



CAMPBELL
UNIVERSITY

College of Pharmacy
& Health Sciences

2017–2018 Academic Bulletin

Post Office Box 1090
Buies Creek, NC 27506

www.campbell.edu/cphs
1-800-760-9734 ext. 1690

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 supersedes all previous editions of the document.

Contents

2	Introduction Administration Mission Statement History Accreditation	52	Pharmacy Admission Policies Technical Standards for Admission & Matriculation Academic Standards Matriculation Policies Experiential Training Drug Information Center Residency Programs Curriculum for Classes of 2018, 2019 and 2020 Course Descriptions for Classes of 2018, 2019 and 2020 Curriculum for Classes 2021 and Beyond Course Descriptions for Classes 2021 and Beyond
4	General Information Degrees Awarded Policies & Procedures Honor Code Administrative Departments Faculty	80	Physical Therapy Academic Program Admission Policies Policies & Procedures Technical Standards for Admission Academic Standards Curriculum Course Descriptions Competencies for Graduates
22	Pre-Nursing Admissions Contact Program Contact Curriculum	95	Physician Assistant Program Academic Program Admission Policies Financial Information Policies & Procedures Technical Standards for Admission Academic Standards Curriculum Course Descriptions Competencies for Graduates
23	Pre-Pharmacy Admissions Contact Program Contact Curriculum	107	Public Health Academic Program Admission Policies Academic Standards Curriculum Course Descriptions
24	Clinical Research Academic Programs Admissions Policies Academic Standards Curriculum Course Descriptions	111	Dual Degree Programs PharmD/MBA PharmD/MS in Clinical Research PharmD/MS in Pharmaceutical Sciences PharmD/MS in Public Health MPAP/MS in Public Health Juris Doctor/MS in Public Health MS in Clinical Research/MBA MS in Public Health/MBA
34	General Sciences Academic Programs Academic Standards Curriculum Course Descriptions		
36	Nursing Academic Programs Program Objectives Admission Policies Academic Standards Registered Nurse Licensure Exam Requirements Curriculum Course Descriptions		
42	Pharmaceutical Sciences Academic Programs Admission Policies Academic Standards Curriculum Cooperative Degree Program Course Descriptions		

Introduction

Administration

Campbell University

J. Bradley Creed, PhD, MDiv

President

John Roberson, EdD, MDiv

Executive Assistant to the President

Mark L. Hammond, PhD

Provost and Vice President,

Academic Affairs

Jim Roberts, MPA

Vice President, Business and Treasurer

Dennis Bazemore, MDiv, DMin

Vice President, Student Life

Britt Davis, DPA

Vice President, Institutional Advancement and

Senior Advisor to the President

College of Pharmacy & Health Sciences Administration

Michael L. Adams, PharmD, PhD

Dean

C. Scott Asbill, PhD

Associate Dean, Academic Affairs

James A. Boyd, PharmD, MBA

Associate Dean, Administration

W. Mark Moore, PharmD, MBA, MS

Associate Dean, Admissions & Student Affairs

Wesley Rich, PhD, MEd, MA

Associate Dean, Health Sciences

Betty Lynne W. Johnson, MEd, PA-C

Assistant Dean, Interprofessional Education

Thomas Colletti, DHSc, PA-C

Director, Department of Physician Assistant

Practice

Gregory Dedrick, PT, ScD

Director, Physical Therapy Program

Nancy Duffy, DNP

Director, School of Nursing

David Eagerton, PhD

Chair, Department of Pharmaceutical Sciences

D. Byron May, PharmD

Chair, Department of Pharmacy Practice

COL (RET) William "Bill" Pickard, MS

Chair, Department of Clinical Research

David Tillman, PhD, MEd

Chair, Department of Public Health

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 began 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-Fetterman School of Business began in 1983. The Schools of Pharmacy and Education were established in 1985. The Divinity School was established in 1996. The School of Pharmacy was renamed as the College of Pharmacy & Health Sciences in 2009.

In addition to its main campus in Buies Creek, Campbell University has extended campuses in the Research Triangle Park, Camp Lejeune, Fort Bragg/Pope Air Force Base, and Raleigh, where the law school relocated to in 2009. Since 1979, Campbell has also partnered with Tunku Abdul Rahman College in Kuala Lumpur, Malaysia, to offer a Bachelor of Science degree.

Campbell University enrolls approximately 6,000 students, including 4,000 undergraduate and graduate students on its main campus. They're studying across nearly 100 disciplines in the liberal arts, health sciences, and professions -- and continuing the university's tradition of excellence in faith, learning, and service.

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

- James Archibald Campbell 1887–1934
- Leslie Hartwell Campbell 1934–1967
- Norman Adrian Wiggins 1967–2003
- Jerry M. Wallace 2003–2015
- J. Bradley Creed 2015 – Present

Accreditation

Southern Association of Colleges & Schools Commission on Colleges

Campbell University is accredited by the Southern Association of Colleges and Schools Commission on Colleges 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.

Commission on Colleges of the Southern Association of Colleges and Schools
1866 Southern Lane
Decatur, GA 30033-4097
Phone: 404-679-5400
Fax: 404-679-4558
www.sacscoc.org

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
135 South LaSalle Street, Suite 4100
Chicago, IL 60603
Phone: 312-664-3575
Fax: 312-664-4652
www.acpe-accredit.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. The DPT Program at Campbell University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

Commission on Accreditation in Physical Therapy Education
1111 North Fairfax Street
Alexandria, VA 22314-1488
Phone: 703-706-3245
Email: accreditation@apta.org
Website: <http://www.capteonline.org>.

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 www.capteonline.org. Complaints may not be submitted anonymously. 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 at accreditation@apta.org, www.capteonline.org, or phone at 703-706-3245.

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 2024. 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 275
Johns Creek, GA 30097
Phone: 770-476-1224
Fax: 770-476-1738
Email: arcpa@arc-pa.org

North Carolina Board of Nursing

The Catherine W. Wood School of Nursing 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 Catherine W. Wood School of Nursing will be receiving Full Approval Status in the spring of 2018.

Commission on Collegiate Nursing Education

The baccalaureate degree in nursing at Campbell University College of Pharmacy & Health Sciences is pursuing initial accreditation by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791. Applying for accreditation does not guarantee that accreditation will be granted.

Council on Education for Public Health

Campbell University's Master of Public Health program is an applicant for accreditation by the Council on Education for Public Health: <http://ceph.org/accredited/applicants/>.

General Information

Degrees Awarded

The College of Pharmacy & Health Sciences offers the following degree programs:

- Doctor of Pharmacy
- Doctor of Physical Therapy
- Master of Physician Assistant Practice
- Master of Science in Clinical Research
- Master of Science in Pharmaceutical Sciences
- Master of Science in Public Health
- Bachelor of Science in Clinical Research
- Bachelor of Science in General Sciences
- Bachelor of Science in Nursing
- Bachelor of Science in Pharmaceutical Sciences

Policies & Procedures

The policies and procedures found in this section apply to all graduate and professional students within the College of Pharmacy & Health Sciences unless otherwise specified.

Graduate and professional students include students enrolled in the following programs:

- Bachelor of Science in Nursing
- Master of Physician Assistant Practice
- Master of Science in Clinical Research
- Master of Science in Pharmaceutical Sciences
- Master of Science in Public Health
- Doctor of Pharmacy
- Doctor of Physical Therapy

Students should contact their program director should questions or concerns arise. Policies and procedures found in this section include:

- Accommodation
- Anti-Hazing
- Attendance
- Complaints/Grievances
- Computers and iPads
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Grade Appeals
- Grade Reports, Records, and Transcripts
- Health Insurance
- Immunization
- Incident Reporting
- Incontinent Weather
- Meal Plan
- Parking
- Professional Liability Insurance
- Refunds
- Safety and Emergency Preparedness
- Sexual Harassment
- Social Media
- Student Health
- Student Services
- Tuition & Fees
- Withdrawal

Accommodation

Students with documented disabilities who desire modifications or accommodations must contact the Director of Access and Outreach in the Office of Student Success located in the University's Student Services building (located between Carter Gym and the Wallace Student Center). No accommodations will be made without approval through the University's process.

Contact

Laura Rich, Director of Access & Outreach
ADA/504 Compliance Officer
227 Main Street
Buies Creek, NC 27506
richl@campbell.edu
910-814-4364
910-814-5710 (fax)

Anti-Hazing

The potential for hazing typically arises as part of a student's introduction to or initiation in a student organization in which there is often a perceived or real power differential between members of the organization and those newly joining it. No student organization, student or alumnus shall conduct nor condone hazing activities. Permission or approval by a person being hazed is not a defense. Hazing is defined as any action taken or situation created, intentionally, whether on or off fraternity/club premises, to produce mental or physical discomfort, embarrassment, harassment, or ridicule. Such activities may include morally degrading or humiliating games and activities, and any other activities which are not consistent with academic achievement, this Statement, the Campbell University College of Pharmacy & Health Sciences Academic Bulletin, the Campbell University College of Pharmacy & Health Sciences Student Handbook, the University Bulletin of Campbell University, the Student Handbook of Campbell University, or applicable state law. Such activities and situations include, but are not limited to:

- Marching in line
- Wearing apparel which is conspicuous and not normally in good taste, and/or inappropriate for the time of year
- Forced or extreme physical activity
- Line-ups
- Forced periods of silence
- Forced or involuntary spending
- Standing for a length of time
- Personal servitude
- Activities that would not normally construe hazing but because of time, place, or manner make them inappropriate
- Deprivation or interruption of consecutive sleep hours

- Expected or forced consumption of food, drink (including alcohol), or other substance
- Acts of humiliation or degradation (including streaking or wearing degrading or humiliating apparel)
- Restrictions on eating or bathing
- Acts that disrupt academic instruction or learning of others
- Interruption or interference of academic commitments
- Branding
- Paddling in any form
- Compromising sexual situations
- Bullying
- Abandonment

Students should also be aware that hazing is a misdemeanor under North Carolina state law. See North Carolina General Statute § 14-35.

To report a hazing incident, visit <http://bit.ly/hazingreport>

Attendance

Students are required to attend at least 80% of the hours prescribed for every enrolled course in order to receive credit 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 their instructors in advance that he or she will be absent.

Complaints/Grievances

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 a period of six years and be subject to review by appropriate accreditation agencies.

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.

Computers and iPads

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. Program computers and iPads must not be sold. Violation of this policy is considered a breach of professionalism and will result in referral to the student conduct and professionalism committee for possible probation or dismissal.

Counseling

A counseling hotline is available free to all students of the College of Pharmacy & Health Sciences. The helpline is a free, confidential, non-judgmental telephone counseling and referral service available to all CPHS students. The service is available 24/7 through ProtoCall Services, a company with nearly 20 years of experience in providing counseling services, which is staffed by licensed behavioral health counselors. The helpline can be reached by calling 866-428-3591.

Counseling services are also offered through CUSOM Behavioral Health Monday-Friday from 1:00-4:30 p.m., location will vary depending on the timing of the appointment. To schedule an appointment, CPHS students can email CUSOMBH@campbell.edu.

Undergraduate Students

On-campus counseling services are available to undergraduate students. Counseling Services is located in the Lanier House 233 Leslie Campbell Avenue (beside Memorial Baptist Church and across the street from Bob Barker Hall Apartments/Suites). Hours of operation are from 9:00 a.m. - 4:30 p.m. Monday-Thursday, and 9:00 a.m. - 12:00 p.m. Friday. The office closes for lunch, typically from 12:00 - 1:15 p.m. For more information about Counseling Services or to make an appointment, please call Counseling Services' staff at 910-814-5709/5708 or visit www.campbell.edu/student-services/counseling-services/ for additional information. All services are free and confidential.

Criminal Background Check & Drug Screen

Introduction

Organizations involved in health care research, development and delivery are held to high degree of integrity and also have an enormous liability for the products and services they provide. In order to mitigate risk, limit liabilities and protect the safety and well-being of patients and research subjects, criminal

background checks (CBCs) and substance abuse screening tests (SASTs) have evolved into required components of the employment and educational processes at most health care facilities and research and development organizations for employees and learners. Additionally, CBCs and SASTs may be required prior to licensure to practice and maybe required for currently licensed health care professionals as defined by the associated regulatory boards.

CPHS is being required to attest that CBCs and SASTs, plus other requirements (e.g. CPR, HIPAA compliance, health insurance, immunizations, etc.) have been completed prior to health professions students (nursing, pharmacy, physical therapy and physician assistant) being allowed to engage in experiential training at the clinical education sites. Also, many sites for the BSCR and BSPS internships have such requirements.

As a result of these risk management movements in the healthcare industry, these required screens have become an important part of the process for matriculation of candidates seeking degrees in the CPHS undergraduate and professional degree programs. If accepted applicants or current students in CPHS programs are not eligible for entry to the appropriate training sites in order to perform the mandatory experiential component(s) as required to complete their degree, then they are not eligible for matriculation at entry and/or progression through their designated program. Individuals in the graduate clinical research, pharmaceutical sciences or public health programs may be subject to CBCs, SASTs or similar aforementioned requirement as a component of any current or future required or elective experiential trainings.

Beginning in the academic year 2016-2017, the cost of all CBCs and SASTs became the responsibility of the individual accepted applicant/current student in the specified Campbell University CPHS program. Prior to students being permitted to participate in experiential education courses (clerkships, internships, etc.), they must submit to updated CBCs and SASTs. Individuals who:

- do not consent to the required screening (CBC, SAST, etc.)
- refuse to provide information necessary to conduct these screens in required time frame
- provide false or misleading information in regard to the CBC and SAST
- attempt to manipulate body fluid samples in the screening process
- complete the screening obligation in a timely manner and by the required deadlines

may lose their status of good standing and will be referred to the appropriate CPHS committee for actions as related to professional behaviors. Sanctions may include loss of eligibility:

- to receive university scholarships
- to hold leadership positions
- to receive CPHS funding for professional meetings
- to participate in experiential education activities

and are subject to sanction up to and including dismissal from the college in accordance with CHPS policies. Information from the updated CBCs and SASTs are kept as confidential as possible and are retained in a file separate from other educational and academic records. Information will be shared with the CPHS Experiential Education Committee, the Associate Dean for Admissions & Student Affairs and with clinical education sites if there is a need to determine the acceptability of a student to the site.

Additional considerations

- Admitted students cannot refuse assignment to a particular experiential site because they do not wish to submit to further substance abuse testing or criminal background checks required by the site.
- The designated experiential faculty member will evaluate alternate placement options and feasibility for any CPHS student who is refused admission to a training site, or who is asked to leave a site because of information discovered through the screening process for experiential training (CBC, SAST, or other background requirement). However, no guarantee of alternate placement can be made.
- CPHS does not accept responsibility to continually seek educational training sites who will accept CPHS students previously denied access to any assigned site.
- CPHS does not accept responsibility for any student being ineligible for coursework, training, continued enrollment in the college, or subsequent licensure for any reason, including failure to pass a CBC and/or SAST regardless of whether or not the student has participated in a corrective action plan attempting to make them acceptable to experiential education training sites.

