APSC must submit a written petition to the College of Pharmacy & Health Sciences’ associate dean of academic affairs within seven days of the student’s receipt of notification of the APSC decision. The decision of the associate dean is final.

Grade Appeals
Students who feel that they have a just reason for appealing a grade in a Department of Physician Assistant Practice course must first appeal to the course coordinator. If no resolution is achieved at the level of the course coordinator a student may appeal to the program director within seven days of notification of the grade. If the student feels the program director’s resolution is not just, the student must submit a written petition to the College of Pharmacy & Health Sciences’ associate dean of academic affairs within seven days of the student’s receipt of notification of the program director’s decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the associate dean is final.

Test Question Appeal
Students who contend the answer to a test question may appeal to the course coordinator, within three days of the exam grade being posted. The appeal must be accompanied by at least two peer-reviewed references. The decision of the course coordinator is final.

Service Hours
Service to the program, college, university, community, and profession is an integral part of the Campbell mission of faith, learning, and service. Physician Assistant students are required to earn 25 service-learning hours, during the first year of study, as part of the didactic curriculum. Service hours can be earned by participating in college health fairs, the Buies Creek Elementary school health fair, PA day activities, the annual Charity Golf Tournament, adopt-a-highway program, and serving as hosts during open houses or Marshalls at graduation, among other activities. Students may also submit verified hours from service to their local churches or community groups. In addition to all other components required for successful completion of the didactic year, completion of the 25 mandatory service hours must be accomplished by the end of the Clinical Year Orientation week each year in order to advance to the clinical year and begin rotations. Failure to complete the hours as required may delay graduation.

Advancement to the Clinical Year
Advancement to the clinical year requires faculty approval and attainment of the following requirements:
1. Successful completion of all courses,
2. Maintenance of a 70% or greater overall grade average,
3. Successful completion of the didactic year summative evaluations, and
4. Completion of 25 hours of required service learning.

Graduation Requirements
Recommendation for graduation requires faculty approval and attainment of the following requirements:
1. Successful completion of all courses, requirements, and remediation,
2. Successful completion of the Campbell PA program PANCE board review seminar, and
3. Successful completion of all summative clinical year evaluations.

Graduation after Deceleration
PA Students who decelerate due to probation, repeating a clinical rotation, or approved medical leave, and are in good academic standing, may walk at the graduation ceremony with their original cohort if they lack no more than five hours of credit (one clinical rotation). The outstanding credit must be completed no later than March 15 of the year immediately following the original graduation date. Students who lack more than five hours of credit, or miss the deadline for completion, will be able to walk at the next graduation ceremony after completion of their outstanding requirements.

Students who decelerate will receive their degree at the next University awarding period; either the May, August, or December graduation dates. Students may sit for their NCCPA boards and apply for North Carolina licensure once all program requirements have been met, and the program director releases their names to the appropriate boards.

All academic, clinical, and remedial work must be completed within three years of matriculating in the PA program. Students who have outstanding work after three years may reapply for admission, as described under the academic dismissal policy.
Employment while in the Program

1. Outside employment during the didactic or clinical phases of the PA program is strongly discouraged.
2. Required program activities cannot be altered by outside activities. Outside obligations cannot interfere or impede class attendance or completion of assignments of program requirements.
3. Students are not permitted to perform any clerical, administrative, or physical work for the PA program or be employed as a graduate assistant.
4. Students must not substitute for faculty or staff by performing any administrative, clerical, or clinical duties while on supervised clinical educational rotations.

Assignment Completion

All course assignments must be turned in by the date and time posted by the instructor. A late penalty of 5-points per day will deducted from the assignment grade. Unless specific reasons for late submissions are approved in advance by the instructor, an assignment that is more than 6 days late will not be accepted and the student will receive a zero for the assignment.

Exam Protocol – Late for an Exam

It is unacceptable to be late for an exam as it is disruptive for the rest of the class. Students must be in their seats and have their computers set up before the posted exam time (usually the hour). Students who are late for an exam must not enter the exam room; those students must report to the PA office suite. They will be set up in a location provided by faculty, or other proctors, who may be available. For a first offense the earned grade will be awarded. For any subsequent exam tardiness, students up to 15 minutes late will be dropped one letter grade for the exam. Students more than 15 minutes late (usually 15 minutes after the hour) will not be allowed to take the exam and will receive a zero for the exam. For extenuating circumstances – car problems, road conditions, acute illness, or other instances beyond the student’s control – the student must notify their advisor or the course coordinator by email, text, or phone as soon as possible. Program faculty will decide whether a make-up exam will be permissible.

Attendance

Attendance is required at all classes and examinations. Attendance is a part of class participation. Excused absences include: serious illness, injury, death in the student’s immediate family, or absence due to authorized representation of the University, CPHS, or PA Program. In order to ensure student safety, if a student is ill he or she must call or email the academic or clinical coordinator as soon as possible. For authorized absences students are required to notify the coordinator 24 hours in advance. Clinical year students must also inform the clinical preceptor as soon as possible if they will miss a clinical session.

Each unexcused absence will receive a 2-point deduction from the professionalism grade for the course. Students who show a consistent pattern of tardiness for class will receive a warning. After the warning, students will receive a one-point deduction from the professionalism grade for each subsequent infraction.

Refer to the Clinical Year Manual for detailed information on clinical year absences.

Medical Leave-of-Absence

Students who require a medical leave-of-absence must request a meeting with the program director. The circumstances of the leave will be reviewed with the Academic Performance and Standards Committee. Each case will be considered on an individual basis. A plan for deceleration, remediation, or withdrawal will be developed in discussion with the associate dean for Admissions and Student Services. Student withdrawal will follow the “Withdrawal” protocol in this bulletin.

Grade Reports, Records, and Transcripts

A report of grades attained by a student in the CPHS will be mailed to the address designated by the student at the end of each semester. The official records of each student in CPHS will be secured in the Office of the Registrar. The Family Educational Rights and Privacy Act (PL93-380) will govern the release of information for this record which contains the transcript from Campbell University, transcripts and transcript evaluations from other educational agencies attended by the student, secondary school transcripts, scholastic aptitude, GRE, and other standardized test scores. The application for admission, general correspondence with the student and, if applicable, letters concerning misconduct or disciplinary actions at Campbell University are kept in the Office of Student Affairs. The transcript and contents of the permanent record may be examined by the student upon appointment with the Registrar, or the associate dean for Student Services.

Counseling

During academic year orientation the Department of Physician Assistant Practice assigns a faculty member as the student’s advisor to provide guidance while students are in the program. This faculty member, the Program Director, and the staff are available to discuss academic and personal issues that may arise and provide guidance and/or referrals to other resources as necessary.

A counseling hotline is available free to all CPHS students through ProtoCall Services. Call: 866-428-3591. Counseling services are available through the coordinator for academic support services. For an appointment call 910-814-5693.

Dress Code

Business attire is appropriate for classroom and examination sessions. Men are required to wear shirts and a tie with slacks or khakis. Women’s skirt or dress length should be to the knee. Thin strap or racer back tank tops must be covered with a sweater or jacket. Sleeveless dressy tops may be worn without a sweater. Low cut tops or dresses are not permitted. Jeans and flip-flops are not permitted. Special jeans days must be approved by the director of pre-clinical education, the director of clinical education, or the program director.

Clean scrubs are recommended for laboratory sessions. A short white lab coat and name tag is required for all clinical encounters; long hair must be pulled back. Nose, lip and eyebrow piercings are not permitted in clinical settings.
 Withdrawal

In the event that a student must withdraw from the College, he or she will be responsible for obtaining the required form for withdrawal from the University registrar. It is the student’s responsibility to complete the prescribed administrative procedures in order to assure notification to all appropriate individuals and offices.

In cases of serious illness, injuries, or extreme circumstances which normally would require the student’s withdrawal from the College, the student may fully withdraw from all semester coursework without receiving a grade. Such cases require adequate documentation of the circumstances.

Students who withdraw in good academic standing and have completed all the necessary documentation will be granted readmission to the program as an entering student. The student must request readmission within two academic years. In these instances of readmission, all courses must be completed and all tuition and fees will be applied.

Students who withdraw must return the program provided laptop, iPad mini, identification card, name tags, and the Campbell logo patch.

Honor Code

Refer to the General Information section of this Academic Bulletin for the Honor Code. PA students are required to read and sign the Honor Code, attesting they understand the code, they have read and understand the bulletin, and will adhere to the policies. A signed copy of the code will be kept in the student’s file.

Curriculum

Class of 2016

Campbell University’s Physician Assistant Program is a 28 month graduate degree program with 13 months of didactic education and 15 months of supervised clinical experience. Graduates will receive the Master of Physician Assistant Practice (MPAP) degree upon successful completion. The program starts in mid-August. Graduation is in December, after 7 semesters of study and training. All didactic courses are held on the main campus.

The PA program curriculum is a competency-based graduate medical education curriculum. The sequence of courses is designed to start with foundational courses in the basic sciences as well as clinical skills. Following the initial foundational coursework, subsequent courses teach clinical medical, surgical and pharmacotherapeutical concepts. Curriculum content is vertically integrated such that the study of topics in a specific clinical discipline, such as cardiology, includes cardiac history and physical exam, cardiology in clinical medicine, cardiology diagnostics such as EKG and appropriate laboratories, and cardiology pharmacotherapeutics. The newly developed Clinical Skills Courses will compliment this integrated curriculum through regular exercises in critical thinking such as clinical case studies, simulation activities and objective structured clinical examinations (OSCEs). Early clinical experience opportunities are also interspersed throughout the didactic year. Assessment of students in the first year is by written examinations, performance on laboratory practical examinations, and participation in small group activities as well as final summative exams.

The clinical rotations in the second year are five-week supervised clerkship experiences in the major disciplines, a seminar in evidence-based medicine and two clinical electives. Evaluation of clinical-year students includes a preceptor assessment of performance, and student performance on written examinations or presentations given at the end of each required clinical rotation. There are final summative exams at the conclusion of the clinical year which are prerequisites for graduation.

All students complete all didactic elements in the program at the same time. All students must complete all required clinical experiences. The only elective study available in this curriculum is in the second year when students may undertake supervised clinical experiences in two five-week rotations of their choosing.

Curriculum design and operationalization is guided by the standards of accreditation for physician assistant education, as published by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). The ARC-PA accreditation standards describe the required curricular components and required supervised clinical experiences for a program to receive accreditation. The curriculum described is designed to meet these accreditation requirements.

Didactic Courses

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 501 - Anatomy Lecture &amp; Lab</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MPAP 502 - Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MPAP 512 - History &amp; Physical Examination</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MPAP 504 - Clinical Medicine I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MPAP 522 - Clinical Skills</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MPAP 515 - Pharmacotherapeutics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MPAP 511 - Genetics</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Spring Semester

MPAP 505 - Clinical Medicine II  6
  • Neurology
  • Endocrinology
  • Gastroenterology
  • Urology
  • Dermatology
  • HEENT
  • Nephrology
MPAP 523 - Clinical Skills  4
  • EKG
  • Clinical Case Studies
  • OSCE
  • SIM
  • Radiology
  • Laboratory Medicine
  • Early Clinical Experience

MPAP 516 - Pharmacotherapeutics II  3
MPAP 503 - Behavioral Medicine  3
MPAP 521 - Surgery  3
MPAP 509 - Evidence-Based Med. I  3

Summer Semester

Course         Credit Hours
MPAP 506 - Clinical Medicine III  6
  • OB-Gyn
  • Pediatrics
  • Geriatrics
  • Men’s Health
MPAP 514 - Orthopaedics  2
MPAP 510 - Emergency Medicine  2
MPAP 517 - Pharmacotherapeutics III  2
MPAP 524 - Clinical Skills  4
  • EKG
  • Clinical Case Studies
  • OSCE
  • SIM
  • Radiology
  • Laboratory Medicine
  • Early Clinical Experience
MPAP 519 - Health Policy & Professional Practice I  1

Clinical Rotations

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 601 - Emergency Medicine</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 602 - Family Practice</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 603 - Internal Medicine</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 604 - Surgery</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 605 - Pediatrics</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 606 - Psychiatry</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 607 - OB/GYN</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 608 - Primary Care</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 609 - Evidence-Based Med. II</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 610 - Orthopaedics</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 611 - Elective 1</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 612 - Elective 2</td>
<td>5</td>
</tr>
</tbody>
</table>

Clinical Affiliation

There are numerous clinical affiliations for PA students to complete their supervised clinical training. Students will be notified of their clinical training sites during the spring/summer semester of the didactic year. Those sites are located in Harnett and surrounding counties in North Carolina.

Clinical Rotations at Distant Sites

While many clinical educational rotations are in Harnett and surrounding counties, it may be necessary for the program to arrange some rotations at distant sites. Every effort will be made to arrange clinical rotations that are within 90 minutes’ drive time from campus, or from a student’s home, for those who are North Carolina residents. Travel expenses are the student’s responsibility. Nevertheless, there are times when it may be necessary for the program to send some students to sites that are not within convenient driving distance. In those few instances the program will arrange for suitable housing; however, students will be responsible for travel and housing. Students may qualify for discounted housing costs, if available through North Carolina AHEC. Distant rotations will account for no more than three of any student’s total rotations.
Course Descriptions

Didactic Courses

MPAP 501 – Human Anatomy
Credit: 4 hours
This one semester clinical anatomy unit prepares the student for clinical practice with an understanding of functional human anatomy. The unit consists of a series of lectures and labs. Lectures are taught by experienced clinicians. The labs are guided by surgical faculty. The lecture and lab sections are organized in an organ system approach, correlating with the physical diagnosis unit that runs concurrently.

MPAP 502 – Physiology
Credit: 3 hours
Physiology is presented to the student to reinforce the importance of physiology and pathophysiology to the study of clinical medicine. The course is structured in an organ system approach, correlating the basic sciences with clinical applications. It is delivered in the first semester as a foundation for the clinical medicine courses. It is structured to coincide with the anatomy course and the physical diagnosis course to emphasize clinical applications.

MPAP 503 – Behavioral Medicine
Credit: 3 hours
This course is an introduction to psychiatric disorders and behavioral medicine. Presented in lecture and seminar format the major psychiatric disorders are studied. DSM-IV classification is covered, as is interviewing and office counseling. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 504 – Clinical Medicine I
Credit: 4 hours
This is the first of three didactic Clinical Medicine courses presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized into an organ system approach, this first course will cover preventive medicine and nutrition, pulmonology, cardiology, infectious diseases, and hematology and oncology. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 505 – Clinical Medicine II
Credit: 6 hours
This is the second of three didactic Clinical Medicine courses presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized into an organ system approach, this second course will cover neurology, endocrinology, urology, gastroenterology, dermatology, ophthalmology, and otolaryngology and nephrology. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or Objective Structured Clinical Examinations prepare the student for clinical patient interactions.