Criminal Background Check Policy for Campbell University Health Programs

CPHS requires criminal background checks (CBCs) of all nursing, pharmacy, physical therapy and physician assistant program applicants who earn acceptance into

their respective health programs prior to matriculation. Current nursing, pharmacy, physical therapy and physician assistant students will also be required to have a CBC annually or as often as required by experiential sites. Students enrolled in the BS in Clinical Research and BS in Pharmaceutical Sciences programs may be required to have a CBC, prior to matriculating into the mandatory senior internship. Currently, applicants and students enrolled in the MS in Clinical Research, MS in Pharmaceutical Sciences and MS in Public Health degree programs are not required to complete CBCs; however, CPHS graduate students who participate in any experiential training experience, required or elective, may be subject to a CBC as part of the process for entrance to the training site.

Accepted applicants to any of the aforementioned CPHS degree programs will be notified of the background check requirement as part of the application/interview/orientation process. Failure to disclose any convictions or pending charges may result in reconsideration of an applicant's admissions status. Current students who fail to disclose new charges or convictions within the designated time period may result in reconsideration of a student's enrollment status. CPHS will contract with an outside vendor for the performance of the background check, and students will be responsible for the cost of the testing.

Educational training sites may require CPHS to provide them with a copy of the results of any criminal background check performed on students 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 criminal background screening or require further screening. Students must be willing to disclose and release the required personal information and CBC results in order to participate in clinical education activities. Students who are not willing to allow the release of the required personal information will not be able to be placed at an affiliated clinical education site, and thus cannot meet the requirements to continue their education and fulfill the curriculum requirements for graduation.

Charges and convictions do not automatically prevent an applicant or current student from matriculating into or continuing in a CPHS degree program at Campbell University. Any charges or convictions as described above must be reviewed for potential impact on the individual's eligibility for placement at experiential training sites to perform the necessary clinical activities or internship requirements for the successful

completion of the applicable CPHS program and ultimately licensure eligibility for the individuals enrolled in health professions programs. In certain cases, the criminal record may prevent the student from being able to meet the requirements for progression in through program or graduation. Any organization that provides an experiential training site for student internships and/or clinical training experiences has the right to review all CBC results, and ultimately has the right to accept or deny the placement of any CPHS student based upon these results.

Procedure

1. A criminal background check will be completed on: all accepted applicants to the CPHS health professions programs prior to matriculation, all current health professions students annually or as required by clinical sites, and any CPHS undergraduate student (BSCR/BSPS) as necessitated for internship placement.
2. Applicants accepted late in the admissions cycle will be given a date for completion of all testing. Failure to complete required testing in the specified time period may result in reconsideration of an applicant's admissions status.
3. 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.
4. 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.
5. CPHS contracts with an outside vendor for the performance of the criminal background check. Results are sent directly from the vendor to the designated program representative for review.
6. Recommendations regarding matriculation of an accepted applicant or continuation of a current student whose criminal background check reveals information of concern will be made by the CPHS Experiential Education Committee.
7. No information derived from a criminal background check will automatically disqualify any accepted applicant from matriculation or prevent progression of a current student.

8. Decisions about matriculation or continuation in a health program 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 if required, the accuracy of the information provided by the applicant in his or her application materials, and/or compliance with policy related to reporting court dates and their decisions.
9. 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 student's permanent file.
10. Information obtained will only be used in accordance with state and federal laws.
11. Due to the potential impact of clinical placements, enrolled health professions students or those currently granted a deferral or alternate course of study are required to self-report any new charges or convictions to the designated program representative within three (3) days.
12. For current health professions students, failure to disclose new criminal charges within three (3) days to the designated experiential faculty member may result in program specific action and /or referral to the appropriate CPHS committee for possible professional behaviors violations.
13. Current students must notify their designated experiential faculty member of scheduled court dates no greater than one week prior to the hearing.
14. Current students must notify their designated experiential faculty member of any court decisions and provide official court documents of the case outcome within one week.
15. Students, who receive court convictions during their enrollment in CPHS health programs, will be required to obtain updated CBCs as necessitated at their expense.
16. All criminal background data will be maintained in a secure location to assure confidentiality. Routine access to the information will be limited to staff members in the office of Admissions & Students Affairs, the associate dean of admissions & student affairs, and directors/ coordinators of experiential education in each health program

Substance Abuse Screening Protocol

CPHS requires substance abuse screening tests (SASTs) of all nursing, pharmacy, physical therapy and physician assistant program applicants who earn acceptance into their respective health programs prior to matriculation. Current nursing, pharmacy, physical therapy and physician assistant students will also be required to have a SAST annually or as often as required by experiential sites in addition to random or just cause SASTs. Students enrolled in the BS in Clinical Research and BS in Pharmaceutical Sciences programs may be required to have a SAST, prior to matriculating into the mandatory senior internship and may be required to submit to random or just cause SASTs. Currently, applicants and students enrolled in the MS in Clinical Research, MS in Pharmaceutical Sciences and MS in Public Health degree programs are not required to complete SASTs; however, CPHS graduate students who participate in any experiential training experience, required or elective, may be subject to a SASTs as part of the process for entrance to the training site.

Accepted applicants to any of the aforementioned CPHS degree programs will be notified of the background check and substance abuse screening protocol requirement as part of the matriculation process. Additional screening tests may be required as determined by CPHS or the experiential training sites. SAST results may be reviewed the CPHS admissions office, the CPHS Experiential Education Committee, the Student Conduct and Professionalism Committee (if necessary) and the designated experiential training sites providing student internships and clinical experiences for CPHS programs. It is extremely important to note an understand that the affiliate rotation/internship/clinical/ experiential sites, not CPHS, ultimately have the ability to accept or deny the placement of any student based upon the SAST results even after acceptance into the program

Consumption of alcohol is not permitted during classes, experiential or co-curricular activities. CPHS reserves the right to require drug or alcohol testing on any currently enrolled CPHS student (BS, MS or doctoral) when based on unusual or erratic behavior or performance reasonable suspicion exists that a student is under the influence of drugs or alcohol. Examples of reasonable suspicions include but are not limited to: a formal or public complaint issued by students, faculty, or staff, and/or physical proof. Refusal or failure to submit to screening may result in disciplinary action up to and including dismissal. Students found to have screening tests positive for alcohol, illicit substances or prescription medications without a valid

prescription will have results evaluated by the CPHS Experiential Education Committee with possible referral to the appropriate CPHS professionalism committee for possible disciplinary action up to and including dismissal as warranted by CPHS administration.

Educational training sites may require CPHS to provide them with a copy of the results of any substance of abuse tests performed on students prior to and for the duration of their placement at the site. Clinical education sites reserve the right to 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 will not be able to be placed at an affiliated clinical education site, and thus cannot meet the requirements to continue their education and fulfill the curriculum requirements for graduation.

A positive drug/alcohol screen may require the student to be evaluated and receive counseling. In this case, the student may be evaluated by a qualified clinician in the Campbell University behavioral health center, or they can opt to be evaluated at a community behavioral health agency/ practice. Should the student opt to use a behavioral health center other than Campbell, the student will be responsible for the cost of evaluation and the associated therapy. All students will be responsible for ensuring that all necessary documentation is provided to the College regarding attendance at a behavioral health center.

Procedure

1. The currently approved urine substance abuse screening test will be completed at a designated lab facility with results sent directly to the current Campbell University vendor. SASTs will be performed on all accepted applicants prior to matriculation and on current health programs' students at least annually.
2. The letter sent by the respective 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 being made after institutional review of the accepted applicant's SAST report.
3. Appropriate authorization, with pertinent identifying information necessary to initiate the test, will be received from each accepted applicant and current student prior to initiating a SAST.
4. Accepted applicants and current students must have the sample collected at a CPHS approved collection site. CPHS

contracts 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. Results are sent directly from the vendor to the designated CPHS Health Program representative for review.

5. Applicants and current students without any abnormal SAST findings can be approved by the Admissions Office or program representative for matriculation or continuation in their respective program.
6. Applicants & current students with abnormal SAST findings, other than a “negative dilute,” must undergo further review by the CPHS Experiential Education Committee.
 - a. Applicants/current students with SAST positive results for illegal substances or non-prescribed controlled medications will be referred to the CPHS Experiential Education Committee with the potential for their offer of admission to be rescinded or dismissal from their current program, depending on the status of the student.
 - b. Applicants/current students with a SAST result of “negative dilute”, MUST repeat the SAST at their expense. A second negative dilute result may jeopardize a student’s admission or ability to continue studies in the progression of his/her respective program.
 - c. Decisions for continuation of a health program student with a SAST positive result are made after careful evaluation of all pertinent information and take into consideration the individual’s ability to be accepted at the necessary clinical/experiential sites, the test value levels, and normative data related to drug use.
 - d. The CPHS Experiential Education Committee reserves the right to refer students with positive SAST results for mandatory drug rehabilitation or psychological evaluation for progression in a health program.
7. Although we acknowledge that marijuana use is legal in several states, marijuana is a Schedule I drug and it is currently considered ILLEGAL by the federal government and by the state of North Carolina; therefore, applicants/current students will be held to this standard set by our federal and state government. The possession and/or consumption of marijuana may jeopardize an applicant’s/student’s ability to matriculate and progress through the CPHS degree programs.

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 many health care professionals in training.

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 (DPT-no bare shoulders). Closed toe shoes are required for all clinical experiences.

The following dress and accessories are unacceptable in the clinic and classroom: hats, caps, t-shirts, men’s sleeveless shirts, blue jeans, shorts, mini-skirts, visible cleavage, sweat pants, athletic attire, tank tops, bare midriffs, skintight clothing, flip flops, and visible tattoos or any body piercing (other than earrings). Special jeans days may be granted through the appropriate program supervisor.

For laboratory training, the dress code is listed below for individual programs. It is understood that laboratory experiences may include time in the classroom; therefore, the proper attire for classroom instruction on laboratory days is at the discretion of the professor. For clinical/experiential training, the dress code will be dictated by company policy.

**Men in the PA Program are required to wear a shirt and tie in business casual settings.*

***DPT program students are to wear appropriate laboratory clothing under scrubs (solid color) on laboratory session days. In the following circumstances, students are to abide by the dress code above (non-laboratory days, outside classroom activity, practical exams, and OSCE).*

Doctor of Physical Therapy Laboratory Dress Code

Laboratory clothing typically needs to allow access for easy manipulation and palpation of body parts. Therefore, wearing shorts, t-shirts, and sports bras or similar is appropriate. 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

Master of Physician Assistant Practice Laboratory Dress Code

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.

Catherine W. Wood School of Nursing Clinical Experience Dress Code

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

- The Catherine W. Wood School 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.
- Shoes must be low heeled and black. For safety, footwear must be non-canvas with an enclosed toe and heel. The shoes can be any style black (professional or athletic) and worn exclusively in the clinical setting.
- The appropriate picture ID is visible at all times.
- 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.
- Nails must be short and clean to prevent injury to patients. Artificial nails are not allowed.
- 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-colored materials.
- Gum or tobacco products are not allowed in any professional care setting.
- A tattoo must be covered during a clinical experience.
- Fragrances are not permitted.

Environmental Health and Safety

The College of Pharmacy & Health Sciences 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 each

program manager's office. Emergency contact numbers are posted in the administrative offices through the College. Training is supplied and recorded (kept in secure file cabinet in program directors' offices) for all faculty, students, and staff who participate in scholarship activities involving hazardous chemicals in laboratories.

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 director. If no resolution is achieved at the course level, the student should appeal to the appropriate program director or department chair. After unsuccessful efforts within the department, a student may appeal to the appropriate 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 (for all students in pharmacy, pharmaceutical sciences and clinical research) or the associate dean for health sciences (for all students in nursing, physical therapy, physician assistant studies, and public health) 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 is final.

Grade Reports, Records, and Transcripts

A report of grades attained by a student in the CPHS will be available through the University's WebAccess system at the end of each semester. The official records of each student in CPHS will be maintained securely 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 maintained by the Office of Admissions & Student Affairs within the university archival system. The transcript and contents of the permanent record may be

examined by the student upon appointment with the Registrar, or the associate dean for admissions and student affairs.

Repeat Courses

For repeat courses, the last attempt only will affect the final grade point average. Previous hours attempted, previous hours passed, and previous quality points will not be considered, although they will remain on the permanent record. All grades from all attempts are recorded and remain on the transcript permanently.

Health Insurance

Due to contractual requirements enumerated in agreements with clinical experiential training sites, all CPHS students enrolled in the nursing, pharmacy, physical therapy and physician assistant programs 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. Students may also be required to upload the necessary supporting documentation verifying active health insurance coverage into the electronic management systems utilized by their respective program in order to track all experiential training requirements. 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. Events covered under the Accidental Insurance Policy are covered in a future section.

Immunization

During introductory and advanced experiential experiences and clinical rotations, students will be involved in direct patient care and; therefore at risk for potential exposure to infectious materials and patients. All students must provide a completed medical history form and proof of immunization as directed by their respective program. Students are responsible for maintaining immunizations; this is required by CPHS in order to complete all required supervised clinical practice experiences. 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. The first dose must be completed prior to matriculation and students must provide documentation of the all doses.
 - 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 all doses in the 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 record is not sufficient.
 - Tuberculin (PPD) skin test: Annually (some rotation 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.
- *Not required for Physical Therapy coursework*

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
- Masks, goggles, face masks
 - Protect mucous membranes of eyes, nose, and mouth when contact with blood and body fluids is likely
- Gowns
 - Protect skin from blood or body fluid contact
 - Prevent soiling of clothing during procedures that may involve contact with blood or body fluids

- Linen
 - Handle soiled linen to prevent touching skin or mucous membranes
 - Do not pre-rinse soiled linens in patient care areas
- Patient care equipment
 - Handle soiled equipment in a manner to prevent contact with skin or mucous membranes to prevent contamination of clothing or the environment
 - Clean reusable equipment prior to reuse
- Environmental cleaning
 - Routinely care, clean, and disinfect equipment and furnishings in patient care areas
- Sharps
 - Avoid recapping used needles, use self-capping safety needles if available
 - Avoid removing used needles from disposable syringes
 - Avoid bending, breaking, or manipulating used needles by hand
 - Place used sharps in puncture-resistant containers
- Patient resuscitation
 - Use mouthpieces, resuscitation bags, or other ventilation devices to avoid mouth to mouth resuscitation
- Patient placement
 - Place patients who contaminate the environment or cannot maintain appropriate hygiene in private rooms

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.

Physician Assistant Students Only-Tuberculosis Training

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 (Shawn Carrillo ext. 1709/email: scarrillo@campbell.edu or Paige Brown, 910-814-5611, email brownp@campbell.edu) as soon as reasonably possible to begin the process of filing an incident report.
 - For physician assistant students the preceptor should notify the PA clinical coordinator by phone, 910-893-1252 or email, gerstnerl@campbell.edu, or the PA department's office, 910-893-1210, 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:
BMI Benefits, LLC
PO Box 511
76 Main Street
Matawan, NJ 077447
Policy Number:
11SPD8336001
Phone: 800-445-3126
Fax: 732-583-9610

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 filled.
 - 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.

Inclement Weather

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 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.

Meal Plan

Campbell University Dining Services offers a variety of meal plan options that includes dining locations across campus. Visit campbell.campusdish.com for detailed meal plan information.

Parking

Students parking on campus are required to obtain a parking decal. Registration information, parking maps, and parking regulations are available at: <http://www.campbell.edu/life/parking/vehicle-registration>

Professional Liability Insurance

Campbell University maintains student liability insurance for all students during their clinical experiences and internships required as part of their curriculum of study. This coverage is valid only during assigned clinical activities. All students and faculty members of the College while participating in a clinical experience and/or internship as part of their curriculum of study are covered by a malpractice liability insurance policy in accordance with contractual agreements with training sites.

Refunds

An admissions deposit is required of each accepted applicant. These deposits are non-refundable.

In the event of a student's complete withdrawal from the university for a particular enrollment period, refunds/repayments are calculated according to the Higher Education Act and its subsequent modifications.

Campbell University will comply fully with federal regulations as required. This method will be used to determine refunds/repayments for Title IV aid as well as state and institutional aid. This includes students who do not follow the university's policy for official withdrawal.

To withdraw officially from the University during a semester, a student is required to complete an official Withdrawal Form, which can be acquired from the Office of Admissions & Student Affairs. The Withdrawal Form must be completed with proper signatures obtained, and turned into the Registrar's Office for placement in the student's permanent file. Failure to withdraw properly will result in a non-prorated reassessment of charges to the student account.

Upon completion of the Withdrawal Form, the Registrar's Office updates class registration as a withdrawal from the University denoting the —Withdrawal Effective Date provided on the form. The Business Office verifies all classes have been updated accordingly and reassesses student tuition and fee charges. Housing and meal plan assignments are reviewed to ensure their correct reassessment.

Drop Period:

- Days 1-5 of the drop period: 100% tuition refund
- Day 6 - until the last day of drop period: No tuition refund

Financial Aid Disbursed to Student Account:

- Financial aid will disburse to student account the first day of class
- Financial Aid Refund:
- Financial aid refunds will be refunded on or after day 6 of the drop period.
- If day 6 is a weekend or holiday, the Business Office will refund the next banking/business day.
- Contingent on banking regulation and individual banking processes, student will receive refunds in their bank account within 3 business days from the date of refund.

The Business Office is responsible for the reassessment of student account charges; however, it is the responsibility of the Financial Aid Office to ensure financial aid awards have been evaluated and reassessed accordingly.

The Business Office reserves the right to hold refund of credit balances until the Financial Aid Office has evaluated and approved the release of funds awarded to students that withdraw from the University.

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 910-893-1912. 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.

Sexual Harassment

Title IX Policies and Procedures

The Title IX policies and procedures are found in this link on the Campbell website: <https://www.campbell.edu/policies/title-ix/title-ix-policies-and-procedures/>.

Social Media Policy

Campbell University's College of Pharmacy & Health Sciences (CPHS) recognizes that online blogs, email lists and social network sites may include (but are not limited to) Facebook, Twitter, Instagram, Snapchat, Pinterest, LinkedIn (hereafter collectively referred to as social media) and are increasingly popular tools for communication and social interaction. CPHS does not actively monitor online activities of the student body; however, it does address issues related to unprofessional behavior brought to the attention of the Office of Student Affairs. A CPHS student must understand that by identifying oneself publicly through social media, he/she is creating perceptions about CPHS, clinical/experiential sites, and/or his/her chosen health profession; therefore, students must assure that all social media content is consistent with the values and professional standards of Campbell University, CPHS, and their profession.

Individuals should make every effort to present themselves in a mature, responsible, and professional manner. Discourse should be civil and respectful while taking care to avoid displays of vulgar, disrespectful, unflattering, or inflammatory language or photographs that reflect poorly on the student, program, or college.

Please be aware that no privatization measure is perfect and that undesigned persons may still gain access to your networking site. Any and all future employers may review these network sites when considering potential candidates for employment. Although posted information can be removed from the original social networking site, exported information cannot be recovered. Any digital exposure can "live on" beyond its removal from the original website and continue to circulate in other venues; consequently, one should think carefully before posting any information on a website or application.

Unprofessional behavior towards patients, other healthcare professionals, preceptors, faculty, staff, peers, or the public is a significant consideration in the evaluation and academic promotion of CPHS students. Students who use social media must be aware that posting certain information is proprietary and illegal. Violations of existing statutes and administrative regulations may result in criminal and civil liability including fines

and imprisonment. Offenders may also be subject to adverse academic actions up to and including dismissal as outlined and detailed in the Academic Bulletin (Honor Code: Articles 2-5, Non-Academic Matters). Any conduct which evidences a lack of knowledge or ability to apply professional principles or skills constitutes unprofessional conduct in violation of professional standards (Honor Code: Article 9 Student Clinical Code of Conduct).

Prohibited actions that will be interpreted as unprofessional conduct and in violation of the CPHS Professional Behavior Standards as described in the Academic Bulletin and may also constitute a violation of the University's academic and non-academic misconduct codes include, but are not limited to the following:

- You may not share the personal health information of other individuals. Removal of an individual's name does not alone constitute proper de-identification of protected health information. Inclusion of data such as age, gender, race, diagnosis, date of evaluation, the type of treatment or the use of a highly specific medical photograph (such as a before/after photograph of a patient having surgery or a photograph of a patient from a medical outreach trip) may still allow the reader to recognize the identity of a specific individual.
- You may not report private (protected) academic information of another student or trainee. Such information might include, but is not limited to: course grades, narrative evaluations, examination scores, or adverse academic actions.
- You may not represent yourself as an official representative or spokesperson for Campbell University or the College of Pharmacy & Health Sciences.
- You may not represent yourself as another person, real or fictitious, or otherwise attempt to obscure your identity as a means to circumvent any prohibitions listed in the Academic Bulletin.
- You may not knowingly distribute false evidence, statements, or charges against another student or faculty/staff member.
- You may not distribute negative comments against another student, faculty/staff member, preceptor, or affiliated training site.
- You may not contribute to or engage in any activity which disrupts or obstructs the teaching, research or extension programs of CPHS or Campbell University, either on the campus or at affiliated training sites.
- You may not threaten or engage in acts of physical violence to CPHS administration, faculty, staff, or students.
- You may not harass, in any form, CPHS administration, faculty, staff, or students.

- You may not violate the confidentiality of a CPHS committee.
- Retaliation in any form is prohibited.
- You may not utilize websites and/or applications in a manner that interferes with your work commitments.
- You may not present any photograph(s) that may reasonably be interpreted as condoning the irresponsible use of alcohol, substance abuse, or sexual promiscuity.

In addition to the examples of the absolute prohibitions outlined above, the following actions (and similar) are strongly discouraged as these are considered unprofessional and reflect poorly on the individual, the healthcare profession, the College of Pharmacy & Health Sciences and Campbell University.

- Displays of vulgar language.
- Displays of language or photographs that imply disrespect for any individual or group because of age, race, gender, ethnicity, or sexual orientation.
- Posting of potentially inflammatory or unflattering material on another individual's website.

The following actions are considered best practices and are strongly encouraged:

- Bringing content that could harm a patient's privacy, rights, or welfare to the attention of the appropriate authorities.
- Notifying CPHS faculty or staff of any violation of noted absolute prohibitions and unprofessional behavior that could negatively impact CPHS.
- Using privacy settings to limit unknown or unwanted access to your profile or application.
- Regularly checking your privacy settings to optimize privacy and security.
- Minimizing personal information on all social media profiles. Excluding addresses, phone numbers, social security numbers, PID numbers, passport numbers, driver's license numbers, birth dates, or any other information that could be used to obtain personal records.
- Using a personal email address (not a campbell.edu address) as the primary means of identification, if choosing to list an email address on a social networking site.
- Discourse should always be civil and respectful.
- Presenting yourself in a mature, responsible, and professional manner.

Violations of the CPHS Social Media Policy are subject to referral to the CPHS Student Affairs Office and/or the CPHS Student Conduct & Professionalism Committee.

This policy was adapted and modified from The University of Louisiana at Monroe, College of Pharmacy, Social Media Policy, Student Handbook, 2013-2014; from The University

of Florida's College of Pharmacy Social Media Policy, 2017; and from the National Student Nurses' Association, Inc. Recommendations for Social Media Usage and Maintaining Privacy, Confidentiality and Professionalism.

Student Health

Students may utilize the Student Health Service for preventive services and personal health concerns. For patient privacy and confidentiality, students must not be treated by CPHS faculty in the student's program who may occasionally cover the clinic. The students should identify themselves as a CPHS student when checking into the clinic so that they may be scheduled with an appropriate provider. More information about health services offered is available at <http://www.campbell.edu/student-services>.

Student Services

CPHS Office of Admissions & Student Affairs offers various student services available to all graduate and professional CPHS students including academic support consultations, career services, and peer tutoring services. One-on-one appointments and group workshops are available for both academic support needs (time management, study skills, test-taking, stress management, etc.) and career services needs (job searching, resume review, cover letter review, etc.). Peer tutoring services are available in each CPHS program to graduate and professional students. Students may request a tutor throughout the semester and sign up based upon their schedule. One-on-one and small group tutoring is available. Any questions regarding graduate and professional student services should be directed to the main office 910-893-1690.

Tuition & Fees

Tuition and fees are determined annually and are available at <http://www.campbell.edu/cphs/admissions/tuition-financial-aid/>. Tuition and fees for the upcoming academic year 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 regalia.

Withdrawal

Procedure:

Withdrawal from the CPHS should only be considered after a careful and thorough evaluation of the academic, financial, and personal impacts arising from such an action.

Prior to requesting an official withdrawal from the University during a semester, a student should discuss options with their academic advisor and/or program director.

To officially withdraw from the College of Pharmacy & Health Sciences during a semester, a student must meet with the Assistant Director of Student Affairs and is required to complete an official CPHS Withdrawal Form available in the CPHS Student Affairs Office (Room 119, Maddox Hall, 910-893-1690). The CPHS Withdrawal Form must be completed, with proper signatures obtained, and returned to the Assistant Director of Student Affairs. The Assistant Director of Student Affairs will process the withdrawal and a copy of the appropriate documentation will be placed in the student's permanent file with appropriate administrative offices/personnel notified. This form, once completed, will be distributed to the following offices: Registrar, Financial Aid, Business, Accounting, Veteran's Affairs, and International Admissions, so that a student's record may be closed out in all these areas.

Upon completion of the CPHS Withdrawal Form, the Registrar's Office updates class registration as a withdrawal from the University denoting the —Withdrawal Effective Date provided on the form. The Business Office verifies all classes have been updated accordingly and reassesses student tuition and fee charges.

Failure to withdraw properly will result in full charges and failing grades. Students will be responsible for all grants, scholarships, loans, and federal monies applied toward their tuition and general fees. Students receiving veterans' benefits must report to the Director of Veterans Affairs within thirty days of withdrawing from Campbell University.

All graduate and professional programs at CPHS will have published dates for withdrawing from school (each is unique due to different start and stop dates). Withdrawal from CPHS prior to or on the designated withdrawal date will result in a student receiving grades of W for all classes.

Withdrawal after the designated withdrawal date will result in a grade determined by the materials completed, usually resulting in a grade of F. When a student withdraws at any time in cases of documented medical emergencies, even after the published last date to withdraw, the grade will be entered as a W.

Any student requesting a Medical Withdrawal will be required to provide documentation from a medical professional (in addition to the official CPHS Withdrawal Form), and will be withdrawn from all courses and assigned a grade of W. Please note: in order to be eligible for re-instatement and enrollment

after a medical withdrawal was granted, a student must provide documentation from a medical provider that he/she is medically cleared to return to the academic rigors of the graduate/ professional program.

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 regrading.
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. Purposely furnish false information.
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 Student Conduct and Professionalism Committee as described in the University handbook. All students are encouraged to study the section 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:

Level-one probation

Level-one probation for a stated period carries a loss of eligibility for:

- Holding or running for elected office in student professional organizations;
- Representing the University in any capacity both on campus and away from campus;
- Competing for honors and distinctions;
- Active participation as an elected representative or member of an honorary organization;
- Obtaining reimbursement monies from any funders within the College of Pharmacy & Health Sciences.

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. A student who is placed on level-two probation will automatically be placed on level-one probation. 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). 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. See Article 5, Section C – 1.

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 Conduct and Professionalism Committee.

B. Organization

The Student Conduct and Professionalism Committee is composed of faculty members from each department, students and the assistant director of 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 assistant director of 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. If a faculty member assigns a student an F or a grade of zero on any assignment or test for which the reason was academic dishonesty, the faculty member must immediately notify the Associate Dean for Admissions and Student Affairs and the Student Conduct and Professionalism Committee chairperson (SCPC) in writing of this event. The student does have the right to appeal the faculty's decision. If the SCPC and Associate Dean for Admissions and Student Affairs uphold the faculty's decision OR if the student chooses not to appeal, the record of the offense will remain in the student's file until graduation. If a second violation of the CPHS Honor Code occurs before graduation that is upheld by SCPC or not appealed, the student will automatically be referred to the SCPC for separate, additional sanctions including possible dismissal from the program. If the faculty member involved in the event currently serves on the SCPC, then the faculty member should recuse himself/herself from the committee meeting.
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 of 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 or weekends.

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 of 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:

Respect and Concern for the Welfare of Patients

- Treat patients and their families with respect and dignity both in their presence and in discussions with others.
- Recognize when one's ability to function effectively is compromised and ask for relief or help.
- Recognize the limits of student involvement in the medical care of a patient and seek supervision or advice before acting when necessary.
- Not use alcohol or other drugs in a manner that could compromise themselves or patient care.

Respect for the Rights of Others

- Deal with professional, staff and peer members of the health care team in a considerate manner and with a spirit of cooperation.
- Act with an egalitarian spirit toward all persons encountered in a professional capacity regardless of race, religion, gender, sexual preference or socioeconomic status.
- Respect the patient's modesty and privacy.

Trustworthiness

- Be truthful in communication to others.
- Maintain confidentiality of patient information.
- Admit errors and not knowingly mislead others to promote one's self at the expense of the patient.
- Not represent himself or herself as a pharmacist, physician, physician assistant, or other health professional.
- Accurately acknowledge the sources for all information reported. Failure to do so will be considered plagiarism.

Responsibility and Sense of Duty

- 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.
- Notify the responsible person if something interferes with his or her ability to perform clinical or academic tasks effectively.

Professional Demeanor

- Maintain a neat and clean appearance, and dress in attire that is accepted as professional to the population served.
- Be thoughtful and professional when interacting with patients and families.
- Strive to maintain composure during times

of fatigue, professional stress, or personal problems.

- Avoid offensive language, gestures, or inappropriate remarks.
- 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:

- Should be challenged to learn, but should not be belittled, humiliated or abused in front of patients, peers or other health professionals.
- Should not be sexually harassed, either verbally or physically.
- Should not be discriminated against on the basis of gender, race, religion or sexual preference.
- Should be a participant in patient care decisions whenever possible.
- 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 individual needs of CPHS.

Article 10: Pledge

A student's signature indicates that he or she agree to uphold the following pledge. A separate pledge form with the language below will be provided and must be signed prior to entry into CPHS.

I, having read and receiving a clear understanding of the basis, spirit and interpretation of the CPHS 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.

I, having read and reviewing the most current CPHS Academic Bulletin, agree to comply with all policies and procedures indicated in the bulletin and accept full responsibility in the event I do not comply.