MPAP 506 – Clinical Medicine III
Credit: 6 hours
This is the last of three didactic Clinical Medicine courses presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized in a life-cycle approach, this course will cover obstetrics and gynecology, pediatrics, geriatrics, and men’s health. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 509 – Evidence-Based Medicine
Credit: 3 hours
This one semester course is an introduction to Evidence-based Medicine (EBM), and prepares the student for EBM II which is the clinical year project. Evidence based-medicine provides tools to assist clinicians to make accurate diagnoses and select optimal treatment for their patients. This course will review statistical concepts, the epidemiologic basis for clinical research, and research ethics, and will teach students to formulate clinical questions, search and critically appraise the medical literature, and incorporate best evidence into their practice. The course content is presented in lecture format with small group discussions.

MPAP 510 – Emergency Medicine
Credit: 2 hours
This course will focus on the management of patients with emergency medical and surgical conditions requiring evaluation and treatment. Presented in lecture format, with small group case discussion sessions, the student will learn to recognize those patients with life-threatening disorders. Triage, stabilization, diagnostic and therapeutic procedures, and specialty consultation will be covered. As adjunctive material and in preparation for clinical year studies students will take the BLS and ACLS certification courses prior to starting the clinical year rotations.

MPAP 511 – Genetics
Credit: 1 hour
This one semester course is an introduction to medical genetics and genomics. Presented in lecture format this course explores the genetic basis of disease and clinical genetic disorders. Students will be taught to develop a genetic pedigree and understand its inherent health implications. Students will also study medical genomics, the application of which can be used to develop genotypic specific diagnoses, prevention, and therapy.
MPAP 512 – History & Physical Examination  
Credit: 3 hours  
This semester long course introduces the student to the art of acquiring a patient history and performing the physical examination. Using weekly lecture and laboratory format the course will detail how to obtain a medical history, and perform a complete physical examination. The small group labs will allow the student to learn history and physical skill, after they are demonstrated by the faculty. Simulated patient encounters will provide the student with the opportunity to practice their clinical skills. At the conclusion of each lab students will perform a case-based clinical scenario exercise with their lab partner and receive faculty feedback on their performance. A summative physical exam will be performed and graded.

MPAP 514 – Orthopaedics  
Credit: 2 hours  
This is a one semester course designed to give the student an overview of the discipline of orthopaedics. Presented in lecture and laboratory format, this course covers the basics of musculoskeletal medicine. Several procedural seminars dedicated to musculoskeletal physical examination skills, casting and splinting, and interpretation of skeletal radiographs are included. The course will cover musculoskeletal disorders of all age groups. Special emphasis will be directed to office and emergency orthopaedics as seen in primary care. Operative orthopaedics will also be discussed in preparation for the required orthopaedics rotation in the second year.

MPAP 515 – Pharmacotherapeutics I  
Credit: 3 hours  
This course is the introductory section of a three semester pharmacotherapeutics curriculum. This first section will introduce the student to the basic principles of pharmacodynamics, pharmacokinetics, drug metabolism, drug interactions, and adverse reactions. The student will also be introduced to the drug reference resources. Drugs will be introduced in conjunction with the clinical medicine units that are taught this semester. Presented in lecture format with interactive sessions, this unit will provide the student with the pharmacotherapeutic principles needed for clinical practice. The course is taught by experienced clinical doctor of pharmacy faculty.

MPAP 516 – Pharmacotherapeutics II  
Credit: 3 hours  
This is the second course in a three semester course. The course will concentrate on therapeutic applications of drugs for various organ systems integrated with the clinical medicine units being taught during this semester. Presented in lecture format augmented by clinical case presentations discussed in small group sessions. The course is taught by experienced clinical doctor of pharmacy faculty.

MPAP 517 – Pharmacotherapeutics III  
Credit: 2 hours  
This is the third semester course in Pharmacology. This course will build on the previous two courses and concentrate on the clinical pharmacotherapeutics of life cycle medicine. Presented in lecture format, with small group discussions, the unit is taught in conjunction with pediatrics, geriatrics, obstetrics and gynecology, men’s health, and integrative medicine. The course will expand on the clinical application of therapeutics specific to patients of all ages and gender. Biological and herbal medicine, as applicable to primary care, will be discussed. The course is taught by experienced doctor of pharmacy faculty.

MPAP 519 – Health Policy & Professional Practice I  
Credit: 1 hour  
This one semester course introduces the student to the issues of physician assistant practice including PA history, state laws and rules, certification, licensure, DEA regulation, and malpractice insurance. The student is also taught healthcare organization, policy, ethics, and economics. The course will explore coding and reimbursement. The student will also have the opportunity to be exposed to the other members of the healthcare team.

MPAP 521 – Surgery  
Credit: 3 hours  
This one semester course, presented in lecture format with weekly lab sessions is designed to introduce the student to the fundamentals of surgical practice. Lectures will cover surgical principles and common surgical conditions. The student will learn basic clinical procedures including sterile procedure, anesthesia, suturing, and common office procedures. Pre-operative and post-operative patient care is presented.

MPAP 522 – Clinical Skills  
Credit: 3 hours  
This course is the first in a sequence of three didactic courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the semester’s clinical medicine units. Each topic is presented in a variety of formats to include but not limited to small group exercises, laboratory exercises, and lecture presentations. Small-group clinical case study discussions, led by experienced clinicians, are utilized to develop problem solving skills. Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) prepare the student for clinical patient interactions. Simulation exercises further enhance students’ learning by offering state-of-the-art task trainers and mannequins for exceptional hands-on skills training. Practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will build on their History and Physical Exam course by completing field assignments assessing actual patients and submitting the appropriate written documentation. Rigorous practice in case presentations will further enhance students’ abilities to fully function in a clinical setting.
MPAP 523 – Clinical Skills  
Credit: 4 hours  
This course is the second in a sequence of three didactic courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the semester’s clinical medicine units. Each topic is presented in a variety of formats to include but not limited to small group exercises, laboratory exercises, and lecture presentations. Small-group clinical case study discussions, led by experienced clinicians, are utilized to develop problem solving skills. Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) prepare the student for clinical patient interactions. Simulation exercises further enhance students’ learning by offering state-of-the-art task trainers and mannequins for exceptional hands-on skills training. Practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will build on their History and Physical Exam course by completing field assignments assessing actual patients and submitting the appropriate written documentation. Rigorous practice in case presentations will further enhance students’ abilities to fully function in a clinical setting.

MPAP 524 – Clinical Skills  
Credit: 4 hours  
This course is the third in a sequence of three didactic courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the semester’s clinical medicine units. Each topic is presented in a variety of formats to include but not limited to small group exercises, laboratory exercises, and lecture presentations. Small-group clinical case study discussions, led by experienced clinicians, are utilized to develop problem solving skills. Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) prepare the student for clinical patient interactions. Simulation exercises further enhance students’ learning by offering state-of-the-art task trainers and mannequins for exceptional hands-on skills training. Practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will build on their History and Physical Exam course by completing field assignments assessing actual patients and submitting the appropriate written documentation. Rigorous practice in case presentations will further enhance students’ abilities to fully function in a clinical setting.

Clinical Courses

MPAP 601 – Emergency Medicine  
Credit: 5 hours  
This 5 week rotation is located at one of our affiliated Emergency Departments. Students will participate in all aspects of emergency medical care. The student will interview, evaluate and examine patients presenting to the Emergency Department. Students will present all patients cared for to the precepting clinician. Emergency procedures and treatment will be guided by the clinical preceptor. Patient encounters must be logged with the PA program. Students will be graded on preceptor evaluations and final examination.

MPAP 602 – Family Practice  
Credit: 5 hours  
This 5 week rotation introduces the student to the basics of family medicine. The student will participate in all aspects of care for patients of all ages. The student will interview, examine, and treat patients under the direction of the preceptor. Special emphasis is placed upon patient education, prevention, and health maintenance.

MPAP 603 – Internal Medicine  
Credit: 5 hours  
This 5 week rotation gives the student the opportunity to apply medical interventions for internal medicine patients in either the inpatient and/or outpatient setting. Under the direction a preceptor the student will analyze the patient chart, monitor the patient’s progress, perform history and physicals, and plan therapeutic interventions. In the inpatient setting the student will round with the inpatient team. In the outpatient setting the student may participate in nursing home rounds. The student will learn to order specialty tests, write orders, and request specialty consultation. They will also gain an appreciation for discharge planning and disposition regarding home care and follow up.

MPAP 604 – Surgery  
Credit: 5 hours  
This is a 5 week rotation located at one of our affiliated inpatient general surgical units. The student will learn pre-op, intra-operative, and post-operative patient care. The student will scrub into surgical cases and assist the surgeon as indicated. The student will participate in the management of the surgical inpatient, and assist with discharge planning. The student will be assigned to an on-call team and respond to emergency in the ED and OR with the team.

MPAP 605 – Pediatrics  
Credit: 5 hours  
This 5 week rotation will expose the student to the clinical practice of pediatric medicine. Rotations will either be at an affiliated inpatient facility or a private outpatient practice. Students will care for infants, children and adolescents. Duties will include routine health maintenance, physical exams, acute care, and patient education. The student will recognize normal development and appreciate common abnormalities of growth and development. Students will become familiar with the evaluation and
treatment of common pediatric disorders. Emphasis will be on preventive care and family dynamics.

MPAP 606 – Psychiatry
Credit: 5 hours
This 5 week rotation enables students to see patients in either outpatient or inpatient mental health facilities. The student will develop skill counseling patients with psychiatric and psychosocial disorders. Under the direction of the preceptor the student will become familiar with the use of psychotropic therapeutics. Students will learn to identify and refer “at-risk” patients.

MPAP 607 – Obstetrics & Gynecology
Credit: 5 hours
This 5 week rotation provides the student for an opportunity to gain experience in common gynecological conditions. The student learns about screening for breast and gynecologic cancers, normal and abnormal menstrual patterns, infectious diseases, and family planning. The student participates in providing routine prenatal and obstetrical care.

MPAP 608 – Primary Care
Credit: 5 hours
This 5 week rotation introduces the student to the basics of outpatient primary care medicine. The student may rotate in an ambulatory clinic, internal medicine office, family practice, or urgent care. The student will participate in all aspects of care for patients of all ages. The student will interview, examine, and treat patients under the direction of the preceptor. Special emphasis is placed upon patient education, prevention, and health maintenance.

MPAP 609 – Evidence-Based Medicine II
Credit: 5 hours
This 5 week course is a continuation of EBM I from the didactic curriculum. This second course extends the content presented in EBM I. In EBM II students formulate a clinical question, research and assess the medical literature, and analyze the selected research studies for validity. There are weekly small group lectures and discussions. The students meet on an individual basis with a faculty mentor to refine their clinical questions and develop a final paper. The students will create a PowerPoint presentation to present findings to the faculty.

MPAP 610 – Orthopaedics
Credit: 5 hours
This is a 5 week rotation in general orthopaedics. The rotation is either with an affiliated hospital based or private community practice. The student will rotate through the various specialties within the department. The student will gain experience with common office orthopaedic disorders, pre-op, and post op care. Operative orthopaedic experience is obtained by assisting the attending surgeon during selected cases. The student will learn common orthopaedic procedures such as joint and soft tissue injections, fracture reduction, casting, splinting, wound care, suturing, and surgical assisting.

MPAP 611 – Elective I
Credit: 5 hours
The student is given the option of electing 2 rotations of their choice. They may be medical and/or surgical electives. It is proposed to select electives that will fulfill the student’s clinical interests and add to their experience preparing for the job market. A case presentation is required at the completion of the elective to be shared with the faculty and fellow students during call back day.

MPAP 612 – Elective II
Credit: 5 hours
The student is given the option of electing 2 rotations of their choice. They may be medical and/or surgical electives. It is proposed to select electives that will fulfill the student’s clinical interests and add to their experience preparing for the job market. A case presentation is required at the completion of the elective to be shared with the faculty and fellow students during call back day.
Physician Assistants are expected to:

Medical Knowledge

- Demonstrate knowledge of the structure and function of the human body from conception to death
- Demonstrate knowledge of the presentation, etiologies, risk factors, pathophysiology, and epidemiology for medical and surgical conditions, applying this knowledge to patient care
- Demonstrate knowledge of the diagnosis, treatment, and prognosis of diseases encountered in specialized areas of medicine
- Correlate history and physical findings and diagnostic studies to formulate a differential diagnosis
- Identify signs and symptoms of medical conditions encountered in both the inpatient and outpatient settings
- Select, order, and interpret appropriate diagnostic and laboratory studies
- Differentiate between normal and abnormal anatomic, physiological, and diagnostic test data
- Manage acute and chronic medical and surgical conditions
- Analyze the indications, contraindications, side effects, interactions and adverse reactions of pharmacologic agents
- Identify the appropriate site of care for the patients’ medical condition
- Identify cases requiring emergency treatment and those requiring referral or hospital admission
- Apply appropriate interventions for the prevention of acute and chronic medical conditions

Interpersonal and Communication Skills

Physician Assistants are expected to:
- Create and sustain a therapeutic and ethically sound relationship with patients
- Communicate effectively with patients, families, and the public across a broad range of socioeconomic and cultural backgrounds
- Apply effective listening, nonverbal, explanatory, questioning, and writing skills to elicit and provide information
- Work effectively with physicians and other health care professionals as a member or leader of a health care team or other professional group
- Demonstrate an understanding of the varieties of human behavior in response to illness and death
- Demonstrate caring and respectful behaviors when interacting with patients and their families
- Document information, accurately and adequately, in the medical record regarding the health care process for medical, legal, quality, and financial purposes

Patient Care

Physician Assistants are expected to:
- Work effectively with physicians and other health care professionals to provide patient-centered care
- Gather essential and accurate information about their patients
- Obtain a complete medical history
- Perform a complete physical examination
- Competently perform medical, surgical, and laboratory procedures (see “technical procedures taught”) including but not limited to:
  - Basic and advanced cardiac life support
  - Wound care
  - Specimen collection
  - Administration of therapeutic agents
  - Application of aseptic technique and universal precaution
  - Surgical assisting
  - Performance of office based procedures and tests
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- Counsel patients and their families in regard to medical and psychosocial issues
- Provide patient education in health promotion and disease prevention to maximize patient autonomy
- Provide health care services aimed at preventing health problems and/or maintaining health
- Provide compassionate healthcare to patients of all age groups, genders, and ethnicities

Professionalism

Physician Assistants are expected to demonstrate:
- Understanding of the legal and regulatory requirements for physician assistant practice
- Understanding of the appropriate role of the physician assistant
- Professional relationships with physician supervisors and other health care providers
- Respect, compassion, and integrity in all clinical and professional situations
- Responsiveness to the needs of patients and society
• Accountability to patients, society, and the profession
• Commitment to excellence and on-going professional development
• Commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
• Sensitivity and responsiveness to patients’ culture, age, gender, and disabilities
• Self-reflection, critical curiosity, and initiative

Practice-Based Learning and Improvement
Physician Assistants are expected to:
• Analyze practice experience and perform practice-based improvement activities in concert with other members of the health care delivery team
• Locate, appraise, and integrate evidence-based scientific studies related to their patients’ health problems
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies on diagnostic and therapeutic effectiveness
• Apply information technology to manage information, access on-line medical information, maintain electronic medical records, and support continuing medical education
• Recognize that life-long learning is critical to modern medical practice
• Facilitate the learning of students and/or other health care professionals
• Recognize and appropriately address gender, cultural, cognitive, emotional and other biases; gaps in medical knowledge; and physical limitations in themselves and others

Systems-Based Practice
Physician Assistants are expected to:
• Utilize information technology to support patient care decisions and patient education
• Effectively interact with different types of medical practice and delivery systems
• Understand the coding systems necessary for practice reimbursement
• Understand the funding sources and payment systems that provide coverage for patient care
• Practice cost-effective health care and resource allocation without compromising quality of care
• Advocate for quality patient care and assist patients in dealing with system complexities
• Partner with supervising physicians, health care managers and other health care providers to assess, coordinate, and improve the delivery of health care and patient outcomes
• Accept responsibility for promoting a safe environment for patient care and recognizing and correcting systems-based factors that negatively impact patient care
Admission Requirements

- Bachelor's degree from an accredited institution
- Minimum cumulative GPA of approximately 3.0
- Acceptable GRE Scores
  (PCAT, LSAT, MCAT, or MAT scores may be accepted. Please inquire with the program manager prior to applying)

Application Process
1. Complete application with required $50 fee
2. Submit all official college transcripts
3. Submit GRE scores and TOEFL scores (if applicable)
4. Submit three letters of recommendation

Tuition, Fees and Financial Information
Tuition and fees are determined annually and are available at www.campbell.edu/publichealth. Graduating students are responsible for the purchase of his or her cap and gown. Optional fees include a yearly parking permit and student illness insurance.

Refund Policy
An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Additionally, no refunds are provided for students who attend any class and subsequently withdraw, drop any course(s) or are suspended from CPHS for any cause.

Financial Aid
For specific Financial Aid information, please contact the Student Financial Planning Office at (910) 893-1310.

Admission Criteria
The MSPH program operates on a fall enrollment. Admission is granted on a rolling basis therefore, applicants are strongly encouraged to apply early in the admissions cycle. An interview with department faculty and/or staff will be granted to applicants deemed eligible for admission upon faculty review of the completed application.

Late Applicants
Any application received after June 1 of the applying year will be considered late and the applicant may incur a late application fee. Applications for the current cycle will be accepted until August 1. Any application received after August 1 will be held and considered for the following year.

Transfer Credit
Transfer of credit from equivalent course work may be conditionally granted. Equivalent coursework must have been completed at or above a Master’s level and at an accredited institution. When requesting a transfer of credit, a student must include the below:
1. Name of previous course
2. Date course was taken
3. Education institution from where the course was completed
4. Syllabus for the course
5. Official transcript with completed course grade

When transferring, the course director will make a recommendation regarding possible exemption directly to the Chair of the Department. The department will make final decisions regarding course exemptions. A maximum of 6 transfer credits will be granted per student.

Prior Degrees
Applicants who hold a professional degree (PhD, JD, DO, MD, MPAP or PharmD) from an accredited institution in the United States are not required to submit a GRE score. The GRE requirement is waived for students enrolled in the doctor of pharmacy, physician assistant, doctor of osteopathic medicine, or juris doctorate programs at Campbell University who are in good standing.

International Applicants
1. International applications are not eligible for provisional acceptance as described above, if a US student visa is required.
2. International applications must also submit a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.
3. International applications must complete their application for admission and all supplemental materials must be received by the April 1 deadline to be considered for admission.
4. International applicants are required to provide a World Education Services evaluation of their credentials (at the cost of the applicant.)
Academic Standards

Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress. A student will be subject to being placed on academic probation for any of the following reasons:
1. Failure to maintain a minimum overall 3.0 grade average,
2. Failure of more than one didactic course with a grade of less than a C, or
3. Failure to complete degree requirements within the prescribed time.

Administrative Probation
Regardless of academic standing, a student may be subject to administrative probation at any time for failure to demonstrate appropriate professional attitude and behavior. Students on administrative probation will be required to engage in counseling as determined by the Academic Performance and Standards Committee. Any student placed on administrative probation failing to complete and/or respond to required counseling may be subject to dismissal from the program.

Academic Dismissal
Students who are on academic probation will be subject to being dismissed from the Public Health program for any of the following reasons:
1. Failure to successfully remediate an initial course failure in which the student received a grade of less than C, or
2. Failure of a third repeated course, or
3. Two or more semesters with less than 3.0 grade average

Any student dismissed from the program may seek re-entry by applying for readmission. If readmitted, the student will incur full tuition requirements for the program.

Academic Status Appeals
At the end of each academic term, the MSPH Academic Performance and Standards Committee Chair reviews the academic performances of all students enrolled in the College of Pharmacy & Health Sciences. The Chair of the committee notifies each student, the appropriate department chair, and the Associate Dean of Academic Affairs regarding each student who does not meet the academic standards as defined by the Academic Regulations of the department and College of Pharmacy & Health Sciences. The Committee will evaluate each student subject to suspension or dismissal in order to make a recommendation whether to retain the student in the professional program. The student may appear in person before the Committee. Upon approval by the Associate Dean of Academic Affairs, the Committee Chair notifies students in writing regarding any decision by the MSPH Academic Performance and Standards Committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the department.

Any student of the College of Pharmacy & Health Sciences has the opportunity to appeal any decision made by the Academic Performance and Standards Committee. Students desiring to appeal a decision rendered by the Committee shall submit a written appeal to the Associate Dean of Academic Affairs for the College of Pharmacy & Health Sciences within five (5) business days of the student’s receipt of notification of the decision. The petition must contain the specific variance requested, a description of any extenuating circumstances intended to justify granting the variance, and a proposed course of study and/or conditions for consideration should the variance be granted. The Associate Dean for Academic Affairs’s decision is final.

Grade Appeals
Students who feel that they have a just reason for appealing a grade in any Department of Public Health course must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, the student should then submit a written appeal to the Department Chair. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance.

After efforts within the department, a student may appeal to the College of Pharmacy & Health Sciences Academic Performance and Standards Committee to seek resolution. If the student feels that the resolution is not just, the student must submit a written petition to the Associate Dean for Academic Affairs at the College of Pharmacy & Health Sciences within two weeks of the student’s receipt of notification of the committee’s decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The Associate Dean for Academic Affairs’s decision is final.

Graduation Requirements
Recommendation for graduation requires faculty approval and attainment of the following requirements:
1. Successful completion of all didactic coursework
2. Successful completion of research capstone project
3. Successful completion of all coursework with a minimum cumulative 3.0 grade average in all MSPH courses

Attendance
To receive credit for any course, a student must attend at least 80% of the hours prescribed for the course. Individual professors have the prerogative of imposing a more strictly defined policy with the following exceptions:
1. Absence due to serious illness, injury, or death in the student’s immediate family, or
2. Authorized representation of the College or of the University.

In the above cases, a student may be permitted to make up work missed in a timely manner. It is the student’s responsibility, whenever possible, to notify College officials in advance that he/she will be absent.

Grade Reports, Records and Transcripts
A report of grades attained by a student in the College of Pharmacy & Health Sciences will be made available through the University’s student portal. The official records of each student in the College of Pharmacy & Health sciences will be secured in the Office of the Registrar. The Family Educational Rights and Privacy Act (PL93-380) will govern the release of information for the record that contains the transcript from Campbell University, transcripts and transcript evaluations from other educational agencies attended by the student, secondary school transcripts, scholastic aptitude and other standardized
test scores. The application for admission, general correspondence with the student and, if applicable, letters concerning misconduct or disciplinary actions at Campbell University are archived by the College of Pharmacy & Health Sciences. The official transcript and contents of the permanent record may be examined by the student only upon appointment with the Registrar.

Dress Code
Business casual attire is appropriate and expected for all classroom attendance.

Withdrawal
In the event a student must withdraw from the program, he/she will be responsible for obtaining the required form for withdrawal from the University Registrar. It is also the student’s responsibility to complete the prescribed administrative procedures to assure notification to all individuals and offices that require this information.

In the case of serious illness, injuries, or extreme circumstances that normally would require the student’s withdrawal, the student may fully withdraw from all semester coursework without receiving a grade. Such cases require adequate documentation of any such circumstance.

Honor Code
Please refer to the General Information section of the CPHS Bulletin for the Honor Code. All students are required to read and sign the Honor Code, attesting that they understand the Code, have read and understand the Bulletin, and will abide by each. A signed copy of the Honor Code will be kept in each student’s file.

Curriculum

First Year

Courses                                    Credit Hours
Semester 1
PUBH 540 – Statistical Methods I          3
PUBH 525 – Overview of Rural Health       3
PUBH 580 – Health Policy & Management     3
PUBH 502 – Seminar in Public Health       1
PUBH 699 – Practicum in Public Health     1

Semester 2
PUBH 560 – Epidemiology                   3
PUBH 520 – Health Education & Promotion   3
PUBH 682 – Ethical Issues in Public Health 2
PUBH 502 – Seminar in Public Health       1
PUBH 699 – Practicum in Public Health     1

Second Year

Semester 3
PUBH 542 – Community Health Assessment & Evaluation 3
PUBH 550 – Environmental Health           3
PUBH 699 – Practicum in Public Health     1
Elective                                   2
Elective                                   2

Semester 4
PUBH 690 – Research Project               3
PUBH 502 – Seminar in Public Health       1
Elective                                   2
Elective                                   2

Course Descriptions

PUBH 101 - Topics in Public Health
Credit: 1
This undergraduate elective course is designed to provide a basic overview of key topics within the field of public health. The course equips students with a broad understanding of public health principles that will allow one to further his/her education with a degree in Public Health and/or career in the field. This one credit course explores: Diseases in National, International, and Global Health; Epidemiology; Emergency Health and Preparedness; Maternal and Children’s Health; Local Health Disparities; Health Policies; Health Management; Behavioral and Mental Health; and Environmental Health.

PUBH 102 - Public Health and Film
Credit: 1
This undergraduate elective course examines how public health is presented in films and media. The course pulls the curtain back on Hollywood magic and discusses how public health actually occurs in the real world. The course equips students with a broad understanding of public health principles.

PUBH 502 - Public Health Seminar
Credit: 1
This seminar series is part of four semesters of seminars designed to provide insight into topical areas of public health. The seminar series provides a forum for interaction among students and faculty therefore, opportunities for students to present their research as it progresses.

PUBH 520 - Health Education and Promotion
Credit: 3
This course introduces students to an overview of conceptual theories that are the basis of social and behavioral sciences applied to public health, specifically health education. The course will also provide students with skills needed to understand individual and community behavior and change processes.
PUBH 525 - Overview of Rural Health  
Credit: 3  
This course introduces students to an overview of the major issues in rural health. This course will also provide an understanding of the demographics, economics, policy and structure of the health care delivery systems in rural America, specifically North Carolina.

PUBH 540 - Statistical Methods  
Credit: 3  
This course introduces students to an overview of biostatistics and its role in the discipline of public health with an emphasis on statistical reasoning and methods. Prerequisite: College-level Statistics (i.e., Math 160) or the equivalent.

PUBH 542 - Community Health Assessment and Evaluation  
Credit: 3  
This course integrates the two important community health methods assessment and evaluation. The course is designed to introduce students to the concepts and techniques of community health improvement and the roles of assessment and evaluation. This course emphasizes the application of statistical reasoning and methods, specifically dealing with large databases. Prerequisite: PUBH 540 Statistical Methods and PUBH 560 Epidemiology

PUBH 550 - Perspectives in Environmental Health  
Credit: 3  
This course introduces students to an overview of basic concepts in environmental sciences, an understanding the health impact of various environmental exposures, and the public health approach to controlling and eliminating environmental health risks.

PUBH 560 - Principles in Epidemiology  
Credit: 3  
This course introduces students to an overview of epidemiology and its application to public health. This course emphasizes an introduction to the application of epidemiological methods. The primary goal of this course is to orient students to the field of epidemiology and foster an appreciation for the methods used to do observational studies in “real world” settings. Prerequisite: College-level statistics course.

PUBH 560 - Health Policy and Management  
Credit: 3  
This course introduces students to the United States health care system and examines the structure of the health care system including the policy process, program management and evaluation.

PUBH 590 - Independent Study in Public Health  
Credit: 1-3  
This elective course is designed to provide students with an opportunity to enhance their public health knowledge and further explore issues or a set of issues related to a particular topic in public health. This course is not related to PUBH 690 Research Project I and/or PUBH 695 Research Project II. This course will involve a minimum of 40 hours per credit hour per semester. This course will be conducted under the guidance of a major professor with consultation with the course director.

PUBH 625 - Adolescent Health  
Credit: 2  
This elective course examines the public health issues related to the adolescent or emerging adulthood stages of development. The course will combine lectures, a variety of texts, classroom discussions, exams, and individual papers to explore the population health dimensions of the biological and psychological distinctiveness of the adolescent population.

PUBH 661 - Epidemiology of Chronic Disease  
Credit: 2  
This elective course is designed to provide students with an overview of prevalence and risk factors for chronic diseases in the U.S. population and other countries. Both general and specific methodological approaches to the epidemiology of chronic diseases will be discussed. Prerequisite: PUBH 560 Principles of Epidemiology.

PUBH 671 - Public Health and Infectious Disease  
Credit: 2  
This elective course provides a broad overview of the effects infectious diseases have on Public Health. This course focuses on the biological aspects of various vector based pathogens that have an impact on global and rural health. Prerequisite: PUBH 501 Introduction to Public Health and permission of instructor

PUBH 682 - Ethical Issues in Rural Public Health  
Credit: 2  
This elective public health science course assumes an understanding of the principles of community, justice, and equity. The goal of protecting the health of a population also raises fundamental questions including when to restrict the freedom of individuals in order to protect the health of the community and the duties or obligations citizens owe back to the larger community. However, when generating public health policy these principles and duties can be difficult to interpret or apply. These challenges are further compounded by the specific realities of community health in rural settings. This course examines where public health research and policy intersects with ethical issues and ethical dilemmas. The course involves weekly “case studies” as practical scenarios that highlight the real world ‘grey areas’ that exist between doing right and doing wrong in the context of public health. Prerequisite: PUBH 525 Overview of Rural Health and PUBH 580 Health Policy & Management

PUBH 690 - Research Project  
Credit: 3  
This course will serve as a capstone experience for public health students. Pre-requisite: All other required public health courses. PUBH 550 Perspectives in Environmental Health may be a co-requisite.