Administrative Departments

Office of the Dean

Michael L. Adams, PharmD, PhD, Dean,
College of Pharmacy & Health Sciences
Wesley Rich, PhD, MEd, MA, Associate Dean
for Health Sciences
Pam Roberts, Assistant to the Dean
Lee Holquist, Administrative 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
Kim Dunn, MS, Director of Enrollment
Management
Dayna Harper, MS, GCDF, Assistant Director of
Student Affairs
Rodney Hipwell, MA, Admissions Counselor
Lori McLean, MAT, Admissions Coordinator
Steph Olson, MS, Coordinator of Academic
Support
Phyllis Strickland, Administrative Assistant
Briana Vargas-Gonzalez, MS, Admissions
Coordinator
Kimberly Whitted, MDiv, Director of
Admissions & Student Diversity

Office of Academic Affairs

C. Scott Asbill, PhD, Associate Dean,
Academic Affairs
Dawn Carroll, MHS, Education and Testing
Coordinator
Myrah Stockdale, MS, BBA, Director
of Assessment
Lois Hupfield, Academic Affairs Coordinator
James Benedict, AV/IT Specialist

Office of Interprofessional Education

Betty Lynne W. Johnson, MEd, PA-C, Assistant
Dean, Interprofessional Education
Marisa Vaskalis, Assistant Director,
Interprofessional Education

Office of Alumni Relations & Advancement

James A. Boyd, PharmD, MBA, Associate Dean
for Administration and Director, Dual
PharmD/MBA Program
Meredith Blalock, Director of Communications
& Marketing
Will Bratton, Director of Advancement

Department of Clinical Research

William W. Pickard, MS, RPh, Chair of
Clinical Research
Sheryl Jensen, Program Manager
Kate Eberle, Program Coordinator
Julie Smith-Hamilton, BSCR Program Director

Catherine W. Wood School of Nursing

Nancy Duffy, DNP, MSN, Program Director
Callie Manning, Administrative Assistant
Sandra Goins, DNP, MSN, MPH, Assistant
Director
Jacqueline Perez, Administrative Assistant

Department of Pharmaceutical Sciences

David Eagerton, PhD, Chair and Associate
Professor of Pharmaceutical Sciences
and Executive Director, Pharmaceutical
Education & Research Center
Chris Breivogel, PhD, Vice Chair of
Pharmaceutical Sciences
Kayla R. Clark, Science Education Outreach
Coordinator and Program Administrator
Crystal Dark, Office Manager & Program
Coordinator
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
I. Daniel Shin, PhD, Director of Pharmaceutical
Sciences
Christina Stalder, Research Technician II
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 A. Boyd, PharmD, MBA, Associate Dean
for Administration and Director, Dual
PharmD/MBA Program
Paige Brown, PharmD, Vice-Chair of
Experiential Education
Shawn Carrillo, Assistant Director of
Experiential Education
Samantha Clinton, Assistant Director of
Continuing Education
Richard Drew, PharmD, Vice-Chair of Research
& Scholarship
Steve Fuller, PharmD, Vice-Chair of Faculty
Development & Leadership
Kathy Monaghan, Program Manager, Drug
Information Center and Assistant to the
Executive Vice-Chair
Tina Thornhill, PharmD, Vice-Chair for
Professional Education
Lisa West, Department Manager

Department of Physical Therapy

Gregory Dedrick, PT, ScD, Program Director
Scott Sawyer, PT, DPT, Assistant Director

Sarah Bayles, Clinical Coordinator
Kim East, Program Coordinator
Rachel Ennis, Administrative Assistant
Heidi Shearin, PT, DPT, Director of Clinical
Education

Department of Physician Assistant Practice

Thomas Colletti, DHSc, PA-C, Chair &
Program Director
Christopher Stewart, MD, Medical Director
Laura Gerstner, MSHS, MHA, PA-C, Director of
Clinical Education
Peter Fenn, MPAS, PA-C, Director of Pre-Clinical
Education
Shannon Johnson, Clinical Education Specialist
April Pope, MPAS, PA-C, Clinical Coordinator
Kristin Stiltner, MBA, Program Manager
Shelly Vahue, Clinical Skills Coordinator
Rachel Wegman, Medical Education Specialist

Department of Public Health

David Tillman, PhD, MEd, Chair of Public
Health
Christie Burley, MDiv, MTS, MBA, Program
Manager

Faculty

Department of Clinical Research

Charles Carter, Associate Professor of Clinical
Research; BS, Pharmacy, State University of
New York (1981); MBA, Entrepreneurship &
Finance, Christian Brothers University (1994);
PharmD, University of Tennessee Center for
Health Sciences (1983); RPh, NC, TN

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

Michael Jiroutek, Assistant Professor of Clinical
Research; BS, Interdisciplinary Mathematics:
Statistics, University of New Hampshire (1993);
MS, Applied Statistics, Worcester Polytechnic
Institute (1995); DrPH, Biostatistics, University
of North Carolina at Chapel Hill (2002)

William W. Pickard, Chair and Associate
Professor of Clinical Research; BS University
of North Carolina at Chapel Hill (1975);
MS, Pharmacy Practice, University of North
Carolina at Chapel Hill (1993); RPh, NC

Miranda van Tilburg, Associate Professor of Clinical Research; PhD, Health Psychology, Tilburg Univ, The Netherlands (1998), M.E. Psychology, Tilburg Univ, The Netherlands (1994)

Catherine W. Wood School of Nursing

Lori Byrd, Assistant Professor of Nursing; BS, Nursing, Atlantic Christian College (1988); MSN, Nursing Education, Walden University (2009); DNP, Executive Administration, Union University (2013)

Nancy D. Duffy, Director and Professor of Nursing; BS, Nursing, Bradley University (1976); MSN, Adult Health, University of North Carolina at Charlotte (1992); DNP, Rush University (2009)

Sharon Eck-Birmingham, Associate Professor of Nursing; BS, Nursing, University of Iowa (1983); MA in Nursing, University of Iowa (1986); D.N.Sc., Yale University (1999)

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)

Natasha Hall, Assistant Professor of Nursing; BS, Nursing North Carolina Central University (1998); MSN, University of Phoenix (2007); PhD, Walden University (2015)

Adrienne Heath, Instructor; BS, Nursing, Emory University (1992); MSN, Georgia State University (2000)

Shana Williams, Instructor; BS, Morris College (2002); BS, Nursing, Medical University of South Carolina (2004); MSN, Medical University of South Carolina (2007)

Tonya Willingham, Instructor; BS, Nursing, University of North Carolina at Charlotte (1993); MA, Counseling Ministry, Southeastern Baptist Theological Seminary (2002); MSN, Nursing Education, Queens University of Charlotte (2013)

Department of Pharmaceutical Sciences

Michael L. Adams, Dean and Professor of Pharmaceutical Sciences; PharmD, Campbell University (1996); PhD, Medicinal Chemistry, University of Washington (2003); RPh, NC

Antoine Al-Achi, 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)

C. Scott Asbill, Associate Dean of Academic Affairs and Professor of Pharmaceutics; PhD, Pharmaceutics, University of South Carolina (2000)

Christopher Breivogel, Vice Chair and Associate Professor of Pharmaceutical Sciences; BS, Biochemistry, University of North Carolina at Chapel Hill (1992); PhD, Pharmacology, Wake Forest University (1998)

David H. Eagerton, Chair and Associate Professor of Pharmaceutical Sciences; PhD, Pharmacology, University of South Carolina (1992)

Pius Fasinu, Assistant Professor of Pharmaceutical Sciences; BPharm, Olabisi Onabanjo University (2005); MS, Pharmacy, University of Witwatersrand (2010); PhD, Pharmacology, University of Stellenbosch (2013)

Michael Gallagher, Associate Director of Pharmaceutical Sciences, Instructor and Lab Manager; BS, Biochemistry, Pennsylvania State University (1989); MA, Human Services, Liberty University (2014)

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)

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)

Rob Hilgers, Assistant Professor of Pharmaceutical Sciences; BSc, Biochemistry, Hogeschool Heerlen (1995); PhD, Pharmacology, University of Maastricht (2004)

Stephen Holly, Associate Professor of Pharmaceutical Sciences; BS, Biochemistry, Clemson University (1992); PhD, Molecular Cell Biology and Biochemistry, Washington University (1999)

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, Assistant Research Professor; BS, Biology, Butler University (2003); MS, Microbial Biotechnology, North Carolina State University (2010)

Victor Pulgar, Associate Professor of Pharmaceutical Sciences; BS, Biochemistry, University of Chile (1992); PhD, Sciences, University of Chile (1999)

Brianne S. Raccor, Assistant Professor of Pharmaceutical Sciences; BS, Biology, Indiana University of Pennsylvania (2001); PhD, Chemistry, University of Pittsburgh (2008)

Stephen Sharkady, Assistant Professor of Pharmaceutical Sciences; BS, Biochemistry and Molecular Biology, Pennsylvania State University (1995); PhD, Biochemistry, Tulane University (2002)

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)

Dorothea K. Thompson, Associate Professor of Pharmaceutical Sciences; BA, Microbiology and English, University of Tennessee (1986); MS, Anaerobic Microbiology, Virginia Tech (1989); MA, English, Pennsylvania State University (1992); PhD, Molecular Microbiology, The Ohio State University (1997); Juris Doctor, University of Tennessee (2012)

Krisztian Toth, Associate Professor of Pharmaceutical Sciences; MD, University of Pecs Medical School (2004); PhD, Medical Sciences/Neuroscience, University of Pecs Medical School (2010)

Department of Pharmacy Practice

Asima Ali, Clinical Assistant Professor of Pharmacy Practice; PharmD, University of Illinois at Chicago (2011); RPh, IL, IN, NC

Casey Kimzey Baldwin, Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (2004); 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 (1995); PharmD, University of Michigan (1999); RPh, NC, SC

Riley Bowers, Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (2015); RPh, NC

J. Andrew Bowman, Director of Continuing Education and Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (1993); RPh, NC, VA

James A. Boyd, Associate Dean of Administration, Director of PharmD/MBA Program and 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, Vice-Chair 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

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

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

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

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); RPh, NC

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, Clinical Assistant Professor of Pharmacy Practice; BS, Pharmacy, University of Connecticut (1977); PharmD, University of North Carolina at Chapel Hill (2000); RPh, NC

Kimberly E. Kelly, Clinical Assistant Professor of Pharmacy Practice; BS, Biochemistry, North Carolina State University (2004); PharmD, University of North Carolina at Chapel Hill (2008); 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

D. Byron May, Chair and Professor of Pharmacy Practice; BS, Clemson University (1983); PharmD, University of Florida (1988); RPh, NC

Amber McLendon, Associate Professor of Pharmacy Practice; PharmD, University of North Carolina at Chapel Hill (2005); RPh, NC

Elizabeth P. 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, Associate Professor of Pharmacy Practice; PharmD, Mercer University (2004); RPh, NC

Ann Marie Nye, Associate Professor of Pharmacy Practice; PharmD, Medical College of Virginia (2001); RPh, NC

Scott L. Perkins, Co-Director of Drug Information Center and Clinical Assistant Professor of Pharmacy Practice; PharmD, Wingate University (2012); RPh, NC

Melanie W. Pound, Associate Professor of Pharmacy Practice; PharmD, Campbell University (2001); RPh, NC

Kathy Fulton Rumley, Clinical Associate Professor of Pharmacy Practice; PharmD, Campbell University (1994); RPh, NC

Tina H. Thornhill, Vice-Chair for Professional Education and Associate Professor of Pharmacy Practice; PharmD, Campbell University (1991); RPh, NC

Katie Trotta, Director, Baggett Wellness Institute and Clinical Assistant Professor of Community Pharmacy Practice; BS, Pharmacy Studies, Bouvé College of Health Sciences (2012); PharmD, Bouvé College of Health Sciences (2013); RPh, NC

Robert K. Tunney, Clinical Assistant Professor of Pharmacy Practice; BS, Pharmaceutical Sciences, Duquesne University (2013); PharmD, Duquesne University (2013); RPh, NC, PA, TN

Catherine L. Wente, Clinical Assistant Professor of Pharmacy Practice; PharmD, West Virginia School of Pharmacy (2002); RPh, KY, NC, WV

Dustin T. Wilson, Assistant Professor of Pharmacy Practice; BS, Health Sciences, East Tennessee State University (2003); PharmD, Campbell University (2007); RPh, NC

Brock Woodis, Associate Professor of Pharmacy Practice; BS, Biology, University of Alabama at Birmingham (2001); PharmD, Auburn University (2005); RPh, NC

Brenda Zagar, Clinical Assistant Professor of Pharmacy Practice; PharmD, Wilkes University (2013); RPh, NC, NY, PA

Department of Physical Therapy

Richard Bohannon, Professor of Physical Therapy; BS, Physical Therapy, University of North Carolina at Chapel Hill (1977); MS, Physical Therapy, University of North Carolina at Chapel Hill (1982); DPT, Boston University (2007); EdD, North Carolina State University (1988)

Jennifer Bunn, Director of Research and Assistant Professor of Physical Therapy; BS, Health and Physical Education, Nicholls State University (2002); MS, Exercise Physiology, University of Kentucky (2004); PhD, Baylor University (2008)

Deborah Constantine, Clinical Assistant Professor of Physical Therapy; BS, Physical Therapy, University of Maryland at Baltimore (1981); MHS, Physical Therapy, University of Indianapolis (1998); DPT, University of North Carolina at Chapel Hill (2016)

Rebecca Crouch, Assistant Director of Clinical Education and Assistant Professor of Physical Therapy; BS, Physical Therapy, Georgia State University (1975); MS, Physical Therapy, University of North Carolina at Chapel Hill (1986); DPT, University of North Carolina at Chapel Hill (2009)

Gregory Dedrick, Director, Physical Therapy Program and Associate Professor of Physical Therapy; BS, Kinesiology, University of North Texas (1994); MPT, University of Texas Medical Branch (1996); ScD, Texas Tech University (2005)

Michelle Green, Assistant Professor of Physical Therapy; BS, Clinical Science, Ithaca College (1994); MPT, Ithaca College (1995); Transitional DPT, University of North Carolina at Chapel Hill (2014)

Angela Griffin, Clinical Assistant Professor of Physical Therapy; BS, Physical Therapy, University of North Carolina at Chapel Hill (1978); MA, Developmental Disabilities, New York University (1991); PhD, Rocky Mountain University of Health Professions (2011)

Bradley J. Myers, Assistant Professor of Physical Therapy; BS, Health Fitness, Central Michigan University (2006); DPT Physical Therapy, Duke University (2009)

Catherine Noonan, Assistant Professor of Physical Therapy; BA, English, Vassar College (1999); DPT, University of North Carolina at Chapel Hill (2010)

Scot Sawyer, Assistant Professor of Physical Therapy; BS, Physical Therapy, University of New England (1994); DPT, University of New England (2011)

Heidi Shearin, Director of Clinical Education and Assistant Professor of Physical Therapy; BS, Physical Therapy, University of North Carolina at Chapel Hill (1986); DPT, A.T. Still University (2008)

Frank Tudini, Assistant Professor of Physical Therapy; BS, Physical Therapy, Daemen College (1994); MS, Physical Therapy, Daemen College (2000); DScPT, Physical Therapy, Andrews University (2009)

Department of Physician Assistant Practice

Thomas P. Colletti, Chair and Director, Physician Assistant Program and Associate Professor of Physician Assistant Practice; 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, Professor of Physician Assistant Practice; 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, Director of Pre-Clinical Education, Associate Professor of Physician Assistant Practice; 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 Physician Assistant Practice; BS, Kinesiology, Pennsylvania State University (2001); MSHS, PA-C, George Washington University (2003); MHA, University of North Carolina at Chapel Hill (2011)

Jennifer Hastings, Assistant Professor of Physician Assistant Practice; BS, Exercise Science, Virginia Tech (2003); MSHS, George Washington University (2005)

Betty Lynne W. Johnson, Assistant Dean of IPE and Associate Professor of Physician Assistant Practice; BS, Campbell University (1979); PA-C, Wake Forest University (1981); MEd, Campbell University (1986)

Miguel Pinero, Assistant Professor of Physician Assistant Practice; BS, Rollins College (1998); MHS, Physician Assistant Practice, Duke University (2004)

April Pope, Clinical Coordinator and Associate Professor of Physician Assistant Practice; BS, Biology, Campbell University (1991); PA-C, Wake Forest University School of Medicine (1993); MPAS, University of Nebraska (2007)

Christopher W. Stewart, Medical Director; Associate Professor of Physician Assistant Practice; BS, Biology, University of North Carolina (1994); MD, Brody School of Medicine, East Carolina University (1998)

Department of Public Health

Peter Ahiawodzi, Assistant Professor of Public Health; BSc, Agricultural Economics, Kwame Nkrumah University of Science and Technology (2001); MPH, Epidemiology, University of Louisville (2010); PhD, Epidemiology, University of Louisville (2014)

Lillian MacNell, Assistant Professor of Public Health; BS, Interdisciplinary Environmental Studies, University of Central Florida (2008); MA, Applied Sociology of the Environment, University of Central Florida (2010); PhD, Sociology, North Carolina State University (2016)

Wesley Rich, Associate Dean for Health Sciences and Assistant Professor of Public Health; BS, Campbell University (2001); MEd, Campbell University (2005); MA, East Carolina University (2014); PhD, Research and Policy Analysis, North Carolina State University (2009)

William J. Taylor, Jr., Associate Professor of Public Health; BS, Pharmacy, University of North Carolina at Chapel Hill (1972); PharmD, University of Tennessee (1976); RPh, NC

David Tillman, Chair and Assistant Professor of Public Health; BA, Campbell University (2001); MEd, Campbell University (2006); PhD, Educational Psychology, North Carolina State University (2012)

Pre-Nursing

Admissions Contact

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

Program Contact

Catherine W. Wood School of Nursing
 Phone: 910-893-1967

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 BSN 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 in all coursework in order to use credit hours as prerequisites for the Nursing program.