PUBH 699 - Practicum in Public Health  
Credit: 1-3  
This required course is designed to provide students with an opportunity to enhance their public health knowledge by gaining valuable skills and tacit knowledge through practical, hands-on application of content from other coursework in a real-world public health context. This course will involve a minimum of 60 hours per credit hour per semester. This course will be conducted under the guidance of a public health faculty and consultation with the preceptor.
PharmD/MBA

The College of Pharmacy & Health Sciences (CPHS) offers a PharmD/MBA dual degree in partnership with the University’s Lundy-Fetterman School of Business. The MBA curriculum prepares future pharmacists for the business complexities related to pharmacy and healthcare. The business track trains students for careers in health sector management, leadership and policy, as well as owning an independent pharmacy.

The objective of the MBA program is to develop the student’s analytical skills, critical thinking, problem solving and decision making capabilities and to provide the basic knowledge needed for the solution of business problems. The MBA curriculum exposes students to a variety of subjects including economics, organizational behavior, marketing, accounting, finance, management and ethics.

Students interested in pursuing the dual degree must be accepted into both programs. Upon acceptance into the PharmD program, the applicant submits an application to the MBA program and a written request to forward his or her PharmD application to the business school. If the student has not met all the prerequisite classes for the MBA program, he or she has the option to complete these during an accelerated three week summer course. Upon successful completion of the three week summer course, all requirements for admission are satisfied. Students are not required to take the GMAT, the PCAT score will be considered in lieu of the GMAT score. The MBA degree will not be conferred until the PharmD requirements are completed.

Students in the joint program may apply up to nine credit hours from the PharmD curriculum toward their MBA. Please see the Transfer of Credits section to view the list of transferable courses.

Students have the option to complete a research project in a health care administration area. This allows the student to apply pharmacy and business principles to a managerial health care problem. This option is not available to students pursuing separate pharmacy and business degrees.

Prerequisites
The following is a list of undergraduate prerequisites for the MBA program:

Courses | Credit Hours
--- | ---
Accounting | 3
Computer Science | 3
Economics | 3
International Business | 3
Management | 3
Marketing | 3
Statistics | 3

Alternatively, students may complete BADM 510-Business Foundations, an intensive accelerated summer course (nine credit hours) covering basic concepts in accounting, economics, ethics, finance, international business, management, marketing and quantitative methods.

Curriculum
A minimum of 36 credit hours must be completed to earn a MBA degree.

Courses | Credit Hours
--- | ---
BADM 710 – Accounting for Decision Making | 3
BADM 724 – Economics for Managers | 3
BADM 730 – Financial Management | 3
BADM 740 – Legal Environment of Business | 3
BADM 742 – Business Ethics | 3
BADM 750 – Organizational Behavior | 3
BADM 758 – Strategic Management | 3
BADM 760 – Contemporary Management Science Techniques | 3
BADM 770 – Marketing Management | 3

Advanced Courses

Courses | Credit Hours
--- | ---
BADM 732 – Management of Financial Institutions | 3
BADM 752 – Human Resource Management | 3
BADM 772 – Marketing Research | 3

Transfer of Courses
Students may substitute up to nine hours of CPHS courses as advanced courses.

Courses | Credit Hours
--- | ---
PHAR 511 – Jurisprudence | 3
PHAR 523 – Special Research Projects in Pharmacy Practice | 3
PHAR 525 – Ethics in Pharmacy Practice | 2
PHAR 531 – Strategic Management in Healthcare | 1
PHAR 561 – Pharmacoeconomics | 3
PHAR 583 – Advanced Pharmacy Marketing & Management | 3
PHAR 584 – Advanced Community Pharmacy Management | 3
PHAR 586 – Advanced Hospital Management | 3
PHAR 587 – Advanced Financial Management for Pharmacists | 3
PHAR 588 – Industrial Pharmacy Management | 3
PHAR 705 – Healthcare Admin. Research Project | 1-3

PharmD/MS in Clinical Research

The PharmD/MSR dual degree program provides pharmacists with additional qualifications and a broad understanding of clinical research. Students expand their clinical skills with an in-depth understanding of the fundamentals required to produce and interpret medical evidence which may be utilized in a variety of practice settings.

Graduates are well prepared for careers in the pharmaceutical and biotechnology industries, Food and Drug Administration and Centers for Disease Control and Prevention, as well as academic careers in pharmacy and medical education.

Students pursuing the dual degree are allowed to apply certain courses to both program requirements, including elective hours.

Students interested in pursuing the dual degree must be accepted into both programs. View the Clinical Research section of the academic bulletin for admissions requirements. The MSCR degree will not be conferred until the PharmD requirements are completed.
Curriculum
The following MSCR courses must be taken in conjunction with the PharmD curriculum for the fulfillment of the dual program:

CLNR 505 – Principles of Clinical Research
CLNR 515 – New Product Development
CLNR 518 – Experimental Design & Biostatistics
CLNR 519/519L – Physical & Clinical Assessment and Lab
CLNR 520 – Advanced Data Management
CLNR 525 – Medical Ethics
CLNR 530 – Regulatory Affairs
CLNR 552 – Scientific Communications
CLNR 559 – Managing & Monitoring Clinical Trials
CLNR 566 – Advanced Study Design & Analysis
CLNR 568 – Project Management
CLNR 606 – Clinical Research Seminar
CLNR 690/690L – Research Project I
CLNR 695/695L – Research Project II

PharmD/MS in Pharmaceutical Sciences
The dual PharmD/MSPS program is suited for candidates who hold a bachelor’s degree in pharmaceutical sciences, chemistry, biology or physics. The MSPS curriculum was designed to enhance individual’s research and contract service capabilities. Students who complete this degree are prepared for careers in drug discovery and development or further studies at the doctor of philosophy level.

Students have the option to start the master’s program one year earlier or at the same time of entry into the PharmD program. Students can complete both degrees in five years, with the recommendation to complete the first year of MSPS coursework prior to entering the PharmD program, then integrating the remaining MSPS courses into the four professional years of the PharmD program.

Students pursuing the dual degree are allowed to apply certain courses to both program requirements, including elective hours. Four of the six required hours in the master’s research project can be applied as one of the nine required clinical rotations completed during the fourth year in the PharmD program. These options are not available to students pursuing separate degrees.

Students interested in pursuing the dual degree must be accepted into both programs. View the Pharmaceutical Sciences section of the academic bulletin for admissions requirements and curriculum.

Note: Exemption from a maximum of six credit hours of didactic coursework based on previous coursework or relevant work experience may be requested by submitting a course exemption form (with supporting documentation) to the appropriate course director with subsequent approval by the vice-chair of pharmaceutical sciences programs and the associate dean of academic affairs.

Curriculum
Below is a curriculum example for the pharmacology track, view the MSPS curriculum for course listings in all five tracks. Curriculum for the dual degree is worked out on an individual basis.

First Graduate Year
Fall Courses
PHSC 512 - Fundamentals of Cellular Pharmacology
PHSC 526 - Protein Analysis and Bioassays
PHSC 534 - M.S. Seminar I

Spring Courses
PHSC 592 - Adv Cellular and Molecular Pharma.
PHSC 508 - Product and Process Validation
PHSC 574 - Graduate Biopharmaceutics
PHSC 536 - M.S. Seminar II

First Professional Year
P-1 Fall Semester
PHAR 302 - Anatomy and Physiology
PHAR 304 - Biochemistry
PHAR 312 - Medical Microbiology
PHAR 301 - Pharmaceutical Calculations
PHAR 305 - Pharmacy in the US Healthcare Systems
PHAR 309 - Drug Information
PHAR 331 - Pharmaceutical Care Skills Lab

P-1 Spring Semester
PHAR 306 - Anatomy and Physiology
PHAR 303 - Patient Counseling and Professional Communication
PHAR 310 - Immunology
PHAR 308 - Clinical Biochemistry
PHAR 307 - Pharmacy Marketing and Management
PHAR 332 - Pharmaceutical Care Skills Lab

P-1 Summer Semester (One Month)
PHAR 505 - Early Practice Experience I

Second Professional Year
P-2 Fall Semester
PHAR 412/417 - Pharmacology and Medicinal Chemistry I & II
PHAR 408 - Biology of Disease
PHAR 404 - Pharmaceutics I
PHSC 510 - Graduate Pharmacokinetics
PHSC 590 - Adv. Pharmacokinetics and Toxicology

P-2 Spring Semester
PHAR 421/423 - Pharmacology and Medicinal Chemistry III & IV
PHAR 406 - Pharmaceutics II/Lab
PHAR 403 - Financial Management and Pharmacoeconomics
PHAR 405 - Nonprescription Drug Therapy

P-2 Summer Semester (One Month)
PHAR 507 - Early Practice Experience II

Third Professional Year
P-3 Fall Semester
PHAR 501 - Therapeutics I
PHAR 503 - Therapeutics II
PHAR 528 - Experimental Design and Biostatistics
PHAR 511 - Jurisprudence
PHAR 508 - Top 300 Examination
PHAR 5XX - PharmD/PHSC Electives
PHSC 610 - Research Project I

P-3 Spring Semester
PHAR 545 - Therapeutics III
PHAR 547 - Therapeutics IV
PHAR 509 - Therapeutic Drug Monitoring
PHAR 544 - Intro to Clinical Res. Design and Lit. Eval.
PHAR 519 - Physical Assessment
PHAR 5XX - PharmD/PHSC Electives

Fourth Professional Year
P-4 Summer, Fall and Spring Semesters
PHAR 6XX - Advanced Pharmacy Practice Experiences (nine one-month rotations)
PHAR 699 - Professional Presentation Seminar
PHSC 620 - Research Project II (Can count as one Advanced Pharmacy Practice Experience)
MPAP/MS in Public Health
The Master of Physician Assistant Practice/MS in Public Health dual degree program gives students an opportunity to pursue both clinical and public health training so they can function not only as clinicians but also contribute as community health leaders, educators, and policy makers, affecting the local, state and national health care systems.

The dual degree program is open to accepted and enrolled physician assistant students. This additional one-year program provides 32 credit hours of public health courses. Interested PA students must complete a separate application for the public health program as well as an additional application to receive dual degree status.

Students will spend their first year completing the MSPH coursework (including fall, spring and summer semesters). The following year, students enter the PA Program to complete the required 28 month PA curriculum, in addition to their MSPH research project. The year as an MSPH student will be solely devoted to public health curriculum.

Curriculum
A minimum of 32 credit hours must be completed to earn a MSPH degree.

Fall
- PUBH 541 – Community Health Assessment & Evaluation (3)
- PUBH 550 – Environmental Health (3)
- PUBH 690 – Research Project (3)
- PUBH 502 – Seminar in Public Health (1)
- PUBH 699 – Practicum in Public Health (1)
Total: 11 credit hours

Spring
- PUBH 540 – Statistical Methods I (3)
- PUBH 550 – Environmental Health (3)
- PUBH 690 – Research Project (3)
- PUBH 502 – Seminar in Public Health (1)
- PUBH 699 – Practicum in Public Health (1)
Total: 11 credit hours
**Summer**

PUBH 541 – Community Health Assessment & Evaluation (3)
PUBH 550 – Environmental Health (3)
PUBH 690 – Research Project (3)
PUBH 502 – Seminar in Public Health (1)
PUBH 699 – Practicum in Public Health (1)
Total: 11 credit hours

**Electives**
In addition to the above core credits, students are required to complete the following courses from the PA curriculum that count as electives toward the MSPH degree.

MPAP 509 – Evidence Based Medicine I, EBM-I (5)
MPAP 609 – Evidence Based Medicine II, EBM-II (5)

**Juris Doctor/MS in Public Health**
A joint offering with Campbell University’s School of Law, the JD/MSPH dual degree program provides students with a unique interdisciplinary perspective of law and public health. Graduates will enter the workplace prepared to represent clients, health organizations or systems and serve in leadership roles in health policy at the national, state, county and local levels.

The dual degree program is open to accepted and enrolled law students. This additional one-year program provides 32 credit hours of public health courses, and both the JD and MSPH degrees are awarded after four years of study.

Interested law students must complete a separate application for the public health program as well as an additional application to receive dual degree status. GRE scores will be waived for students who have a letter of acceptance from the law program.

Typically dual degree students complete the public health coursework between their first and second year of law school. Following the year of public health study, students return to law school for their final two years of required coursework. The year as an MSPH student will be solely devoted to public health curriculum. All law classes are held at the Law School’s campus in Raleigh, and public health coursework on Campbell’s main campus in Buies Creek.

**Curriculum**
A minimum of 32 credit hours must be completed to earn a MSPH degree.

**Fall**
PUBH 540 – Statistical Methods I (3)
PUBH 525 – Overview of Rural Health (3)
PUBH 580 – Health Policy & Management (3)
PUBH 502 – Seminar in Public Health (1)
PUBH 699 – Practicum in Public Health (1)
Total: 11 credit hours

**Spring**
PUBH 560 – Epidemiology (3)
PUBH 520 – Health Education & Promotion (3)
PUBH 682 – Ethical Issues in Public Health (2)
PUBH 502 – Seminar in Public Health (1)
PUBH 699 – Practicum in Public Health (1)
Total: 11 credit hours

**Electives**
In addition to the above core credits, students are required to complete 10 hours of electives from the law program. Students may choose coursework from the approved list below. Other law courses (excluding courses required for completion of the JD degree) may be requested, subject to the prior consent of the law school’s associate dean for academic affairs, and the chair of public health.

- Administrative Law (2)
- Environmental Law (2)
- Family Law (3)
- Health Law Seminar (3)
- Intellectual Property (3)
- Law, Culture, Society and Philosophy (2)
- Law and Medicine (2)
- Local Government Law (2)
- National Security Law (2)
- Scientific Evidence (2)

**MSCP Credit Transfers to Law Degree**
The law school will count the following six credits (when earned or awarded on the MSPH transcript) toward a law student’s JD degree requirements:

- Health Policy and Management (3)
- Community Health Evaluation (3)

**MS in Clinical Research/MBA**
A joint offering with the Lundy-Fetterman School of Business, the MS in Clinical Research/Master of Business Administration dual degree provides students who are interested in the clinical research and business industries the opportunity to further develop their management skills, gain exposure to various areas of business, and expand their leadership and problem solving abilities.