Freshman Year

Semester 1

Courses	Credit Hours
CUC 100 - Connections	0.5
ENGL 101 - Academic Writing	3
HIST 111 or 112 - Western Civilization I or II	3
BIOL 111 - Basic Biology	4
NURS 100 - Nursing	1
PE 185 - Lifetime Wellness	2
MATH 111 (or greater)	3
Total	16.5

Semester 2

Courses	Credit Hours
CUC 100 - Connections	0.5
ENGL 102 - Academic Writing & Literature	3
PSYC 222 - General Psychology	3
BIOL 275 - Clinical Microbiology	4
CHRS 125 - Intro to Christianity	3
A/M/T 131 - Intro to Art, Music, or Theater	3
Total	16.5

Sophomore Year

Semester 1

Courses	Credit Hours
CUC 200 - Connections	0.5
SOCI 225 - Principles of Sociology	3
BIOL 285 - Human Anatomy & Physiology I	4
PSYC 260 - Developmental Psychology	3
ELECTIVE (Humanities)	3
Total	13.5

Semester 2

Courses	Credit Hours
CUC 200 - Connections	0.5
ENGL 2XX - Literature	3
BIOL 286 - Human Anatomy & Physiology II	4
COMM 261 - Team & Small Group Communication	3
MATH 160 - Statistics	3
ELECTIVE (Humanities)	3
Total	16.5

Students must take 9 hours of electives from Humanities/Fine Arts and Social Sciences. At least 3 credit hours must come from each category.

It is strongly recommended that students take CHRS 224 - Christian Ethics.

Humanities/Fine Arts Electives:
 CHRS 202, 212, 224, 236, 251, 322, or higher;
 PHIL 121;
 ENGL 201, 202, 203, 204, 205, or 206;
 HIST 1xx, 2xx, 3xx, or 4xx;
 Foreign Language 221, 222, 241, or 242

Social Science Electives:
 CRIM; ECON; GEOG; POLS; PSYC; SOCI;
 COMM 240.

Pre-Pharmacy

Admissions Contact

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

Program Contact

Pre-Pharmacy Office
Phone: 1-800-334-4111 ext. 4711
Email: prepharm@campbell.edu

Pre-Pharmacy is a non-degree program, specifically designed to prepare students for entry into Campbell University's highly regarded and competitive College of Pharmacy & Health Sciences (CPHS).

The College offers several degrees for individuals who are interested in pharmacy or pharmacy related careers including bachelor's and master's degrees in clinical research or pharmaceutical sciences, and the doctor of pharmacy program. The Pre- Pharmacy curriculum helps students complete the requirements for entry into all of these programs.

During the pre-pharmacy years, a pre-pharmacy director works full-time to assist students. The director will provide students with appropriate advice each semester in planning their class schedules, as well as guidance for their academic and professional goals. CPHS faculty members are also available to provide students with advice on career pathways and residency information.

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
CUC 100 - Connections	0.5
ENGL 101 - Academic Writing	3
CHEM 111 - General Chemistry	4
BIOL 111 - Basic Biology	4
RELG 125 - Intro to Christianity	3
PE 185 - Lifetime Wellness	2
PHAR 100 - Pre-Pharmacy	
Freshman Seminar	1
Total	17.5

Semester 2

Courses	Credit Hours
CUC 100 - Connections	0.5
ENGL 102 - Academic Writing & Literature	3
CHEM 113 - General Chemistry	4
BIOL 221 - Human Anatomy & Physiology	4
MATH 122 - Calculus	4
THEA 115 - Public Speaking	3
Total	18.5

Sophomore Year

Semester 1

Courses	Credit Hours
CUC 200 - Connections	0.5
CHEM 227 - Organic Chemistry	4
BIOL 334 - Microbiology ²	4
PHYS 221 - Physics I	4
MATH 160 - Statistics	3
LANG 201 - Foreign Language	3
Total	18.5

Semester 2

Courses	Credit Hours
CUC 200 - Connections	0.5
CHEM 228 - Organic Chemistry	4
PHYS/BIOL 2xx - Physics II or Biology ¹	4
ECON 200 - Economics	3
HIST 1XX - Western Civilization I or II	3
ENGL 2XX - Literature	3
Total	17.5

¹Physics 2 is required for BS Pharmaceutical Sciences; an upper level Biology is required for BS in Clinical Research.

²Microbiology has a prerequisite of Cell Biology (BIOL201). Microbiology can be taken prior to Cell Biology in certain situations, with academic advisor approval.

Pharmacy Scholar Early Assurance Guarantee

High School Qualifications and Application Process

- The candidate must be enrolled as a student in the Pre-Pharmacy Program at Campbell University.
- 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.
- 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.
- Transfer students are ineligible for the guarantee program.

Pharmacy Scholar Early Assurance Guarantee Options

- Pre-Pharmacy Focused Pathway: (Six Year Pathway)
 - Successful candidates must earn a 3.6 or higher cumulative GPA upon application to the Doctor of Pharmacy program
 - Successful candidates must obtain

a percentile score of 60 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).

- Accelerated Bachelor of Science Pathway: (Seven Year Pathway)
 - Successful candidates must earn a 3.5 or higher cumulative GPA upon application to the Doctor of Pharmacy program
 - Successful candidates must obtain a percentile score of 60 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).
 - 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.
- Advanced Development Pathway: (Eight Year Pathway)
 - Successful candidates must earn a 3.4 or higher cumulative GPA upon application to the Doctor of Pharmacy program
 - Successful candidates must obtain a percentile score of 55 or better in the Biology and Chemistry portions of the Pharmacy College Admissions Test (PCAT).
 - 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.
 - 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.

Clinical Research

Department of Clinical Research

Campbell University
College of Pharmacy & Health Sciences
Department of Clinical Research
P.O. Box 1090
Buies Creek, NC 27506
910-814-4909

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.

3+2 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 3+2 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. Consideration for acceptance into this program, students must meet the following requirements:

- GPA of 3.0 or higher
- GRE verbal \geq 50th percentile, quantitative \geq 50th percentile, analytical writing \geq 3.0 (a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT score).
- All MSCR course prerequisites. See admissions requirements. Summer only admission for 3+2 program.

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.

The following courses will comprise the Clinical Research Minor:

Courses	Credit Hours
CLNR 324 - Intro to Biostatistics	3
CLNR 330 - Regulatory Affairs I	2
CLNR 334 - Scientific Literature Seminar I	1

Courses	Credit Hours
CLNR 341 - Medical Terminology	1
CLNR 363 - New Product Development	2
CLNR 364 - Principles of Clinical Research	2
CLNR 365 - Managing & Monitoring Clinical Trials I	2
CLNR 379 - Physical & Clinical Assessment	2
CLNR 450 - Data Management	3
CLNR 451 - Scientific & Technical Writing	1.5
Total	19.5

Admissions Policies

BSCR Matriculation

The students in the pre-pharmacy or equivalent program can declare their major and matriculate into the BSCR degree program. It should be noted that BSCR students are required to complete a semester-long internship. Most internships are completed at external companies that serve as experiential training sites for CPHS. These institutions may require criminal background checks, substance abuse screenings and/or more stringent immunization requirements. All BSCR students are subject to these types of screenings and the results will be evaluated as detailed in the Criminal Background Check and Substance Abuse Screening policies and procedures outline in this academic bulletin.

MSCR Matriculation

The MSCR program is a fully online, year round program with applicants considered for Summer and Fall 1 terms. While the Department operates on rolling admission, individuals should submit their applications by the following deadlines:

- Summer Admission: March 31
- Fall 1 Admission: June 30

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 3+2

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.

3. PharmD/MSCR dual degree applicant

An applicant with acceptance into the doctor of pharmacy (PharmD) program may apply for the MSCR program to pursue the PharmD/MSCR dual degree. Since matriculates to the PharmD program are only required to have completed 64 hours of prerequisites, and not required to have an undergraduate degree, these MSCR applicants may enter the program with or without completion of an undergraduate degree prior to enrollment. Accepted applicants have been accepted into both degree programs and normally pursue the degrees over a five-year time period. Students without an undergraduate degree cannot graduate with the MSCR until completion of the requirements of doctor of pharmacy degree or bachelor's degree is met.

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Admission Requirements

- Bachelor's degree or higher from a regionally accredited college or university (Exceptions: BSCR/MSCR 3+2 and PharmD/MSCR applicants)
- GPA of 3.0 or higher
- GRE verbal \geq 50th percentile, quantitative \geq 50th percentile, analytical writing \geq 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 prerequisites. However, students must complete prerequisite coursework specified for any MSCR course prior to enrollment as indicated in the prerequisite 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 not seeking a degree can register for courses if they:
 - Submit a completed application form and application fee.
 - Have earned a bachelor's degree (or higher) from a regionally accredited college or university with a GPA of 3.0 or higher.
 - Submit official transcripts of all college/university work attempted.
 - Submit GRE scores, having achieved a verbal score \geq 50th percentile, quantitative score \geq 50th percentile and an analytical writing score \geq 3.0

(a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT scores).

- GRE School Code: 4575
- Department Code: 0626
- Submit two letters of recommendation.
- Receive the permission of the MSCR Admissions Committee.
- Non-native English speakers must submit TOEFL ($>$ 100, internet based) or IELTS ($>$ 7.0, with no individual score below 6) scores.
 - Institution Code: 5100

Note: A maximum of 6 credit hours (not to exceed three courses) of MSCR courses that do not require a prerequisite may be *taken.*

Non degree-seeking students are encouraged to register as early as possible. However, in cases where demand for a class exceeds capacity, degree-seeking students will have priority over non-degree seeking students, which may result in a non-degree seeking student being removed from the course. Credit for any course(s) taken by non-degree seeking students who enroll in the program will be valid for up to five years following course completion.

**This includes clinical research core courses numbered 505, 515, 517, 519, 525, 530, 552, 561 and elective courses numbered 539, 541, 550, 555, 560, 574, 593 and 595.*

Note: A maximum of 6 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 for academic affairs is required.

International Students

- 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.
- This program is completely online with no residency required; therefore, international applicants are not eligible to receive US student visas.
- 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.

Leave of Absence Policy

Students requesting a leave of absence greater than two 8 week terms must notify 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 five 8 week terms.

Refund Policy

Reference the General Information section of this bulletin for more information regarding the CPHS refund policy.

Academic Standards

BS in Clinical Research

Academic standards and grade appeals for undergraduate programs are specified in Campbell University's Undergraduate Academic Bulletin.

MS in Clinical Research

Academic Probation

Students in the MSCR program are subject to academic probation for:

1. Failing to maintain a cumulative GPA of 3.0 or greater in all MSCR courses
2. Earning a final grade of less than C in any MSCR course. Students earning less than a C must repeat course and earn a grade of C or above

Any occurrence of either of the above will result in academic probation not to exceed one academic year. In addition, students must complete an academic contract to acknowledge their academic probation.

Academic Dismissal

Students in the MSCR program are subject to academic dismissal for:

1. Failure to complete all coursework within 5 years of beginning the program or 61 attempted credit hours, whichever comes first.
2. Failure to maintain a cumulative GPA of 3.0 or greater for any 10 consecutive MSCR credit hours.
3. Failure to successfully remediate (receive a C or above) a course in which a grade less than C was earned.

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 for academic affairs is required.

Transfer credit from equivalent coursework may be conditionally granted. When requesting a transfer, students must include:

- Previous course name and graduate 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 will be 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

For information regarding grade appeals, reference the College's Policies & Procedures at the beginning of this bulletin.

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

Semester 1

Courses	Credit Hours
CHEM 111/111L - General Chemistry I	4
BIOL 111/111L - Basic Biology	4
ENGL 101 - Academic Writing	3
CHRS 125 - Intro to Christianity	3
PE 185 - Lifetime Wellness	2
PHAR 100 - Pre-Pharmacy Seminar*	1
CUC 100 - Connections	0.5
Total	17.5

Semester 2

Courses	Credit Hours
CHEM 113/113L - General Chemistry II	4
BIOL 221/221L - Anatomy & Physiology	4
ENGL 102 - Academic Writing & Literature	3
MATH 122 - Calculus	4
THEA 115 - Public Speaking	3
CUC 100 - Connections	0.5
Total	18.5

Semester 3

Courses	Credit Hours
CHEM 227 - Organic Chemistry I	4
BIOL 334 - Microbiology	4
PHYS 221 - General Physics I	4
LANG 201 - Foreign Language	3
MATH 160 - Statistics*	3
CUC 200 - Connections	0.5
Total	18.5

Semester 4

Courses	Credit Hours
CHEM 228 - Organic Chemistry II	4
BIOL XXX - Biology Elective^	3/4
HIST 1XX - Western Civilization I or II	3
Humanities Elective (see listing)	3
ECON XXX - Econ. Elective	3
CUC 200 - Connections	0.5
Total	16.5-17.5

Semester 5

Courses	Credit Hours
CLNR 326 - Principles of Clin. Biochem	3
CLNR 341 - Medical Terminology	1
CLNR 363 - New Product Development	2
CLNR 364 - Principles of Clin. Research	2
CLNR 324 - Introduction to Biostatistics	3
CLNR 451 - Sci. & Technical Writing	1.5
A/M/T 131 - Intro to Art, Music, Theatre	3
Total	15.5

Semester 6

Courses	Credit Hours
CLNR 328 - Introduction to Pharmacology	4
CLNR 330 - Regulatory Affairs I	2
CLNR 365 - Manag./Monit. Clin. Trials I	2
CLNR 442 - Interpersonal Skills	2
CLNR 379 - Physical & Clinical Assessment	2
CLNR 334 - Scientific Literature Seminar I	1
ENGL 20X - Literature I or II	3
Total	16

Semester 7

Courses	Credit Hours
CLNR 465 – Manag/Monitor Clin. Trials II	2
CLNR 440 – Regulatory Affairs II	2
CLNR 450– Data Management	3
CLNR 336 – Scientific Lit Seminar II	1
UNIV XXX - Humanities/Social Science Elective (see listing)	3
Elective	2/3
Total	13-14

Semester 8

Courses	Credit Hours
CLNR 420 – Senior Internship***	14
CLNR 416 – Senior Seminar	1
Total	15

Total credit hours earned= 130.5 - 132.5

^ Biology electives must be bio-medical electives. Examples include, but are not limited to, advanced physiology, biomedical ethics, developmental anatomy, cellular & molecular biology (prerequisite for microbiology) & immunology (prerequisite for medical microbiology), cytology/histology, bioinformatics, genetics, immunology, advanced cell & molecular biology, and biochemistry.