The objective of the dual MSCR/MBA program is to develop graduates who are well-versed in the understanding of clinical research, drug development and epidemiology, as well as competent in the business world. Students will be exposed to essential business practices including economics, organizational behavior, marketing, accounting, finance, management and ethics.

**Curriculum**
MSCR/MBA students will be required to complete the following MSCR courses (34 credit hours):

- CLNR 505 – Principles of Clinical Research
- CLNR 515 – New Product Development
- CLNR 517/518 – Biostatistics
- CLNR 520 – Advanced Data Management
- CLNR 525 – Medical Ethics
- CLNR 530 – Regulatory Affairs
- CLNR 552 – Scientific Communications
- CLNR 559 – Managing & Monitoring Clinical Trials
- CLNR 566 – Advanced Study Design & Analysis
- CLNR 606 – Clinical Research Seminar
- CLNR 690/690L – Research Project I
- CLNR 695/695L – Research Project II
MSCR/MBA students will be required to complete the required, core MBA courses (27 credit hours):

BADM 710 – Accounting for Decision Making
BADM 724 – Economics for Managers
BADM 730 – Financial Management
BADM 740 – Legal Environment of Business
BADM 742 – Business Ethics
BADM 750 – Organizational Behavior
BADM 758 – Strategic Management
BADM 760 – Contemporary Management Science Techniques
BADM 770 – Marketing Management

MSCR/MBA students will be required to complete nine credit hours of elective courses. They may select from either the Lundy-Fetterman School of Business graduate advanced courses or the Department of Clinical Research electives.

BADM 732 – Management of Financial Institutions
BADM 752 – Human Resource Management
BADM 772 – Marketing Research
CLNR 504 – Special Projects in Clinical Research
CLNR 560 – Pharmacoeconomics
CLNR 561 – Healthcare Economics
CLNR 568 – Project Management
CLNR 581 – Pharmaceutical Compliance and Quality Assurance
CLNR 593 – Leadership Development

**MS in Public Health/MBA**

A joint offering with the Lundy-Fetterman School of Business, the MS in Public Health/Master of Business Administration dual degree provides students with a set of complementary knowledge and skills in the research, clinical, policy and administrative domains. Graduates will be well prepared for leadership roles in healthcare administration.

The objective of the dual MSPH/MBA program is to develop graduates who are well-versed in the understanding of public health, local health care disparities, and development of local community health intervention and education programs. Graduates will also be competent in the business world. Students will be exposed to essential business practices including economics, organizational behavior, marketing, accounting, finance, management and ethics.

**Program Requirements**

MSCPH/MBA students will be required to complete the following MSPH courses (34 credit hours):

PUBH 502 - Public Health Seminar
PUBH 520 - Health Education and Promotion
PUBH 525 - Overview of Rural Health
PUBH 540 - Statistical Methods
PUBH 541 - Community Health Assessment and Evaluation
PUBH 550 - Perspectives in Environmental Health
PUBH 560 - Epidemiology
PUBH 580 - Health Policy and Management
PUBH 662 - Public Health Biology
PUBH 682 - Ethics in Rural Public Health
PUBH 690 - Research Project I
PUBH 699 - Public Health Practicum

MSCPH/MBA students will be required to complete the required, core MBA courses (27 credit hours):

BADM 710 – Accounting for Decision Making
BADM 724 – Economics for Managers
BADM 730 – Financial Management
BADM 740 – Legal Environment of Business
BADM 742 – Business Ethics
BADM 750 – Organizational Behavior
BADM 758 – Strategic Management
BADM 760 – Contemporary Management Science Techniques
BADM 770 – Marketing Management

Three MSPH courses (9 credit hours) will be counted toward the completion of the MBA:

PUBH 540 – Statistical Methods
PUBH 580 – Health Policy and Management
PUBH 690 – Research Project (with a focus in healthcare administration)
General Information

Policies and Procedures

Degrees Awarded
The College of Pharmacy & Health Sciences offers the following degree programs:
- Bachelor of Science in Clinical Research
- Bachelor of Science in General Science
- Bachelor of Science in Nursing*
- Bachelor of Science in Pharmaceutical Sciences
- Master of Science in Clinical Research
- Master of Science in Pharmaceutical Sciences
- Master of Science in Public Health
- Master of Physician Assistant Practice
- Doctor of Pharmacy
- Doctor of Physical Therapy

*Criminal CCNE approval

Criminal Background Check Policy
The College of Pharmacy & Health Sciences requires criminal background screenings of all doctor of pharmacy and physician assistant students accepted into their respective programs prior to matriculation. Students enrolled in the clinical research and pharmaceutical sciences programs, who will be participating in training activities at various sites or organizations, may also be required to submit to a criminal background check if required by the organization providing the experiential training. CPHS will contract with an outside vendor for the performance of the background check, and students may be assessed a fee to cover the cost of the background check.

In subsequent years, a background check on doctor of pharmacy students will be performed during the second professional year (P2), prior to the introductory practice experience, and during the third professional year (P3) prior to beginning advanced practice experiences. For physician assistant students, a background check will be repeated prior to beginning the second year supervised clinical practice experiences.

Certain offenses may result in the student not being able to be placed at an affiliated site. In such cases, the student may not be able to meet the requirements for graduation. Also certain offenses may preclude professional licensure. Therefore, applicants to the doctor of pharmacy and physician assistant programs will be notified of the background check requirement as part of the application process. All interviewed applicants will be given a copy of the policy and an authorization/waiver will be obtained. Students who are not willing to allow the release of the required personal information may not be able to be placed at an affiliated clinical education site, and thus cannot meet the requirements for graduation.

A copy of the student's criminal background check may be required by the site providing the clinical educational experience of the doctor of pharmacy or physician assistant student. The health care facility or clinical site has the right to make the final determination whether the student may participate at their site. The site has the right to refuse to allow the student to complete a rotation at the respective site.

All criminal background data will be maintained in a secure location to assure confidentiality. Routine access to the information will be limited to a staff member in theolute of Admissions & Students Affairs, the associate dean of admissions & student affairs, director of experiential education, physician assistant clinical coordinator, and the University general counsel. The College will notify students of findings as required by law.

Procedure
1. A criminal background check will be completed on all pharmacy and physician assistant accepted applicants prior to matriculation.
2. Accepted applicants and selected wait listed applicants will receive a letter from the College with detailed information about these requirements. The letter will explain the contingency that the final decision regarding matriculation will be made after review of the applicant's criminal background check report.
3. Appropriate authorization, with pertinent identifying information necessary to initiate the check, will be received from each accepted applicant prior to initiating a criminal background check. This authorization will inform the accepted applicant that he or she will have access to criminal background check data about himself or herself to ensure the accuracy of the criminal background check report.
4. Ultimate decisions regarding matriculation of an accepted applicant whose criminal background check reveals information of concern will be made by CPHS in consultation with the University's general counsel.
5. No information derived from a criminal background check will automatically disqualify any accepted applicant from matriculation. A final decision about matriculation will be made only after a careful review of factors including: the nature, circumstances and frequency of any offenses, length of time since the offenses, documented successful rehabilitation and the accuracy of the information provided by the applicant in his or her application materials.
6. Information from these reports that is unrelated to decisions about admissions and continued enrollment will be maintained in the Office of the Dean and will not become part of the students' permanent file.
7. Information obtained will only be used in accordance with state and federal laws.
8. Enrolled students are required to disclose any misdemeanor or felony convictions other than, minor traffic violations, including deferred adjudication, within thirty days of occurrence to the Office of Admissions & Student Affairs.

Dress Code
Proper professional attire signals to patients and other health professionals a student's self-confidence, knowledge level, and willingness to participate in responsible decision making processes. The short-length white lab coat is required for health care professionals in training.

During the first three didactic years of the PharmD program, “business casual” attire is appropriate for classroom and examination sessions. Business casual attire for men includes collared shirts and khaki or dress slacks; for women knee-length skirts or dress slacks with tailored blouses.

The following dress and accessories are unacceptable in the clinic and classroom: hats, caps, t-shirts, men’s sleeveless shirts, blue jeans, sweat pants, athletic attire, tank tops, bare midriffs, and visible tattoos or any body piercing (other than earrings).
Formal Grievance Policy for ACPE Concerns

Students who have concerns regarding the College of Pharmacy & Health Sciences’ capability to achieve the standards of accreditation or comply with policies and procedures of the Accreditation Council for Pharmacy Education (ACPE) may file a grievance with the Office of Admissions & Student Affairs. Formal grievances must be submitted in writing to the associate dean of admissions & student affairs.

The written grievance should include the following: student name and contact information, the date of the grievance, the specific ACPE accreditation standard, policy or procedure that is involved, and a description of the specific grievance.

The grievance will be reviewed by the associate dean of admissions & student affairs and referred to the appropriate administrators for investigation, analysis, and appropriate action. Students should expect a timely, fair, and comprehensive review of their complaints to include personal discussions with appropriate administrators, and the opportunity to supply supportive documentation or the testimony of fellow students regarding their concerns. Students will be notified regarding the outcome of the review and any actions planned or taken.

A record of written grievances regarding the College’s adherence with accreditation standards or related policies and procedures, including the original grievance and administration’s response, will be maintained in the Office of the Dean for review by appropriate accreditation agencies, unless otherwise prohibited by state or federal law. Appropriate information addressed in such grievances will be utilized in the College of Pharmacy & Health Sciences’ assessment, planning and self-study processes.

The accreditation standards, policies and procedures for colleges of pharmacy can be found at: www.acpe-accredit.org/standards. Students who are not satisfied with the response from the College of Pharmacy & Health Sciences’ administration may submit their grievance directly to the ACPE via the following website: www.acpe-accredit.org/students/complaints.asp or by email at csinfo@acpe-accredit.org.

General Complaint Procedure

Students have the right to file formal written and signed complaints regarding policies and procedures of the College to the dean’s office. Student complaints will be evaluated by appropriate administrators as referred by the dean.

The written grievance should include the following: student name and contact information; the date of the grievance; and a description of the specific grievance. Students should expect a timely, fair, and comprehensive review of their complaints to include personal discussions with appropriate administrators, and the opportunity to supply supportive documentation or the testimony of fellow students regarding their complaints.

A written response to a student complaint will be provided following review by the College’s Executive Committee. The student’s original complaint and Executive Committee’s response will be kept on file for review by appropriate accreditation agencies.

Inclement Weather Policy

During periods of inclement weather, classes at CPHS will meet according to the decisions made by the University. Students may monitor decisions made through the University’s inclement weather website, www.campbell.edu/weather.

Students will also receive an email once a decision is made about the occurrence of classes. Students are encouraged to use their own good judgment relative to safety in traveling to campus. Should classes meet and students who commute are unable to travel safely to the campus, they will not be penalized and will be able to make-up missed work.

Infection Control

Immunizations

During introductory and advanced pharmacy practice experiences and physician assistant clinical rotations, students will be involved in direct patient care and therefore at risk for potential exposure to infectious materials and patients. Prior to registration, students must provide proof of the immunizations/immunity requirements listed below.

Requirements

- Tetanus-diphtheria-pertussis: Td booster within the past 10 years. Students must have a one-time dose of Tdap unless contraindicated. Students must have booster protection across all years enrolled in the program (i.e. lapses in coverage between boosters are unacceptable).
- Polio: Complete IPV or OPV series
- MMR: Two doses or laboratory evidence of immunity to each of the three diseases
- Hepatitis A: Two-vaccination series required before the end of the first professional year, students must provide documentation of the second dose.
- Hepatitis B: Students must show documentation of a three-dose series with the first of the three doses upon admission to CPHS. Before the end of the first professional year, students must provide documentation of the second and third doses in a series.
- Varicella (chicken pox): Students must either receive the two-series Varicella vaccination or prove immunity to the Varicella virus by a positive (+) blood titer. Individuals utilizing blood titer as proof must submit a copy of the actual lab result. History of “chicken pox” in your medical is not sufficient.
- Tuberculin (PPD) skin test: Annually (some rotations sites require a 2-step PPD - CPHS will let the student know if this applies.) If the TB skin test is positive a chest X-ray is required.
- Influenza: Annual flu vaccine is required.

Standard Precautions

The Center of Disease Control (CDC) has developed a list of the following precautions to prevent accidental spread of infectious diseases to both students and patients:

- Hand washing (or using an antiseptic hand rub)
  - After touching blood, body fluids, secretions, excretions and contaminated items
  - Immediately after removing gloves between patient contact
- Gloves
  - For contact with blood, body fluids, secretions and contaminated items
  - For contact with mucous membranes and non-intact skin
Tuberculosis Training-Physician Assistant Students Only
Physician assistant students will receive training for preventing the transmission of tuberculosis (TB) annually. All students who have the potential for exposure to TB may be fit tested for National Institute of Occupational Safety and Health (NIOSH) certified personal respirator protective devices, as required by clinical sites. These devices are considered personal protective equipment and must be purchased by the student.

Personal Illness
Students presenting signs or symptoms of infectious or communicable diseases have a duty not to spread illness to others. Students should consult Student Health Services (910-893-1516), their preceptor, clinical supervisor or the infection control office at the clinical site about the advisability of working with patients and when it is safe to return to patient care.

Incident Reporting
Body Fluid and Needle Stick Policy and Procedure
Incidents involving needle sticks and exposure to body fluids or potential bloodborne pathogens require immediate action to protect students’ health and safety. If a student sustains a needle stick or is exposed to infectious materials he or she should:
1. Immediately wash exposure site thoroughly with soap and water (or water only for mucous membranes)
   - Wash needle stick and cuts with soap and water
   - Flush the nose, mouth or skin with water
   - Irrigate eyes with clean water, saline or sterile irrigants
2. Notify the preceptor or clinical supervisor at the rotation site for assistance
   - For pharmacy students the preceptor should notify the Office of Experiential Education by phone, 800-760-9697, or email (Jean White ext. 1709/email: whitej@campbell.edu or Paige Brown ext. 5611/ email brownp@campbell.edu) as soon as reasonably possible to begin the process of filing an incident report.
3. Seek immediate care for necessary lab work and post-exposure prophylaxis
   - In the event that the rotation site has an existing exposure policy, the student should comply with the site’s policy.
   - If the rotation site is not able to assist the student, the student should seek care at the nearest available facility to provide appropriate care (initial lab work for HIV, HBV, HCV and risk assessment to determine the need for chemoprophylaxis, etc.) or students may be seen at Campbell University’s Student Health Service.
4. The preceptor or appropriate institutional representative should obtain consent from the source patient for appropriate laboratory testing (i.e. HIV, HBV, and HCV status).
   - Students should receive post-exposure prophylaxis within hours of the exposure rather than days, per CDC recommendations, if the status of the source patient is deemed high risk or if there is uncertainty of the source patient’s status.
5. Some clinical sites will provide post exposure care to students at no charge. When this is not the case, needle sticks and other exposure are covered under the Campbell University Student Accident Insurance Policy.
   - Accidental infectious exposure must be reported as directed in this policy:
     - The accident policy is underwritten by Guarantee Trust Life Insurance Company and administered by First Agency, Inc.
     - First Agency, Inc.
     5071 West H Avenue
     Kalamazoo, MI 49009-8501
     Phone: 269-381-6630
     Fax: 269-381-3055
     Web: www.1stagency.com
     - Policy Number: 324-125-001-0

OSHA Bloodborne Pathogens Training
CPHS requires that all students who have contact with patients view the OSHA Bloodborne Pathogens (BBP) training video. Copies of student training records will be kept in the office of each respective professional program.
When presenting to a clinic for post-exposure care, the student may provide the above policy information and his or her student ID card. However, the site may or may not accept direct payment through this plan. Students may have to pay out of pocket at the time of service. However, reimbursement for services up to $5,000 per incident can be filed via Student Health Services.

Students will need:
• To provide an itemized statement complete with diagnosis and procedure codes
• Complete a claim form either in person, or call Student Health Services at 910-893-1560. The staff will be glad to help you fill out the form by email correspondence.
• Student Health Services personnel will provide further instruction on how to complete and file your claim.

If requested, mail documents to:
Campbell University
Student Health Service
PO Box 565
Buies Creek, NC 27506

Students may opt to use their personal health insurance to cover the cost of post-exposure care in lieu of using the Campbell University Student Accident Insurance Policy.

6. Although, the preceptor or clinical supervisor may have contacted CPHS as indicated above, the student must also contact the Office of Experiential Education or the Physician Assistant Department Office as soon as reasonably possible but within a minimum of 72 hours of the exposure to finalize the incident report.

The incident report shall contain:
• The date and time of exposure Clinical site, location and unit information
• Details of how the exposure occurred
• Details of the type and severity of the exposure
• Details about the source patient (i.e. post-exposure management, previous vaccinations, current HIV, HBV, HCV status)
• The Office Experiential Education or the Physician Assistant Department Office will provide a copy of the incident report to Student Health Services. This will alert the Student Health Services in the event that an accident insurance claim needs to be filed.
• In the event that an incident report was filed at the rotation site, a copy of this must be sent to the Office of Experiential Education or the Physician Assistant Department Office to be maintained in the student’s file.

7. In the event of an exposure, the National Clinician’s Post Exposure Prophylaxis Hotline is available by phone, 888-448-4911, 24 hours per day, seven days per week, to provide guidance in managing exposures.

Sexual Harassment
Sexual harassment is a violation of the University’s mission statement, code of honor and student code. Sexual harassment includes unwelcome sexual advances, requests for sexual favors and other physical and expressive behavior of a sexual nature in which:
• Submission to such conduct becomes a term or condition of an individual’s employment or education;
• Submission to such conduct becomes a basis for academic or employment evaluation;
• Conduct creates a hostile, intimidating, offensive or demeaning employment or educational environment.

Sexual harassment represents a form of abuse and/or intimidation and will be dealt with accordingly under the Student Code of Conduct, General Standards of Conduct, Article 6. It is recommended that students experiencing sexual harassment contact the associate dean of academic affairs or the associate dean of admissions & student affairs. However, students may contact any appropriate administrator and may bypass anyone who may be the subject of the complaint. A thorough investigation of complaints will be conducted, and there will be no retaliation for making complaints.

Honor Code
We, the students, staff and faculty of Campbell University’s College of Pharmacy & Health Sciences (CPHS), recognize that health care related professions are among the most noble and honorable callings to which one may aspire. These are professions that demand of their members the highest degree of professional competence, ethical behavior, and morality. They require continuous educational development, constant personal and professional self-examination, and an ever-present awareness and sensitivity to human problems. It is the responsibility of every health care related professional, from the day that his or her professional career begins, to seek to achieve the highest aspirations and goals inherent in the profession; to exhibit honor and integrity in the use of his or her special skills for the betterment of humankind; and to act at all times in a manner which will instill public confidence in the profession. We therefore adopt this Honor Code in an attempt to set forth the minimum standards by which our conduct should be governed.

Article 1: Academic Matters

A. General Statement
Recognizing that it is impossible and inadvisable to set forth with specificity a range of conduct that is prohibited, we nevertheless realize that questions arise occasionally with respect to what a student may or may not do in connection with an academic matter. This Honor Code therefore sets forth the minimum standards of conduct with the hope and expectation that a CPHS student will never approach, and certainly never fall below, these minimum standards. It is the obligation of the students and faculty to participate in making the honor system viable by reporting violations of all academic matters.

B. Definition
An academic matter means any one of the following: any activity which may affect a grade in a course; any activity which in any way contributes to satisfaction of the requirements of a course, or requirements for graduation, or co-curricular activities of an academic nature including student publication and competitions.
C. Prohibited Activities with Respect to Academic Matters

CPHS students shall not:

1. Use materials during an examination other than those specifically authorized by the instructor. To avoid even the appearance of impropriety during an examination, all books, notebooks, briefcases, and the like should be placed in the front or rear of the examination room.

2. Use of materials in any research or assignment that are specifically forbidden by the instructor. This includes reuse of the student’s own work.

3. Engage in any form of plagiarism. Plagiarism is using the words or ideas of another source directly without proper acknowledgment of that source. While it is often necessary to obtain information from other sources, the willful or inadvertent use of information from another source without acknowledging it (including all types of commercial term paper preparation services; internet or electronic database sources for term papers, journal clubs, or case presentations; and other students’ work) is considered plagiarism. Ignorance is not an excuse. The student bears the responsibility to learn from the individual instructor the procedure for acknowledging sources and indicating quotations as required for each assignment.

4. Give, solicit, or receive information or assistance to or from any person or source during an examination, makeup examination, or written assignment unless specifically authorized to do so by the instructor.

5. Submit modified or changed tests, answer sheets, or assignments for regarding.

6. Intentionally deface, remove without authorization, or conceal any material from CPHS, the Drug Information Center, or any library.

7. Make an unauthorized or improper use of a computer or computer program, including unauthorized use of programmable calculators during an examination.

8. Fail to report to the Student Conduct and Professionalism Committee any first-hand knowledge of any violation to any of the aforementioned provisions of this Honor Code.

9. Willfully conceal or misrepresent information material to an investigation of any alleged violation of this Honor Code when the information is sought by the Student Conduct and Professionalism Committee, faculty, dean, or the dean’s designee.

Article 2: Non-academic Matters

A. General Statement

CPHS students are hereby informed that in their personal and professional lives they represent not only themselves, but also CPHS and the health profession. Therefore, while they have the right and freedom to exercise individual autonomy, they also have the responsibility to exercise that autonomy in a manner that will bring honor to themselves, CPHS, and their chosen profession.

B. Prohibited Activities with Respect to Nonacademic Matters

CPHS students are subject to the same level of conduct as all Campbell University students; students residing in university housing are subject to the rules for all students who reside in university housing. Any infractions of these rules will be handled by the Student Conduct and Professionalism Committee. All students are encouraged to study the sections concerning these violations in the current Campbell University Student Handbook.

In addition, CPHS student shall not:

1. Fail to conform his or her conduct to the ethical and moral standards of the health care profession as articulated in the Student Clinical Code of Conduct (Article 9).

2. Intentionally make misrepresentation on a resume or curriculum vitae concerning class rank, grades, academic honors, work experience, or any other matter relevant to job placement

3. PURPOSEFUL FALSIFICATION OR FRAUD

4. Perpetrate any form of theft, forgery, falsification, or fraudulent use of university or work-site property.

5. Willfully conceal or misrepresent information material to an investigation of an alleged violation of this Honor Code when the information is sought by the Student Conduct and Professionalism Committee, faculty, dean, or the dean’s designee.

6. Use or remove unauthorized prescription or nonprescription drugs or appliances from the site of a clinical rotation or work-site.

Article 3: Violations: Civil Law

CPHS shall direct all cases concerning violations of civil laws to the Student Conduct and Professionalism Committee. Any violations will be handled by the faculty of the Student Conduct and Professionalism Committee as described in the University handbook. All students are encouraged to study the sections concerning these violations in the Campbell University Student Handbook.

Article 4: Penalties

A. The associate dean of admissions & student affairs at CPHS may impose the following penalties for any of the violations listed above. Recommendations to the associate dean of admissions & student affairs are submitted by the Student Conduct and Professionalism Committee. Following proper procedures listed in article 5 of this Honor Code, the Student Conduct and Professionalism Committee may recommend to the associate dean of admissions & student affairs for one or more of the following penalties:

1. Separation: Separation is a state in which the student is not permitted to continue his/her program at the university. The student shall be withdrawn from all uncompleted courses in which he/she is currently enrolled. The student will not be permitted to re-enter the College of Pharmacy & Health Sciences’ educational programs.

2. Suspension: Suspension is a temporary state of separation for definite period from the university including the programs, facilities and activities. The completion of the period of suspension does not guarantee reinstatement. The decision to readmit a student will be the responsibility of the associate dean of admissions & student affairs.

3. Probation: Probation can be of two types:

   1. Probation: Probation can be of two types:
Level-one probation

Level-one probation for a stated period carries a loss of eligibility for:
1. Holding or running for elected office in student professional organizations;
2. Representing the University in any capacity both on campus and away from campus;
3. Competing for honors and distinctions;
4. Active participation as an elected representative or member of an honorary organization.

Violation of the terms of level-one probation may result in extended probation, level-two probation, or in the student’s suspension.

Level-two probation

Level-two probation for a stated period carries a loss of eligibility for attendance at any and all CPHS sponsored activities.

Violation of the terms of level-two probation may result in extended probation or in the student’s suspension.

The terms of probation will be enforced by the Student Conduct and Professionalism Committee. Other persons may be appointed by the associate dean of admissions & student affairs or the student Conduct and Professionalism Committee to help enforce said terms.

1. Community Service: Community service for a stated number of hours will require a student to perform tasks that will benefit the community or CPHS. Tasks will be assigned and administered by the director of admissions & student affairs. Failure to perform required service in an appropriate fashion may result in probation.
2. Loss or Lowering of the Course Grade: All students who are found guilty of the act of cheating or plagiarism shall receive a score of zero (0) on that specific component of the course (quizzes, tests, projects, assignments, etc). Specific penalties for these violations may also include, but are not limited to, course failure, probation, suspension, and/or separation from the program and the University. A second act of cheating or plagiarism by the student will result in the separation of the student from the University.
3. Reprimand: An official reprimand will be given by the Student Conduct and Professionalism Committee when the charges are not dismissed. A summary of the offense and the reprimand will be placed in the students file in the dean’s office.

B. Any professor may define penalties for a student who violates particular course regulations. The professor must clearly state these regulations and penalties in his or her course syllabus. The student has the right to appeal such penalties to the Student Conduct and Professionalism Committee.

Article 5: Student Conduct and Professionalism Committee

A. General Statement

The associate dean of admissions & student affairs is responsible for the administration of the CPHS disciplinary system. This responsibility is exercised on behalf of the president of the University and entails the supervision of several bodies. Alleged violations of the University’s student code of conduct or civil laws will be handled by the University policies as written in the Campbell University Student Handbook. Alleged violations of the CPHS Honor Code will be evaluated by the Student Affairs Committee.

B. Organization

The Student Conduct and Professionalism Committee is composed of faculty members from each department, students and the director of admissions & student affairs (ex-officio). An ad-hoc member will be chosen to replace any member who cannot or chooses not to attend the proceedings. The associate dean of admissions & student affairs will appoint this member.

This committee serves as a hearing board for incidents of misconduct involving violations of the Honor Code. The Honor Code includes standards for academic, non-academic, and clinical behavior. The Student Conduct and Professionalism Committee will make recommendations to the associate dean of admissions & student affairs. The associate dean of admissions & student affairs will then notify the student in writing of actions concerning alleged violations. A record of disciplinary actions is normally maintained by the dean’s office until the student graduates or leaves CPHS. Students may examine the contents of their file by appointment with the director of admissions & student affairs.

C. Instigation of Hearings

When there is a suspicion of academic misconduct, investigation and appropriate actions may be pursued by either the professor of the course in which the alleged misconduct occurred or by the Student Conduct and Professionalism Committee. In either case, the matter must be promptly resolved.

If the professor decides to deal with the incident, he or she should report the student’s actions to the chair of the Student Conduct and Professionalism Committee. Individual faculty policies concerning misconduct should be clearly stated in the course syllabus. The accused student has the right to appeal any action by the faculty member to the Student Conduct and Professionalism Committee, in which normal committee procedures will be followed.

Charges of misconduct may arise from a student (or group of students), professor, adjunct professor or preceptor. Within seven (7) days of the alleged misconduct or discovery of alleged misconduct, the accuser(s) should discuss the situation with either the director of admissions & student affairs or the professor in charge of the course. Dated notes should be taken to describe the discussion. Every effort should be made to maintain confidentiality in these discussions.

If the accuser(s) has (have) opted to bring the matter before the director of admissions & student affairs, the director should meet with the professor and the chairperson of the Student Conduct and Professionalism Committee to explore options. This meeting should take place no longer than seven (7) days after the matter was brought to the attention of the director.

The options available for resolution of the situation include:
1. The professor can opt to deal with the situation, in which case the student(s)
must be informed of allegations and afforded an opportunity to defend him or herself.

2. The case can be referred to the Student Conduct and Professionalism Committee for resolution. Referral to the committee must be by a written memo which names the student, describes the alleged misconduct (including pertinent dates and times), and summarizes the content of earlier meetings regarding this case.

3. The case may be dismissed.

Within five (5) days of referral of the case to the Student Conduct and Professionalism Committee, the chair of the committee will provide a copy of the referral memo to the accused student(s). In addition, the chairperson will schedule an initial hearing for any charged student with the committee. This hearing should be held within ten (10) days of the referral of the case to the committee.

D. Proceedings

The chair will begin preliminary investigation of the allegations. Whenever possible, this should include a personal interview with the student, witnesses and professor involved.

Preliminary findings shall be presented at the initial meeting with the Student Conduct and Professionalism Committee. The chair shall objectively present his or her findings to the committee. The accused student(s) shall meet with the committee and be informed of the allegations and afforded an opportunity to defend him or herself. Although the purpose of this hearing is exploratory and fact finding in nature, the accused student does have the right to solicit advice and to offer witnesses to support his or her position.