*Statistics and public speaking are required for pharmacy, not clinical research. Biostatistics will count towards pharmacy

Humanities electives: CHRS: 202, 212, 224, 236, 251, 322 or higher; PHIL 121; ENGL 201 – 206; HIST 1xx – 4xx; LANG 221, 222, 241, 242

Social science electives: CRIM, ECON, GEOG, POLS, PSYC, SOCI, COMM 240

***Students are required to submit and pass a criminal background check and drug screen prior to the start of internship. Fall/Spring semesters only.

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

3+2 Program

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 3+2 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.

Semester 1

Courses	Credit Hours
CHEM 111/111L - General Chemistry I	4
BIOL 111/111L - Basic Biology	4
ENGL 101 - Academic Writing	3
CHRS 125 - Intro to Christianity	3
PHAR 100 - Pre-Pharmacy Seminar*	1
CUC 100 - Connections	0.5
Total	15.5

Semester 2

Courses	Credit Hours
CHEM 113/113L – General Chemistry II	4
BIOL 221 – Human Anatomy & Physiology	4
MATH 122 – Calculus	4
ENGL 102 – Academic Writing & Literature	3
PE 185 – Lifetime Wellness	2
CUC 100 - Connections	0.5
Total	17.5

Semester 3

Courses	Credit Hours
CLNR 101- >Intro to Clinical Research	1
CHEM 227– Organic Chemistry I	4
BIOL XXX – ^Biology Elective A/M/T 131 – Intro to Art, Music, or Theatre	3/4
UNIV XXX - Humanities Elective (see listing)	3
CUC 200 - Connections	0.5
Total	14.5-15.5

Semester 4

Courses	Credit Hours
CHEM 228 – Organic Chemistry II	4
BIOL XXX – ^Biology Elective	3/4
ENGL 20X - Literature I or II	3
MATH 160 - >Statistics	3
UNIV XXX - Social Science Elective (see listing)	3
CUC 200 - Connections	0.5
Total	16.5-17.5

Semester 5

Courses	Credit Hours
CLNR 326 – Principles of Clin. Biochem	3
CLNR 341 – Medical Terminology	1
CLNR 363– New Product Development	2
CLNR 364 – Principles of Clin. Research	2
CLNR 324 – Introduction to Biostatistics	3
CLNR 451 – Sci. & Technical Writing	1.5
THEA 115 - Public Speaking	3
Total	15.5

Semester 6

Courses	Credit Hours
CLNR 328 – Intro. to Pharmacology	4
CLNR 442 – Interpersonal Skills	2
CLNR 338 – Scientific Literature Seminar	2
UNIV XXX - Humanities/Social Science Elective (see listing)	3
LANG 20X - Foreign Language	3
HIST 1XX - Western Civ. I or II	3
Total	17

Summer 1

Courses	Credit Hours
CLNR 505 - Principles of Clin. Research	1.5
CLNR 515 - New Product Development	1.5
CLNR 519/L – Physical & Clinical Assessment w/lab	2
CLNR 561 – Healthcare Economics	2
Total	7

Semester 7

Courses	Credit Hours
Fall I	
CLNR 525 - Medical Ethics	2
CLNR 559 - Man./Mon. Clinical Trials	3
Total	5
Fall II	
CLNR 517 - Biostatistical Inference	2
CLNR 568 - Project Management	2
Total	4

Semester 8

Courses	Credit Hours
Spring I	
CLNR 518 - Intro to Biostats. Model.	2
CLNR 520 - Adv. Data Management	2
Total	4
Spring II	
CLNR 530 - Regulatory Affairs	2
CLNR 566 - Adv. Study Design/Ana.	2
Total	4

Summer 2

Courses	Credit Hours
CLNR 420 - +Senior Internship	14
CLNR 416 - Senior Seminar	1
CLNR 568 - Project Management	2
Total	17

Semester 9 Courses	Credit Hours
Fall I	
CLNR 606 - Clinical Research Seminar	2
CLNR 690 - Research Project I	1
CLNR 5XX - Elective	2
Total	5
Fall II	
CLNR 691 - Research Project II	2
Total	2

Semester 10 Courses	Credit Hours
Spring I	
CLNR 694 - Research Project III	2
CLNR 5XX - Elective	2
Total	4
Spring II	
CLNR 695 - Research Project IV	2
Total	2

Total = 152.5-154.5 Hours

*All freshmen will take a freshman seminar with their academic program.

>Not required to complete degree but recommended to meet the total degree hour requirement

^Biology electives must be bio-medical electives. (Examples include, but are not limited to, advanced physiology, biomedical ethics, developmental anatomy, cellular & molecular biology {prerequisite for microbiology & immunology [prerequisite for medical microbiology]}, cytology/histology, bioinformatics, genetics, immunology, advanced cell & molecular biology, and biochemistry.

Students are required to submit and pass a criminal background check and drug screen prior to the start of internship. Summer only.

Humanities electives: RELG 202, 212, 224, 236, 251, 322 OR HIGHER; PHIL 121; ENGL 201-206; HIST 1XX-4XX; LANG 221, 222, 241, 242

Social Science electives: CRIM, ECON, GEOG, POLS, PSYC, SOCI, COMM 240

Curriculum

MS in Clinical Research

Students are required to complete the following courses in addition to 4 credit hours of elective courses:

Core Courses	Credit Hours
Courses	
CLNR 505 – Principles of Clinical Research	1.5
CLNR 515 – New Product Development	1.5
CLNR 517 – Biostatistical Inference	2
CLNR 518 – Introduction to Biostatistical Modeling	2
CLNR 519/L – Physical & Clinical Assessment with Lab	2
CLNR 520 – Advanced Data Management	2
CLNR 525 – Medical Ethics	2
CLNR 530 – Regulatory Affairs	3
CLNR 552 – Scientific Communication	2
CLNR 559 – Managing & Monitoring Clinical Trials	3
CLNR 561 – Healthcare Economics	2
CLNR 566 – Advanced Study Design & Analysis	3
CLNR 568 – Project Management	2
CLNR 606 – Clinical Research Seminar	2
CLNR 690 – Research Project I	1
CLNR 691 – Research Project II	2
CLNR 694 – Research Project III	2
CLNR 695 – Research Project IV	2

Electives

Courses	Credit Hours
CLNR 504 – Special Research in Clinical Research*	1-2
CLNR 510 – Pharmacokinetics*	2
CLNR 528 – Pharmacogenetics	2
CLNR 529 – Epidemiology	2
CLNR 539 – Medical Genomics	2
CLNR 541 – Behavioral Medicine	2
CLNR 550 – Introduction to Public Health	2
CLNR 555 – Special Populations in Clinical Research	2
CLNR 560 – Pharmacoeconomics	2
CLNR 562 – Preclinical Drug Development	2
CLNR 573 – Evidence-Based Medicine	2
CLNR 574 – Integrated Drug Safety	2
CLNR 578 – Biopharmaceutics*	3
CLNR 581 – Pharmaceutical Compliance & QA	2
CLNR 593 – Leadership Development	2
CLNR 595 – Bioterrorism & Mass Public Health Threats	2

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 2 credit hours per academic term.

NOTE: Please refer to our website at www.campbell.edu/cphs for the most current curriculum and tuition information.

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 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 placed on understanding mechanism of action through detailed exploration of receptor-mediated events (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 Required: BIOL 221 or equivalent Anatomy & Physiology course

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.

Prerequisites: CLNR 363 & 364

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. For the first presentation, students will prepare a brief presentation on a scientific research paper of their own choosing and use PowerPoint to make visual aids to supplement their presentation. The second will be a seminar-style presentation on a health-related topic, again using PowerPoint to generate slides as visual aids.

Prerequisite: CLNR 334

CLNR 338 Scientific Literature Seminar (3+2 Program)

This interactive class is combination of CLNR 334, Scientific Literature Seminar I and CLNR 336, Scientific Literature 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. In addition to learning how to apply these skills with a team, complete comprehension of these skills are applied in the form of two solo oral presentations. For the first presentation, students will prepare a brief presentation on a scientific research paper of their own choosing, and use PowerPoint to make visual aids to supplement their presentation. The second will be a seminar-style presentation on a health-related topic, again using PowerPoint to generate slides as visual aids.

Prerequisite: CLNR 451

CLNR 341 – Medical Terminology (Online)

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 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 insure 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-definition, methodology, conduct and applications. The course will explore basic elements of clinical research including the hierarchy of clinical design, clinical trial conduct, and safety surveillance. Application of clinical trial knowledge to specific medical practice issues will also be explored.

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 assessment, and diagnostic test data.

Prerequisite: BIOL 221 or equivalent Anatomy & Physiology course

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

Fall/Spring semesters only (BSCR students)

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 GCC & BSCR courses and at least a 2.0 major and cumulative GPA

Co-requisite: CLNR 416

Fall/Spring semesters only (BSCR students)

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 465 – 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

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.

Prerequisite: CLNR 517

Acceptable Co-requisite: 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

Acceptable Co-requisite: 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 health care 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

This course 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 health care economics. This perspective will be delivered by starting at the macro-economic, global level and then narrowing the focus of study to numerous national health care systems and landmark case studies. All case studies will be aimed at measuring the economic impact of specific health care crises. Each case will be preceded by the description of cultural values that impact health care delivery and government response in the event of a health care 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

Acceptable Co-requisite: CLNR 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 & 559

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 physiochemical 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 health care 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. Cross-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
Co-requisite: CLNR 690

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 develop and submit a written Research Proposal describing their research question(s) and research hypotheses.

In later research project courses, the student will develop a full Study Protocol describing the methodology that will be employed in the study, and then ultimately conduct the study and present study results.

Prerequisites: All core courses; 3.0 GPA
Co-requisite: CLNR 606 or CLNR 568

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.

Prerequisite: CLNR 690

CLNR 694 – Research Project III

Credit: 2 Hours

This course is the third 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 finalize their Research Protocol, obtain IRB approval /exemption (as appropriate) and develop a Data Analysis Plan for their project. In the last research project course, the student will analyze their data and present study results.

Prerequisite: CLNR 691

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.

Prerequisite: CLNR 694

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.

General Sciences

Department of Clinical Research
Program Director: 910-814-5755

Department of Pharmaceutical Sciences
Program Administrator: 910-893-1695

Academic Programs

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.

Academic Standards

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

Curriculum

Clinical Research Concentration

Fall Semester 1

Courses	Credit Hours
CHEM 111/111L - General Chemistry I	4
BIOL 111/111L - Basic Biology	4
ENGL 101 - Academic Writing	3
CHRS 125 - Intro to Christianity	3
PE 185 - Lifetime Wellness	2
CUC 100 - Connections	0.5
Total	16.5

Spring Semester 2

Courses	Credit Hours
CHEM 113/113L - General Chemistry II	4
BIOL 221/221L - Human Anatomy & Physiology	4
ENGL 102 - Academic Writing & Literature	3
MATH 122 - Calculus	4
THEA 115 - Public Speaking	3
CUC 100 - Connections	0.5
Total	18.5

Fall Semester 3

Courses	Credit Hours
CHEM 227/227L - Organic Chemistry I	4
BIOL XXX - Biology Elective	3/4
PHYS 221/221L - Physics	4
HIST 1XX - Western Civilization I or II	3
LANG 201 - Foreign Language	3
CUC 200 - Connections	0.5
Total	17.5-18.5

Spring Semester 4

Courses	Credit Hours
CHEM 228/228L - Organic Chemistry II	4
BIOL XXX - Biology Elective	3/4
ECON XXX - Economics	3
HIST 1XX- Western Civilization I or II	3
ENGL 2XX - Literature	3
PE 111 - PE Activity	1
CUC 200 - Connections	0.5
Total	17.5-18.5

Fall Semester 5 (B1 CLNR)

Courses	Credit Hours
CLNR 326 - Principles of Clinical Biochemistry	3
CLNR 341 - Medical Terminology	1
CLNR 363 - New Product Development	2
CLNR 364 - Principles of Clinical Research	2
CLNR 324 - Intro to Biostatistics	3
CLNR 451 - Scientific & Technical Writing	1.5
UNVI 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 365 - Managing & Monitoring Clinical Trials	2
CLNR 442 - Interpersonal Skills	2
CLNR 379 - Physical & Clinical Assessment	2
CLNR 334 - Scientific Literature Seminar I	1
ENGL 2XX - Literature	3
RELG 2XX - Religion Elective	3
Total	19

Fall Semester 7 (P1)

Courses	Credit Hours
PHRD 510 - Pharmacy Seminar I	0
PHRD 511 - Biomedical Foundations	4
PHRD 512 - US Health Care	1.5
PHRD 513 - Pharmacy Practice Skills I	0.5
PHRD 514 - Personal/ Professional Development I	0.5
PHRD 515 - Pharmaceutics, Pharmacokinetics & Calculations	1.5
PHRD 516 - Drug Information I	1
PHRD 521 - Pharmaceutical Sciences Foundations	3
PHRD 522 - Nonprescription Therapeutics	3
PHRD 523 - Pharmacy Practice Skills II	0.5
PHRD 524 - Personal/ Professional Development II	0.5
PHRD 525 - Pharmaceutics, Pharmacokinetics, & Calculations II	2
PHRD 526 - Drug Information II	1
Total	19

Spring Semester 8 (P1)

Courses	Credit Hours
PHRD 530 - Pharmacy Seminar II	0
PHRD 531 - Integrated Pharmacotherapy I Infection & Immunity	5.5
PHRD 532 - Medical Literature Evaluation I	1
PHRD 533 - Pharmacy Practice Skills III	.5
PHRD 534 - Personal/ Professional Development III	.5
PHRD 535 - Pharmaceutics, Pharmacokinetics, & Calculations III	2
PHRD 541 - Integrated Pharmacotherapy II Endocrine	5
PHRD 542 - Medical Literature Evaluation II	1
PHRD 543 - Pharmacy Practice Skills IV	.5
PHRD 544 - Personal/ Professional Development IV	.5
PHRD 545 - Pharmaceutics, Pharmacokinetics, & Calculations IV	3
Total	19.5

Total credit hours earned 142.5-144.5

Pharmaceutical Sciences Concentration

Fall Semester 1

Courses	Credit Hours
CHEM 111/111L - General Chemistry I	4
BIOL 111/111L - Basic Biology	4
ENGL 101 - Academic Writing	3
CHRS 125 - Intro to Christianity	3
PE 185 - Lifetime Wellness	2
CUC 100 - Connections	0.5
PHAR 100 - Freshman Seminar	1
Total	17.5