The committee shall vote on whether or not preliminary findings warrant a full hearing by a simple majority vote. If a hearing is deemed necessary, the chair will notify the student and witnesses of the hearing date in writing at least three (3) days prior to the hearing. A waiver of his or her notice may be made if the student so chooses. A full hearing should be held within ten (10) days of the preliminary committee review.

If the committee votes that no hearing is warranted, the case will be dismissed. The chair will file the minutes in the permanent files of the Student Conduct and Professionalism Committee and a copy shall be placed in the dean’s office until the student graduates or leaves CPHS. Should additional information become available, the chairperson may reopen the case and ask the committee to consider the new information.

All sessions of the committee will be closed to all individuals except those immediately concerned in the case, except by the expressed wish of the accused that the hearings be open. No attorney shall be present, as this is not a court of law. In case of a closed hearing, all persons present at the proceedings shall be bound to disclose no more than the committee does in its official report on the case. Revelation of such details will be considered a violation of the Honor Code.

In the case of closed hearings, the testimony of each witness shall be given while the other witnesses in the case are out of the room. In open hearings, the witnesses of both parties shall be present during the entire proceedings.

The committee may allow introduction of evidence other than testimony of witnesses provided that the evidence is relevant to the question before the committee on any matter. The committee shall set rules for the conduct of all cases and all arrangements connected with the taking of evidence. Time frames for instigation of hearings and proceedings may be altered if circumstances warrant. Votes on all matters shall be a simple majority.

Deliberation of the committee shall take place in private and remain secret. Voting on decisions of guilt shall be by secret ballot. If the committee determines that the student was in violation of the Honor Code, it will consider and recommend the appropriate penalty. The student should be informed immediately of the judgment and the recommended penalty in case of guilt. The associate dean of admissions & student affairs may uphold or reject any decision or penalty recommended by the committee. A letter from the associate dean’s office will serve as the official notice of judgment and sentence.

All minutes and evidence shall be placed in the permanent files of the Student Conduct and Professionalism Committee, and a copy will be sent to the associate dean of admissions & student affairs office where it shall remain until the student graduates or leaves CPHS.

Article 6: Rights of the Student

With respect to violation of the student Honor Code, a student of Campbell University is guaranteed the following rights:

1. The right to a prompt hearing;
2. The right to a reasonable amount of time to prepare for his or her hearing;
3. The right of being presumed innocent until proven guilty;
4. The right to solicit advice;
5. The right to appeal;
6. The right to know his or her accuser;
7. The right to expect that the Student Conduct and Professionalism Committee will deal with his or her case in a confidential manner.

Article 7: Appeals Process

Any decision reached by the Student Conduct and Professionalism Committee may be appealed to the associate dean of admissions & student affairs. An appeal shall be requested by the student in writing, within three (3) days following the date the student receives the decision of the Student Conduct and Professionalism Committee. All appeals to the associate dean for admissions & student affairs should be delivered in person or by registered mail to:

Campbell University
College of Pharmacy & Health Sciences
Office of Admissions & Student Affairs
PO Box 1090
Buies Creek, NC 27506

Article 8: Notes and Definitions

1. The word “student” in this manual refers to any person who is enrolled in any course offered by CPHS.
2. The words “professor” or “instructor” in this manual refer to any person who is authorized by the University to hold and teach a class sponsored by the University or precept a student during an off-campus practice experience.
3. The words “University” and “College” refer to Campbell University and the College of Pharmacy & Health Sciences of Campbell University, respectively.
4. The phrase Student Conduct and Professionalism Committee refers to the committee that is assigned by the dean at CPHS to review situations in which students are involved in academic or professional misconduct.

5. The word “handbook” in this manual refers to the current edition of the Campbell University Student Handbook.

6. The word “day(s)” refers to official school days — not holidays, weekends or summer session.

Campbell University College of Pharmacy & Health Sciences reserves the right to change, delete or modify any item in this document at any time. Proper notification concerning changes, deletions or modifications of said document will be sent to all students within four weeks.

Article 9: Student Clinical Code of Conduct

CPHS students and faculty have adopted the following code of conduct to guide ethical behavior in hospitals, community pharmacies, research and production facilities, and various rotation sites included as clinical practice experiences. We feel that the magnitude of our responsibility as health care professionals necessitates the establishment of the highest standards of professional conduct.

This code of conduct represents general standards of behavior and illustrates ideals for which to strive; however, specific infractions reported by students, preceptors or faculty to the chair of the Student Conduct and Professionalism Committee may be investigated by this committee with respect to both the magnitude and chronicity of incidents considered. It should also be understood that these general standards may not afford guidance in every conceivable situation or anticipate every possible infraction.

The Student Conduct and Professionalism Committee will be charged with the responsibility of promptly investigating alleged infractions of this code. All cases will require the submission of a report of findings and appropriate recommendations to the associate dean for admissions & student affairs in a timely manner.

Students should read, discuss and sign the Honor Code prior to enrollment to CPHS. This code of conduct was created by the students and faculty of CPHS. Modifications of this code will require majority approval of both the faculty and student body.

The students attending CPHS will meet the following guidelines:

Respect and Concern for the Welfare of Patients
1. Treat patients and their families with respect and dignity both in their presence and in discussions with others.
2. Recognize when one’s ability to function effectively is compromised and ask for relief or help.
3. Recognize the limits of student involvement in the medical care of a patient and seek supervision or advice before acting when necessary.
4. Not use alcohol or other drugs in a manner that could compromise themselves or patient care.

Respect for the Rights of Others
1. Deal with professional, staff and peer members of the health care team in a considerate manner and with a spirit of cooperation.
2. Act with an egalitarian spirit toward all persons encountered in a professional capacity regardless of race, religion, gender, sexual preference or socioeconomic status.
3. Respect the patient’s modesty and privacy.

Trustworthiness
1. Be truthful in communication to others.
3. Admit errors and not knowingly mislead others to promote one’s self at the expense of the patient.
4. Not represent himself or herself as a pharmacist, physician, physician assistant, or other health professional.
5. Accurately acknowledge the sources for all information reported. Failure to do so will be considered plagiarism.

Responsibility and Sense of Duty
1. Participate responsibly in patient care or research to the best of his or her ability and with the appropriate supervision. Undertake clinical duties and persevere until they are complete.
2. Notify the responsible person if something interferes with his or her ability to perform clinical or academic tasks effectively.

Professional Demeanor
1. Maintain a neat and clean appearance, and dress in attire that is accepted as professional to the population served.
2. Be thoughtful and professional when interacting with patients and families.
3. Strive to maintain composure during times of fatigue, professional stress, or personal problems.
4. Avoid offensive language, gestures, or inappropriate remarks.
5. Adhere to the CPHS professional dress code

Student Rights
In addition to the standards we have adopted for the conduct of ourselves, we expect to be treated with respect as participants in the delivery of health care.

CPHS students:
1. Should be challenged to learn, but should not be belittled, humiliated or abused in front of patients, peers or other health professionals.
2. Should not be sexually harassed, either verbally or physically.
3. Should not be discriminated against on the basis of gender, race, religion or sexual preference.
4. Should be a participant in patient care decisions whenever possible.
5. Should have his or her health care related education take priority over routine menial tasks.

If a preceptor feels a student lacks adequate knowledge or skills, he or she has the responsibility to inform and instruct that student so he or she can improve his or her performance.

If a student feels that a preceptor has committed infractions against the above standards, he or she has the responsibility of informing that preceptor, whether by direct contact or by way of an honest preceptor evaluation at the end of a rotation, of such feelings so that the preceptor can improve his or her performance.

NOTE: The above standards of conduct are based on the Code of Conduct for Duke University Medical Students and have been adapted to meet the needs of CPHS.
Article 10: Pledge
A student’s signature indicates that he or she agrees to uphold the following pledge. This pledge must be signed prior to entry into CPHS.

I ____________________________, having read and receiving a clear understanding of the basis, spirit and interpretation of the Honor Code, pledge my personal honor. I will uphold this code and its standards in all matters. If at any time I violate the letter or the spirit of this pledge, I accept full responsibility for my actions.

By my signature, I also attest that I have read and understand the information presented in the academic bulletin.

Signature

Date

Faculty

Department of Clinical Research

Ronnie Chapman, Visiting Associate Professor of Clinical Research; BS, Biology, High Point College (1983); PharmD, Mercer University (1988); RPh, GA, NC

Timothy M. Hinson, Associate Professor of Clinical Research; BS, Pharmacy, University of North Carolina at Chapel Hill (1984); PharmD, Campbell University (1992); RPh, NC

Melissa A. Holland, Assistant Professor of Clinical Research; BS, Biology, Pennsylvania State University (1998); MS, Clinical Research, PharmD, Campbell University (2007); RPh, MD, NC


Melissa Johnson, Associate Professor of Clinical Research; BS, University of Georgia (1992); PharmD, Campbell University (1997); MHS, Clinical Research, Duke (2007)

William W. Pickard, Chair and Associate Professor of Clinical Research; University of North Carolina at Chapel Hill (1975); M.S., Pharmacy Practice, University of North Carolina at Chapel Hill (1993); RPh, NC

Beth S. Sutton, Assistant Professor of Clinical Research; BS, Biology, University of North Carolina at Wilmington (2000); PhD, Molecular Biology and Biochemistry, Wake Forest University (2005)

Department of Nursing

Nancy D. Duffy, Director of Nursing; BS, Nursing, Bradley University (1976); MSN, Adult Health, University of North Carolina at Charlotte (1992); DNP, Rush University (2009)

Sandra L. Goins, Assistant Director and Assistant Professor of Nursing; BS, Nursing, Winston-Salem State University (1978); MPH, Emory University (1990); MSN, Family Nursing, Emory University (1990); DNP, Chatham University (2013)

Department of Pharmaceutical Sciences

S. Thomas Abraham, Associate Professor of Pharmaceutical Sciences; BS, Chemistry, Mars Hill College (1987); PhD, Biomedical Sciences/Pharmacology, East Tennessee State University (1994)

Michael L. Adams, Assistant Dean of Graduate & Interprofessional Education and Associate Professor of Pharmaceutical Sciences; PharmD, Campbell University (1996); PhD, Medicinal Chemistry, University of Washington (2003), RPh, NC

Antoine Al-Achi, Associate Professor of Pharmaceutical Sciences; BS, Pharmacy, Damascus University (1978); MPHarm, Hospital Pharmacy, Massachusetts College of Pharmacy and Health Sciences (1981); MS, Radiopharmaceutical Sciences, Northeastern University (1988); PhD, Biomedical Sciences/Pharmaceutics, Northeastern University (1983); CT (ASCP)

Timothy J. Bloom, Vice-Chair of Pharmaceutical Sciences and Associate Professor of Pharmaceutical Sciences; BA, Zoology, University of North Carolina at Chapel Hill (1985); PhD, Pharmacology, University of Washington (1996)

Christopher Breivogel, Associate Professor of Pharmaceutical Sciences; BS, Biochemistry, University of North Carolina at Chapel Hill (1992); PhD, Pharmacology, Wake Forest University (1998)

Brad N. Chazotte, Research Associate Professor, BS, Bucknell University (1976); Ph.D. Chemistry, Northern Illinois University (1981)

Emanuel J. Diliberto, Jr., Chair and Professor of Pharmaceutical Sciences; BS, Pharmacy, Albany College of Pharmacy, Union University (1967); PhD, Pharmacology, University of Rochester (1972), RPh, NC

Michael Gallagher, Associate Director of Pharmaceutical Sciences, Instructor and Lab Manager; BS, Biochemistry, Pennsylvania State University (1989); MA, Human Services, Liberty University (2014)

Robert L. Garrett, Jr., Assistant Professor of Pharmaceutical Sciences; BS, Biology, Harding University (1977); PhD, Pharmacology, Northeast Louisiana University College of Pharmacy (1986)

Robert B. Greenwood, Associate Dean of Academic Affairs and Professor of Pharmaceutical Sciences; BS, Pharmacy, University of North Carolina at Chapel Hill (1971); PhD, Pharmaceutics, University of North Carolina at Chapel Hill (1980); RPh, NC

Mali Gupta, Associate Professor of Pharmaceutical Sciences; BS, Pharmacy, Gujarat University, (1969); MS, Industrial Pharmacy, Massachusetts College of Pharmacy and Health Sciences, (1971); PhD, Industrial Pharmacy, Massachusetts College of Pharmacy and Health Sciences (1973)

Julianne M. Hall, Assistant Professor of Pharmaceutical Sciences; BS, Biology, Trinity College (1994); PhD, Biological Sciences, Duke University (2000)
Terri S. Hamrick, Associate Professor of Pharmaceutical Sciences; BA, Biology and Religious Studies, University of Virginia (1985); PhD, Microbiology and Immunology, University of North Carolina at Chapel Hill (1996)

Rahul Haware, Assistant Professor of Pharmaceutical Sciences; Bachelor of Pharmacy, Pharmaceutics, University of Pune, India (2000); Master of Pharmacy, Pharmaceutics, University of Pune, India (2004); MS, Molecular Biology, University of Heidelberg, Germany / University of Skövde, Sweden (2005); PhD, Pharmaceutics, University of Tromsø, Norway (2009)

Qinfeng (Sarah) Liu, Assistant Professor of Pharmaceutical Sciences; BS, Fine Organic Chemistry, East China University of Sciences and Technology (1993); MS, Fine Organic Chemistry, East China University of Sciences and Technology (1996); PhD, Analytical Chemistry, University of Toledo (2005)

Timothy J. Marks, Program Administrator and Instructor; BS, Biology, Butler University (2003); MS, Microbial Biotechnology, North Carolina State University (2010)

Georgie Nemecz, Assistant Professor of Pharmaceutical Sciences; BS, Chemistry, University of Szeged (1978); MS, Chemistry, University of Szeged (1978); PhD, Biochemical Sciences, University of Szeged (1981)

Brianne S. Raccor, Assistant Professor of Pharmaceutical Sciences; BS, Biology, Indiana University of Pennsylvania (2001); PhD, Chemistry, University of Pittsburgh (2008)

I. Daniel Shin, Director of Pharmaceutical Sciences and Professor of Pharmaceutical Sciences; BA, Korea University (1976); MS, Physical Chemistry, Western Illinois University (1988); PhD, Analytical Chemistry, North Carolina State University (1992)

William C. Stagner, Professor of Pharmaceutical Sciences; BS, Pharmacy, University of Iowa (1973), MS, Pharmaceutics, University of Iowa (1977), PhD, Pharmaceutics, University of Iowa (1979)

Department of Pharmacy Practice

D. Byron May, Chair and Professor of Pharmacy Practice; BS, Clemson University (1983); PharmD, University of Florida (1988); RPh, NC

Connie L. Barnes, Executive Vice-Chair of Pharmacy Practice, Co-Director of Drug Information Center and Professor of Pharmacy Practice; PharmD, Campbell University (1990); RPh, NC