Spring Semester 2

Courses	Credit Hours
CHEM 113/113L - General Chemistry II	4
BIOL 221/221L - Human Anatomy & Physiology	4
ENGL 102 - Academic Writing & Literature	3
MATH 122 - Calculus	4
THEA 115 - Public Speaking	3
CUC 100 - Connections	0.5
Total	18.5

Fall Semester 3

Courses	Credit Hours
CHEM 227/227L - Organic Chemistry I	4
BIOL 334/334L - Microbiology	4
PHYS 221/221L - Physics I or II	4
HIST 1XX - Western Civilization	3
LANG 201 - Foreign Language	3
CUC 200 - Connections	0.5
Total	18.5

Spring Semester 4

Courses	Credit Hours
CHEM 228/228L - Organic Chemistry II	4
PHYS 222 - General Physics II	4
ECON 200 - Economics	3
ENGL 2XX - Literature	3
ELECTIVE (Humanities)	3
CUC 200 - Connections	0.5
Total	17.5

Fall Semester 5 (B1 PHSC)

Courses	Credit Hours
PHSC 323 - General Biochemistry	3
PHSC 325/325L - General Biochemistry Prelab/Lab	1
PHSC 210 - Laboratory Safety I	1
PHSC 324 - Intro to Biostatistics	3
PHSC 451 - Scientific & Technical Writing	1
PHSC 442 - Interpersonal Skills	1.5
PHSC 220/220L - Quantitative Lab Techniques	2
A/M/T 131 - Intro to Art, Music, Theatre	3
UNIV XXX - Humanities/Social Science	3
Total	18.5

Spring Semester 6 (B1 PHSC)

Courses	Credit Hours
PHSC 328 - Intro to Pharmacology	4
PHSC 410 - Analytical Instrumentation	3
PHSC 411/411L - Analytical Instrumentation Prelab/Lab	1
PHSC 338 - Product & Process Validation	2
PHSC 326 - Molecular Biology	3
PHSC 327/327L - Molecular Biology Prelab/Lab	1
PHSC 334 - Scientific Literature Seminar I	1
Total	15

Fall Semester 7 (P1)

Courses	Credit Hours
PHRD 510 - Pharmacy Seminar I	0
PHRD 511 - Biomedical Foundations	4
PHRD 512 - US Health Care	1.5
PHRD 513 - Pharmacy Practice Skills I	0.5
PHRD 514 - Personal/Professional Development I	0.5
PHRD 515 - Pharmaceutics, Pharmacokinetics & Calculations	1.5
PHRD 516 - Drug Information I	1
PHRD 521 - Pharmaceutical Sciences Foundations	3
PHRD 522 - Nonprescription Therapeutics	3
PHRD 523 - Pharmacy Practice Skills II	0.5
PHRD 524 - Personal/Professional Development II	0.5
PHRD 525 - Pharmaceutics, Pharmacokinetics, & Calculations II	2
PHRD 526 - Drug Information II	1
Total	19

Spring Semester 8 (P1)

Courses	Credit Hours
PHRD 530 - Pharmacy Seminar II	0
PHRD 531 - Integrated Pharmacotherapy I Infection & Immunity	5.5
PHRD 532 - Medical Literature Evaluation I	1
PHRD 533 - Pharmacy Practice Skills III	.5
PHRD 534 - Personal/Professional Development III	.5
PHRD 535 - Pharmaceutics, Pharmacokinetics, & Calculations III	2
PHRD 541 - Integrated Pharmacotherapy II Endocrine	5
PHRD 542 - Medical Literature Evaluation II	1
PHRD 543 - Pharmacy Practice Skills IV	.5
PHRD 544 - Personal/Professional Development IV	.5
PHRD 545 - Pharmaceutics, Pharmacokinetics, & Calculations IV	3
Total	19.5

Total credit hours earned 142.5

Students must take 9 hours of electives from Humanities/Fine Arts and Social Sciences.

At least 3 credit hours must come from each category.

Humanities/Fine Arts Electives:

RELG 202, 212, 224, 236, 251, 322, or higher;

PHIL 121;

ENGL 201, 202, 203, 204, 205, or 206;

HIST 1xx, 2xx, 3xx, or 4xx;

Foreign Language 221, 222, 241, or 242

Social Science Electives:

CRIM, ECON, GEOG POLS, PSYC, SOCI,

COMM 240

Course Descriptions

For a list of course descriptions please view the clinical research, pharmaceutical sciences and pharmacy sections of this Academic Bulletin.

Nursing

Catherine W. Wood School of Nursing

Campbell University
College of Pharmacy & Health Sciences
4250 US 421 South
Lillington, NC 27546
910-893-1967

Academic Programs

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 (2015) 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, cultural sensitivity, professional values and practice across the life span. The Catherine W. Wood School of Nursing is dedicated to helping students become the best health care professionals they can be by offering interprofessional education opportunities, top of the line training facilities, and first-hand experience with rural health care needs.

Program Philosophy

The mission of Campbell University and the Catherine W. Wood School 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 health care 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 health care 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 Catherine W. Wood School of Nursing is consistent with the missions of Campbell University and the College of Pharmacy & Health Sciences. 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 health care 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 health care.
- 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 & Professionalism

Students in the Catherine W. Wood School of Nursing 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. 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, Catherine W. Wood School of Nursing, and CPHS Guidelines

- The Pre-Nursing student accepts the latest published version of the Campbell University Bulletin Undergraduate Studies and is responsible for being completely familiar with the provisions therein.
- Upon enrollment into the BSN Degree Program, the student accepts the latest published version of the BSN Degree Student Handbook and is responsible for being completely familiar with the provisions therein.
- As the School of Nursing is part of CPHS, the student also accepts the latest published version of the CPHS Academic Bulletin whereas it applies to Nursing.

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 annually in January. This process requires a competitive application for admission to the degree program.

BSN Admission

The process of BSN Division admission will be a joint collaborative effort with the College of Pharmacy & Health Sciences (CPHS) Admissions Office. The admissions

process 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 BSN Coursework.

The admissions process includes an electronic application that opens annually in January and is open for a total of 3 weeks. The application is more competitive when the student completes all prerequisites at the end of the spring semester before fall matriculation to the BSN 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. BSN Science Grade Point Average of 3.0 or above is preferred (Biology, Microbiology, Human Anatomy I & II). The minimum science GPA for admission is 2.75.
3. The admissions process may include a personal interview at which time the applicant will submit a written 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. In the clinical nursing courses, applicants will be notified by the College of Pharmacy & Health Sciences (CPHS) Admissions Office of an admissions decision through email and an official decision letter to be delivered 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.

It should be noted the Admissions Committee continues to review the results of pending coursework and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

BSN 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 BSN division, through the electronic 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.
3. For transfer credit of BSN level courses, the official transcript and copy of the course syllabus must be submitted to the Catherine W. Wood School 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 former Dean/Director 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.

Program Requirements

- Health Care Provider Cardiopulmonary Resuscitation (CPR) Certificate prior to BSN division coursework
- Criminal background check
- Applicants must have documentation of the following vaccines and health assessments prior to BSN 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
- 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
- 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. See BSN Degree Program Student Handbook for Technical Standards for Admissions, Academic Progression, and Graduation in the BSN Pre-Licensure Nursing Program.
- Negative Substance Abuse Screening

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 Catherine W. Wood School of Nursing BSN graduate is a safe and effective care provider.

Grading Scales

Nursing

A	93-100
B	85-92
C	75-84
D	68-74
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 Methods of Evaluation- 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). Rounding does not occur for end of course grades.
4. In the clinical nursing courses (Fundamentals of Nursing Practice with Older Adults, Adult Health Nursing Practice I and II, Women’s Health/ Pediatrics, Psychiatric and Mental Health Nursing Practice, 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 or 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 BSN 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. Reference the General Information section in this bulletin for more details.

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.

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/

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.

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 Campbell University 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 Catherine W. Wood School of Nursing 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 Catherine W. Wood School of Nursing 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 Catherine W. Wood School of Nursing 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:

- Description of academic standing (remediation, probation, suspension, dismissal)
- Rationale for academic standing
- Criteria required to regain good academic standing
- Contact information of the program director to discuss items outlined in the letter
- Notification of appeals process

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

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 Starfish Warnings/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

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 Starfish Warnings/Academic Success Plans in one semester, beyond the remediation efforts for a grade of less than 80% on exams.

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 Academic Performance and Standards Committee and program director, with notification to the associate dean for health sciences, 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 Starfish Warnings/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

Academic Suspension

Academic suspension from the Catherine W. Wood School of Nursing 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 Catherine W. Wood School of Nursing Academic Performance and Standards 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 for health sciences.

Academic Dismissal

The Catherine W. Wood School of Nursing Academic Performance and Standards Committee and program director may recommend academic dismissal to the associate dean for health sciences 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 Starfish Warnings/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 program director will notify each student, the Academic Performance and Standards Committee chair and the associate dean for health sciences of the 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 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 the associate dean for health sciences. Students have the opportunity to appeal any decision made by the APSC by submitting a written petition to the associate dean for health sciences 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 for health sciences is final.

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 recorded grade. 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.

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 University's Office of Financial Aid.

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 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 Catherine W. Wood of Nursing appoints a faculty advisor for each student to assist the student with program planning and tracking of prerequisites and BSN 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 (2015) 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, 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.

Students must take 9 hours of electives from Humanities/Fine Arts and Social Sciences. At least 3 credit hours must come from each category.

Humanities/Fine Arts Electives:

RELG 202, 212, 224, 236, 251, 322, or higher; PHIL 121; ENGL 201, 202, 203, 204, 205, or 206; HIST 1xx, 2xx, 3xx, or 4xx; Foreign Language 221, 222, 241, or 242

Social Science Electives:

CRIM; ECON; GEOG; POLS; PSYC; SOCI; COMM 240

Freshman Year

Semester 1

Courses	Credit Hours
CUC 100 - Connections	0.5
ENGL 101 - Academic Writing	3
HIST 111 or 112 - Western Civilization I or II	3
BIOL 111 - Basic Biology	4
NURS 100 - Nursing	1
PE 185 - Lifetime Wellness	2
MATH 111 (or greater)	3
Total	16.5

Semester 2

Courses	Credit Hours
CUC 100 - Connections	0.5
ENGL 102 - Academic Writing & Literature	3
PSYC 222 - General Psychology	3
BIOL 275 - Clinical Microbiology	4
CHRS 125 - Intro to Christianity	3
A/M/T 131 - Intro to Art, Music, or Theater	3
Total	16.5

Sophomore Year

Semester 1

Courses	Credit Hours
CUC 200 - Connections	0.5
SOCI 225 - Principles of Sociology	3
BIOL 285 - Human Anatomy & Physiology I	4
PSYC 260 - Developmental Psychology	3
ELECTIVE (Humanities)*	3
Total	13.5

**It is strongly recommended that students take CHRS 224 - Christian Ethics.*

Semester 2

Courses	Credit Hours
CUC 200 - Connections	0.5
ENGL 2XX - Literature	3
BIOL 286 - Human Anatomy & Physiology II	4
COMM 261 - Team & Small Group Communication	3
MATH 160 - Statistics	3
ELECTIVE (Humanities)	3
Total	16.5

Junior Year

Semester 1

Courses	Credit Hours
NURS 300 - Professional Nursing Practice	3
NURS 310 - Health Assessment	3
NURS 320 - Fundamentals of Nursing Practice with Older Adults	6
NURS 330 - Concepts of Pathophysiology & Pharmacology I	3
Total	15

Semester 2

Courses	Credit Hours
NURS 350 - Research & Evidence Based Practice	3
NURS 360 - Adult Health Nursing Practice I	5
NURS 370 - Psychiatric & Mental Health Nursing Practice	5
NURS 340 - Concepts of Pathophysiology & Pharmacology II	3
Total	16

Senior Year

Semester 1

Courses	Credit Hours
NURS 400 - Adult Health Nursing Practice II	5
NURS 410 - Nursing Practice of Women & Children	6
NURS 420 - Leadership in Nursing	3
NURS 430 - Health Policy	2
Total	16

Semester 2

Courses	Credit Hours
NURS 450 - Population Health	5
NURS 460 - Focused Client Experience Practicum	6
NURS 470 - Transitions to the Role of the Professional Nurse	3
NURS 480 - Nursing Informatics	2
Total	16

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 Catherine W. Wood School 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

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

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.

Pharmaceutical Sciences

Department of Pharmaceutical Sciences

Campbell University
College of Pharmacy & Health Sciences
PO Box 1090
Buies Creek, NC 27506
(800) 760-9734, ext. 1695

Academic Programs

The Department of Pharmaceutical Sciences offers a bachelor's and a master's degree in pharmaceutical sciences preparing students for careers in pharmaceutical, biotechnology, academic or governmental institutions.

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 post-graduate studies. The BSPS program offers one of the most extensive laboratory-based programs in North Carolina.

Students who declare BSPS as their major 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:

- Alcami
- Barry-Wehmler Design Group
- BioAgilytix
- Biogen
- Carolina Medical Products
- Catalent
- DSM
- Eisai
- Fujifilm Diosynth
- FDA
- Grifols
- Hatch Beauty
- Hospira (Clayton and Rocky Mount)
- Innospec
- Liquidia
- Envisia
- Novozymes
- Purdue Pharma
- Sandoz
- State Bureau of Investigation
- Xytrus

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 four tracks listed below. Each track has two options (see Curriculum).

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 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.

Admission Policies

BSPS Matriculation

The students in the pre-pharmacy or equivalent program can declare their major and matriculate into the BSPS degree program. It should be noted that BSPS students are required to complete a semester-long internship. Most internships are completed at external companies that serve as experiential training sites for CPHS. These institutions may require criminal background checks, substance abuse screenings and/or more stringent immunization requirements. All BSPS students are subject to these types of screenings and the results will be evaluated as detailed in the Criminal Background Check and Substance Abuse Testing policies and procedures outline in this academic bulletin.

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.

The earlier an application is received, the greater the probability of being admitted to the first choice track. International applicants must apply by April 1 due to additional time required for federal process requirements for international students. Domestic applicants must apply by June 15.

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+Research program: A Campbell University undergraduate BSPS student may apply to the MSPS program in the spring of their Junior year. These students can take MS courses prior to graduating from the BSPS program. Accepted applicants can complete the BS and MS degrees in approximately 5 years 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 prior to matriculation or not. (See the Dual Degree Programs section of this bulletin for more information.)
4. See Cooperative Degree Program section.

Admissions Requirements

- Preferred undergraduate GPA of 3.0 or better

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.

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 for academic affairs.

Application Process

- Complete the online application and submit the following:
 - All college transcripts
 - GRE scores (PCAT scores may be substituted)
 - TOEFL or IELTS scores (if applicable)
 - Application fee (\$50)

Unofficial (scanned electronic or photocopies) of transcripts and test scores may be submitted for consideration of admission. If the admissions committee finds the applications materials sufficient for acceptance, official copies of all materials must be received by the admissions department before acceptance can be granted.

Admission Policies

1. Those who have earned a prior graduate degree in another chemical or biomedical discipline are not required to submit GRE or other test scores.
2. Students not seeking a degree can receive approval to register for courses if they:
 - Have taken all prerequisites for the desired course(s) and earned a C or higher
 - Completed an application with required \$50 fee (unless currently enrolled at Campbell University)
 - Submit all official college transcripts (unless a current or former student at Campbell University)
 - Receive permission from the course instructor(s)
3. 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 must submit a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.