Tara L. Bell, Assistant Professor of Pharmacy Practice; BS, Biology, Saint Mary’s College-University of Notre Dame; PharmD, University of Michigan (1999); RPh, NC, SC

J. Andrew Bowman, Director of Continuing Education and Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (1993); RPh, NC, VA

James A. Boyd, Director of PharmD/ MBA Program and Associate Professor of Pharmacy Practice, BS, Pharmacy, University of Nebraska Medical Center (1977); PharmD, University of Nebraska Medical Center (1980); MBA, University of Nebraska at Lincoln (1987); RPh, NC, NE

Paige Brown, Director of Experiential Education and Clinical Assistant Professor of Pharmacy Practice, PharmD, Campbell University (2006); RPh, NC

Robert M. Cisneros, Jr., Associate Professor of Pharmacy Practice; BS, Pharmacy, Northeast Louisiana University (1974); MSc, Auburn University (1976); MBA, University of Alabama in Birmingham (1998); PhD, Pharmacy Care Systems, Auburn University, (2003); RPh, AL, LA

Valerie B. Clinard, Vice Chair of Experiential Education and Associate Professor of Pharmacy Practice; PharmD, University of North Carolina at Chapel Hill (2000); RPh, NC

April A. Cooper, Clinical Assistant Professor of Pharmacy Practice; BS, Pharmacy, University of North Carolina at Chapel Hill (1991); PharmD, University of North Carolina at Chapel Hill (1993); RPh, NC

Steven M. Davis, Associate Professor of Pharmacy Practice; PharmD, University of Florida at Gainesville (1988); RPh, NC

V. Paul Dimondi, Assistant Professor of Pharmacy Practice, PharmD, Campbell University (2011)

Richard H. Drew, Vice-Chair of Research & Scholarship and Professor of Pharmacy Practice; BS, Pharmacy, University of Rhode Island (1980); MS, Pharmacy, University of North Carolina at Chapel Hill (1989); PharmD, University of North Carolina at Chapel Hill (1999); RPh, NC, RI

Leigh L. Foushee, Director of Alumni Relations and Clinical Associate Professor of Pharmacy Practice; PharmD, Campbell University (2000); RPh, NC

Stephen H. Fuller, Vice-Chair of Faculty Development & Leadership and Professor of Pharmacy Practice; BS, Chemistry, Wake Forest University (1981); BS, Pharmacy, Medical College of Virginia (1985); PharmD, Medical College of Virginia (1988); RPh, NC

Casey Gardner, Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (2004) RPh, NC

James B. Groce III, Professor of Pharmacy Practice; BA, Zoology, University of North Carolina at Chapel Hill (1980); BS, Pharmacy, University of North Carolina at Chapel Hill (1983); PharmD, Campbell University (1993); RPh, NC

Ted E. Hancock, Assistant Professor of Pharmacy Practice; BS, Computer Science, Purdue University (1990); PharmD, University of North Carolina at Chapel Hill (2007)

Charles Herring, Associate Professor of Pharmacy Practice; BS, Pharmacy, University of North Carolina at Chapel Hill (1992); PharmD, University of North Carolina at Chapel Hill (1994); RPh, NC

Steven Johnson, Assistant Professor of Pharmacy Practice; PharmD, University of Colorado (2010); RPh, NC
Cynthia J. Johnston, Assistant Professor of Pharmacy Practice; BS, Pharmacy, University of Connecticut (1977); PharmD, University of North Carolina at Chapel Hill (2000); RPh, NC

Catherine D. Lewis, Clinical Assistant Professor of Pharmacy Practice; PharmD, West Virginia School of Pharmacy (2002); RPh, NC

Kimberly P. Lewis, Clinical Assistant Professor of Pharmacy Practice; BS, Biology, Tougaloo College (2001); PharmD, University of Tennessee (2006); RPh, MS, NC, OH

Ronald W. Maddox, Dean and Professor of Pharmacy Practice; BS, Pharmacy, Auburn University (1969); PharmD, University of Tennessee (1973); RPh, AL, GA, NC

Amber McLendon, Assistant Professor of Pharmacy Practice; PharmD, University of North Carolina at Chapel Hill (2005); RPh, NC

Beth Mills, Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (1998); RPh, NC

W. Mark Moore, Associate Dean for Admissions & Student Affairs and Assistant Professor of Pharmacy Practice; BS, Pharmacy, University of North Carolina at Chapel Hill (1994); MBA, PharmD, Campbell University (2000), MS, Clinical Research, Campbell University (2007); RPh, NC

Jason Moss, Assistant Professor of Pharmacy Practice; PharmD, University of North Carolina at Chapel Hill (2008); RPh, NC

Andrew J. Muzyk, Assistant Professor of Pharmacy Practice; PharmD, Mercer University (2004); RPh, NC

Sidonie M. Nupa, Clinical Assistant Professor of Pharmacy Practice; RN, John Calhoun Community College (2008); PharmD, Roseman University of Health Sciences (2012); MBA, Roseman University of Health Sciences (2012); RPh, NC

Ann Marie Nye, Associate Professor of Pharmacy Practice; PharmD, Medical College of Virginia (2001); RPh, NC

Melanie W. Pound, Associate Professor of Pharmacy Practice; PharmD, Campbell University (2001); R.Ph, NC

Kathey Fulton Rumley, Clinical Associate Professor of Pharmacy Practice; PharmD, Campbell University (1994); RPh, NC

Jennifer D. Smith, Associate Professor of Pharmacy Practice; BS, Biology, East Carolina University (1998); PharmD, Campbell University (2002); RPh, NC

Tina H. Thornhill, Associate Professor of Pharmacy Practice; PharmD, Campbell University (1991); RPh, NC

Mary L. Townsend, Associate Professor of Pharmacy Practice; PharmD, Mercer University (1999); RPh, GA, NC

Dustin T. Wilson, Assistant Professor of Pharmacy Practice; BS, Health Sciences, East Tennessee State University (2003), PharmD, Campbell University (2007); RPh, NC

Brock Woodis, Assistant Professor of Pharmacy Practice; BS, Biology, University of Alabama at Birmingham (2001), PharmD, Auburn University (2005), RPh, NC

Department of Physical Therapy

Gregory Dedrick, Director, Physical Therapy Program and Associate Professor of Health Professional Studies; BS, Kinesiology, University of North Texas (1994) MPT, University of Texas at El Paso (1996); DPT, Texas Tech University (2005)

Jennifer Bunn, Associated Faculty; BS, Exercise, Nutrition, and Preventative Health, Nichols State University (2002); MS, University of Kentucky (2005); PhD, Baylor University (2008)

Michelle Green, Assistant Professor of Health Professional Studies; BS, Clinical Science, Ithaca College (1994); MPT, Ithaca College (1995); Transitional DPT, University of North Carolina at Chapel Hill (2014)

Doug Powell, Assistant Professor of Health Professional Studies; BS, East Carolina University (2002); MA, East Carolina University (2004); PhD, University of Tennessee (2009)

Scot Sawyer, Assistant Professor of Health Professional Studies; BS, Physical Therapy (1994); DPT, University of New England (2011)

Heidi Shearin, Director of Clinical Education and Assistant Professor of Health Professional Studies; BS, University of North Carolina at Chapel Hill (1986); DPT, A.T. Still University (2008)

Brett Windsor, Assistant Professor of Health Professional Studies; BSc, Physiotherapy, Curtin University of Technology (1994) MS, Public Administration: Health Administration, Portland State University (2009)

Department of Physician Assistant Practice

Thomas P. Colletti, Chair and Director, Physician Assistant Program and Associate Professor of Health Professional Studies; BS, Biology, City College of New York (1974); PA-C, United States Public Health Service Physician Assistant Program (1980); MPAS, University of Nebraska (1999); DHSc, A.T. Still University (2014)

David M. Coniglio, Academic Coordinator and Associate Professor of Health Professional Studies; BA, English, University of the South (1972); MPA, University of Tennessee (1978); PA-C, Medical University of South Carolina (1982); EdD, North Carolina State University (2013)

Pete Fenn, Simulation Medicine Coordinator and Associate Professor of Health Professional Studies; PA-C, Wake Forest University School of Medicine (1984); MPAS, University of Nebraska (2012)

Laura R. Gerstner, Director of Clinical Education and Assistant Professor of Health Professional Studies; BS, Kinesiology, Pennsylvania State University (2001); MSHS, PA-C, George Washington University (2003); MHA, University of North Carolina at Chapel Hill (2011)

Liza M. Greene, Academic Coordinator and Assistant Professor of Health Professional Studies; BS, Biology, Campbell University (2003); MMS, PA-C, Methodist University (2006)
Betty Lynne W. Johnson, Director of Pre-Clinical Education and Associate Professor of Health Professional Studies; BS, Campbell University (1979); PA-C, Wake Forest University School of Medicine (1981); MEd, Campbell University (1986)

Miguel Pinero, Assistant Professor of Health Professional Studies; BS, Rollins College (1998); MHS, Physician Assistant Practice, Duke University (2004)

April Pope, Clinical Coordinator and Associate Professor of Health Professional Studies; BS, Biology, Campbell University (1991); PA-C, Wake Forest University School of Medicine (1993); MPAS, University of Nebraska (2007)

Christopher W. Stewart, Associate Professor Health Professional Studies; BS, Biology, University of North Carolina (1994); MD, Brody School of Medicine, East Carolina University (1998)

Department of Public Health

Wesley Rich, Assistant Dean for Administration and Assistant Professor of Public Health; BS, Campbell University (2001); MEd, Campbell University (2005); PhD, Research and Policy Analysis, North Carolina State University (2009)

William J. Taylor, Jr., Associate Professor of Clinical Research; BS, Pharmacy, University of North Carolina at Chapel Hill (1972); PharmD, University of Tennessee (1976); RPh, NC

David Tillman, Assistant Professor of Public Health; BA, Campbell University (2001); MEd, Campbell University (2006); PhD, Educational Psychology, North Carolina State University (2012)

Administrative Departments

Office of the Dean
Ronald W. Maddox, PharmD, Vice President of Health Programs and Dean, College of Pharmacy & Health Sciences
Wesley Rich, PhD, Assistant Dean for Administration
Pam Roberts, Assistant to the Vice President of Health Programs and Dean
Lee Holquist, Assistant to the Dean’s Office

Office of Admissions & Student Affairs
W. Mark Moore, PharmD, MBA, MS, Associate Dean, Admissions & Student Affairs
Brenda Blackman, Director of Pre-Pharmacy Advisement & Retention
Kimberly Dunn, MS, Regional Director
Lindsey Haire, Senior Admissions Coordinator
Rodney Hipwell, Admissions Counselor
Stephanie Knight Admissions Coordinator
Christy McCormick, Student Affairs Coordinator
Shari McGuire, Senior Admissions Counselor
Steph Olson, MS, Coordinator of Academic Support
Phyllis Strickland, Administrative Assistant
Kimberly Whitted, MA, Admissions Coordinator

Office of Academic Affairs
Robert B. Greenwood, PhD, Associate Dean, Academic Affairs
Kim East, Academic Affairs & Graduate Programs Coordinator

Office of Graduate & Interprofessional Education
Michael L. Adams, PharmD, PhD, Assistant Dean, Graduate & Interprofessional Education
Emily Bloom, Director of Interprofessional Education & Outreach
Kim East, Academic Affairs & Graduate Programs Coordinator

Office of Alumni Relations & Advancement
Leigh L. Foushee, PharmD, Director of Alumni Relations
Rich Koecke, Director of Development
Leah B. Whitt, MBA, Director of Communications

Department of Clinical Research
William W. Pickard, MS, RPh, Chair of Clinical Research
Kayla Clark, Departmental Assistant
Aaron D. Gauger, Departmental AV/IT Manager
Sheryl Jensen, Program Manager
Gabrielle Morgan, MBA, MSCR, Director, Bachelor of Science in Clinical Research
Julie Smith-Hamilton, Departmental Program Coordinator
Jim Van Dorn, Broadcast Technician

Department of Pharmaceutical Sciences
Emanuel J. Diliberto, Jr., PhD, Chair of Pharmaceutical Sciences and Executive Director, Pharmaceutical Education & Research Center
Tim Bloom, PhD, Vice Chair of Pharmaceutical Sciences
Crystal Dark, Office & Business Manager
Michael Gallagher, MA, Associate Director of Pharmaceutical Sciences
Mali R. Gupta, PhD, Director, Pharmaceutical Education & Research Center
Paul Johnson, Manager, QC/Analytical R&D, Pharmaceutical Education & Research Center
Timothy Marks, MS, Program Administrator
Chad Moody, Research Technician II
Shraddha Shapariya, MS, Graduate Student Relations Coordinator
I. Daniel Shin, PhD, Director of Pharmaceutical Sciences
Scott Staton, Manager, Formulation & Operations, Pharmaceutical Education & Research Center
Department of Pharmacy Practice
D. Byron May, PharmD, Chair of Pharmacy Practice
Connie L. Barnes, PharmD, Executive Vice-Chair of Pharmacy Practice and Co-Director of Drug Information Center
J. Andrew Bowman, PharmD, Director of Continuing Education
James Boyd, PharmD, MBA, Director, Dual PharmD/MBA Program
Paige Brown, PharmD, Director of Experiential Programs
Valerie B. Clinard, PharmD, Vice Chair, Experiential Education
Samantha Clinton, Continuing Education Coordinator
Richard Drew, PharmD, Vice-Chair of Research & Scholarship
Steve Fuller, PharmD, Vice-Chair of Faculty Development & Leadership
Kathy Monaghan, Program Manager, Drug Information Center
Lisa West, Office Manager
Jean A. White, Program Manager, Experiential Programs

Department of Physical Therapy
Gregory Dedrick, PT, ScD, Program Director
Rachel Ennis, Administrative Assistant
Heidi Shearin, PT, DPT, Director of Clinical Education
Kate Thomas, Administrative Assistant

Department of Physician Assistant Practice
Thomas Colletti, DHSc, MPAS, PA-C, Chair & Program Director
David Coniglio, EdD, MPA, PA-C, Academic Coordinator
Laura Gerstner, MSHS, MHA, PA-C, Director of Clinical Education
Betty Lynne Johnson, MEd, PA-C, Director of Pre-Clinical Education
Shannon Johnson, Clinical Education Specialist
Charlotte Paolini, DO, Medical Director
April Pope, MPAS, PA-C, Clinical Coordinator
Robyn Rogers, Medical Education Specialist
Kristin Stiltner, MBA, Program Manager

Department of Public Health
Wesley Rich, PhD, Chair of Public Health
Christie Burley, MDiv, MTS, MBA, Program Manager