2. The completed application for admission must be received by the April 1 deadline to be considered for admission.
3. If English is not the applicant's native language, applicants must also submit official scores for the TOEFL (≥ 80) or IELTS (≥ 6.5). Applicants who have lived in the US or another English-speaking country may not be required to submit English proficiency test scores (at the admission committee's discretion).

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Refund Policy

An admissions deposit is required of each accepted applicant. These deposits are non-refundable. Please refer to the General Information section of this bulletin for more information.

Academic Standards

BS in Pharmaceutical Sciences

Academic standards and grade appeals for undergraduate programs are specified in the Campbell University's Undergraduate Academic Bulletin.

MS in Pharmaceutical Sciences

The academic success of our students is of utmost importance in the MSPS program in the Department of Pharmaceutical Sciences. The main purpose of the PS Graduate Academic Performance & Standards (GAPS) policy is to identify and alert students with low academic performance as early as possible and provide assistance to improve their performance to successfully finish the program.

1. Students must have a cumulative GPA of 3.0 in all MSPS courses to graduate from the program, and all courses (Core courses, track-specific course and electives) must be completed with a grade of C or better. Earning any credits of D or F will result in dismissal.
2. Students must maintain a minimum cumulative GPA of 3.0 to remain in good academic standing. Failure to maintain this minimum GPA will result in a probationary period, not exceeding one semester. The student will be dismissed if the required cumulative GPA has not been achieved at the end of the probationary period.

- Students dismissed from the program may appeal to the MSPS Graduate Academic Performance and Standards (GAPS) Committee to be reinstated. Upon reinstatement, any course with a grade of D or F must be repeated at the next course offering, unless the Committee otherwise allows.
- Students must complete all coursework within seven (7) years of entering the MSPS program.

The chair of the GAPS Committee 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 or by email concerning his/her standing in the program. A student may appeal the director's decision to the Committee (see Rule 3 above). The student must submit a written or email 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 & Health Sciences for a review. The Committee's chair will notify the student in writing or by email 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 & 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 still 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 & 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.

Curriculum

BS in Pharmaceutical Sciences

Fall Semester 1

Courses	Credit Hours
CHEM 111/111L - General Chemistry I	4
BIOL 111/111L - Basic Biology	4
ENGL 101 - Academic Writing	3
CHRS 125 - Intro to Christianity	3
PE 185 - Lifetime Wellness	2
CUC 100 - Connections	0.5
PHAR 100 - Freshman Seminar	1
Total	17.5

Spring Semester 2

Courses	Credit Hours
CHEM 113/113L - General Chemistry II	4
BIOL 221/221L - Human Anatomy & Physiology	4
ENGL 102 - Academic Writing & Literature	3
MATH 122 - Calculus	4
THEA 115 - Public Speaking	3
CUC 100 - Connections	0.5
Total	18.5

Fall Semester 3

Courses	Credit Hours
CHEM 227/227L - Organic Chemistry I	4
BIOL 334/334L - Microbiology & Immunology	4
PHYS 221/221L - Physics	4
HIST 1XX - Western Civilization I or II	3
LANG 201 - Foreign Language	3
CUC 200 - Connections	0.5
Total	17.5-18.5

Spring Semester 4

Courses	Credit Hours
CHEM 228/228L - Organic Chemistry II	4
PHYS 222 - General Physics II	4
ECON 200 - Economics	3
ENGL 2XX - Literature	3
UNIV XXX - Humanities Elective	3
CUC 200 - Connections	0.5
Total	17.5

Fall Semester 5

Courses	Credit Hours
PHSC 323 - General Biochemistry	3
PHSC 325/325L - General Biochemistry Prelab/Lab	1
PHSC 210 - Laboratory Safety I	1
PHSC 324 - Intro to Biostatistics	3
PHSC 451 - Scientific & Technical Writing	1
PHSC 442 - Interpersonal Skills	1.5
PHSC 220/220L - Quantitative Lab Techniques	2
UNIV XXX - Humanities/Social Science Elective	3
Total	15.5

Spring Semester 6

Courses	Credit Hours
PHSC 328 - Intro to Pharmacology	4
PHSC 410 - Analytical Instrumentation	3
PHSC 411/411L - Analytical Instrumentation Prelab/Lab	1
PHSC 338 - Product & Process Validation	2
PHSC 326 - Molecular Biology	3
PHSC 327/327L - Molecular Biology Prelab/Lab	1
PHSC 334 - Scientific Literature Seminar I	1
Total	15

Fall Semester 7

Courses	Credit Hours
PHSC 418 - Industrial Pharmacy	3
PHSC 419/419L - Industrial Pharmacy Prelab/Lab	1
PHSC 438 - Pharmaceutical Methods & Bioprocessing	3
PHSC 439L - Pharmaceutical Methods & Bioprocessing Lab	1
PHSC 336 - Scientific Literature Seminar II	1
UNIV XXX - Elective	3
Total	12

Spring Semester 8

Courses	Credit Hours
PHSC 420 - Senior Internship*	12-14
PHSC 416 - Senior Seminar	1
Total	13-15
Total credit hours earned	130.5-132.5

*Students are required to submit and pass a criminal background check prior to the start of internship. Internships may require an additional criminal background check and/or drug screen before beginning internship.

Students must take 9 hours of electives from Humanities/Fine Arts and Social Sciences. At least 3 credit hours must come from each category.

Humanities/Fine Arts Electives:

RELG 202, 212, 224, 236, 251, 322, or higher;
PHIL 121; ENGL 201, 202, 203, 204, 205, or
206; HIST 1xx, 2xx, 3xx, or 4xx;
Foreign Language 221, 222, 241, or 242

Social Science Electives:

CRIM; ECON; GEOG; POLS; PSYC; SOCI;
COMM 240

MS in Pharmaceutical Sciences

The MSPS curriculum has four (4) tracks of specialization within the Pharmaceutical Sciences with two paths in each track. A student in a track has to choose one of the following two paths: 1) Research path-complete an independent research project (PHSC 620) to deepen knowledge and skills in a specific area within their track or 2) Dual path-complete two laboratory-based courses from another track (Group 1 electives) to broaden the student's experience, knowledge-base, skill-set and marketability in other areas of the Pharmaceutical Sciences.

Core Curriculum

All students must complete courses in the Core Curriculum, all the courses in the Track Curriculum for one of the 4 tracks listed below, and either complete a research project (PHSC 620) or choose two advanced laboratory courses from Group 1 Electives. Most tracks also have a 3-credit Group 2 elective requirement.

Courses	Credit Hours
PHSC 508 - Drug Development & Pharm. Regulations	2
PHSC 512 - Fundamentals of Cellular Pharmacology	4
PHSC 523 - Graduate Expt'l Design & Biostatistics	4
PHSC 534/536 - M.S. Seminar I & II	2
PHSC 574 - Biopharmaceutics	3
PHSC 610 - Research Proposal	2
PHSC XXX - Research Project OR two Group 1 Electives	4-8
Total	21-25

Track Curricula**Bioprocessing & Biotechnology**

Prerequisites: Microbiology, Molecular Biology

Courses	Credit Hours
PHSC 526/526L - Protein Analysis & Bioassays/Lab	4
PHSC 538/538L - Bioprocessing I: Upstream Technologies/Lab	4
PHSC 539/539L-Bioprocessing II: Downstream Operations/ Lab	4
PHSC 5XX - Group 2 Elective(s)	3
Total	15

Industrial Pharmacy

Prerequisites: Analytical Instrumentation

Courses	Credit Hours
PHSC 412L – Analytical Lab Survey (Exempted for CU BSPS graduates)	1
PHSC 514/515/515L – Industrial Pharmacy/Lab	4
PHSC 540 – Adv. Physical Pharmacy	3
PHSC 542 – Adv. Topics in Industrial Pharmacy	3
PHSC 543L – Adv. Industrial Pharmacy Lab	1
PHSC 510 – Pharmacokinetics	2
PHSC 565 – Adv Exptl Design	2
PHSC 573 – Intro to Multivariate Analysis	1
Total	17

Pharmaceutical Analysis

Prerequisites: Analytical Instrumentation

Courses	Credit Hours
PHSC 412L – Analytical Lab Survey (Exempted for CU BSPS graduates)	1
PHSC 514/515/515L – Industrial Pharmacy/Lab	4
PHSC 528/529L – Adv. Pharm Analysis-Separation/Lab	4
PHSC 530/531L – Adv. Pharm. Analysis- Spectroscopy/Lab	4
PHSC 5XX - Group 2 Elective(s)	3
Total	16

Pharmacology

Courses	Credit Hours
PHSC 526/526L – Protein Analysis & Bioassays/Lab	4
PHSC 590/590L – Adv. Pharmacology & Toxicology/Lab	3
PHSC 592 – Adv. Cellular & Molecular Pharmacology	3
PHSC 510 – Pharmacokinetics	2
PHSC 5XX - Group 2 Elective(s)	3
Total	15

Group 1 Electives

Each student will complete either PHSC 620 (Research Project) OR any two of the following courses that are not already in their track curriculum (above):

Courses	Credit Hours
PHSC 514/515/515L – Industrial Pharmacy/Lab	4
PHSC 526/526L – Protein Analysis & Bioassays/Lab	4
PHSC 528/529L – Adv. Pharm Analysis-Separation/Lab	4
PHSC 530/531L – Adv. Pharm. Analysis- Spectroscopy/Lab	4
PHSC 538/538L– Bioprocessing I: Upstream Technologies/ Lab	4
PHSC 539/539L– Bioprocessing II: Downstream Operations/ Lab	4
PHSC 540 or 542 + 543L – Adv. Topics in Industrial Pharmacy or Adv Physical Pharmacy with Adv Industrial Pharmacy Lab	4
PHSC 590/590L – Adv Pharmacology and Toxicology Lab	3

Group 2 Electives

All students, except those in the Industrial Pharmacy track, complete 3 credits of Group 2 electives. Electives must be PHSC or PHAR courses 500 or above. Other PHAR courses that are not listed below may be used as electives with approval by course instructor and associate dean for academic affairs. Group 1 electives can also be used to fulfill the elective requirement.

Courses	Credit Hours
Group 1 Electives	3-4
PHSC 501 – Herbal Medicine	1
PHSC 502 – Alternative Medicine	3
PHSC 503 – Drug Discovery	1
PHSC 504 – Adv. Research in Pharm. Sciences	1-3
PHSC 510 – Pharmacokinetics	2
PHSC 518 – General Toxicology/ Lab	3
PHSC 522 – Molecular Modeling	2
PHSC 558 – Essentials of Toxicology	2
PHSC 564 – Pharmacogenetics	2
PHSC 565 – Adv. Exp. Design	2
PHSC 577, 581, 583 – Pharmacology & Medicinal Chemistry II, III or IV	3-4
PHSC 582 – Botanical Medicine Seminar	1

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 their BSPS internship (one summer or a semester).

Admission Requirements

Students working toward a BSPS degree may apply for the 5 Years + Research option if they have a minimum GPA (overall and major) of 3.0 after the fall of the junior year

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. Applicants must submit GRE scores before they begin their senior year to be considered for acceptance. PCAT scores may be accepted in place of GRE.

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 514/515/515L – Industrial Pharmacy/Lab	4
PHSC 438/439L – Pharm. Methods & Bioprocessing/Lab	4
PHSC 336 – Scientific Literature Seminar II	1
PHSC 523 – Graduate Experimental Design & Biostatistics*	4
Total	13

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

Summer after Semester 8

Courses	Credit Hours
PHSC 420 – Senior Internship	12
PHSC 416 – Senior Seminar	1
Total	13

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 – Elective	3
PHSC 610 – Research Proposal or Group 1 Elective	2-4
Total	6-8

Semester 10

Courses	Credit Hours
PHSC 536 –M.S. Seminar II	1
PHSC 620 – Research Proposal or Group 1 Elective and PHSC 610	4-6
Total	5-7

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	
<i>Only core courses this semester</i>	

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 528/529L - Adv. Pharm. Analysis-Separations	4
Semester 8	
PHSC 530 - Adv. Pharm Analysis-Spectroscopy/Lab	4
Semester 9	
PHSC 508 - Drug Dev. and Pharm. Regulations	2
PHSC 512 - Fundamentals of Cellular Pharmacology	4
Semester 10	
<i>Only core courses this semester</i>	

Pharmacology

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

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, in a total of five years for both degrees.

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.

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 3.0 or above
- GRE (or PCAT) score

Application deadline is April 1 of the student's junior year.

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 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.

Note: This course is prerequisite (or co-

requisite) for the MS Analytical and Industrial Pharmacy tracks. Campbell BSPS graduates are exempted from this requirement.

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 – Industrial Pharmacy/Pre-Lab/Lab

Credit: 3/1 hours

This survey course introduces student to the preformulation and manufacturing of pharmaceutical dosage forms. Students gain hands-on experience in the laboratory setting performing a variety of USP tests and unit operations. 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 biomacromolecules 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 501 – Herbal Medicine

Credit: 1 hour

This course discusses herbal remedies recently being used as alternative solutions to treat and prevent different diseases.

PHSC 502 – Alternative Medicine

Credit: 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.

PHSC 503 – Drug Discovery

Credit: 1 hour

This course will teach students how to apply the principles of pharmacology to drug discovery and development. Specifically, pharmacological concepts will be applied directly to the detection and quantification of drug effect. Concepts such as affinity, efficacy

and allosteric modulation will be described in the definition of new drugs for receptors, ion channels and enzymes. Drug development also will be discussed through the application of pharmacokinetics. In addition, the infrastructure of drug discovery and development organizations will be discussed to give students a working knowledge of the working environment for possible career choices.

PHSC 504 – Advanced Research in Pharmaceutical Sciences

Credit: Variable (Maximum 3 hours)

This research course is intended for the advanced student. It continues the basic science research experience.

This course is co-listed as PHAR 504.

PHSC 508 – Drug Development and Pharmaceutical Regulations

Credit: 2 hours

This course provides basics in worldwide drug regulations, facilities and process qualification, and in the processes involved in drug discovery and development. Students will learn how specific activities fit into the overall scheme of drug development, and evaluate the impact of each activity on the overall progression of a new drug candidate. The principles of good manufacturing practices (cGMP), quality control, and quality assurance are introduced. The basics of regulatory compliance, the global nature of regulations, and the importance of validation in the Pharmaceutical and Biotechnology Industries are presented. Federal regulations and documentation requirements are discussed.

PHSC 510 – 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.

This course is co-listed as PHAR 410.

PHSC 512 – Fundamentals of Cellular Pharmacology

Credit: 4 hours

This course begins with the background material in cell biology necessary for understanding the latter section on cellular and molecular pharmacology. The focus will be on experimental methods for discovery of the biochemical mechanisms of cell function and drug action. Topics will include cell structure and function, ligand/receptor interactions, drug efficacy, and structure and function of the four classes of receptors.

Prerequisite: Biochemistry

PHSC 514/515/515L – Industrial Pharmacy/Pre-Lab/Lab

Credit: 3/1 hours

These courses build upon the survey courses and provide advanced understandings in pre-formulation and manufacturing of pharmaceutical dosage forms. Students gain hands-on experience in the laboratory setting performing a variety of USP tests and unit operations in advanced level.

Credit cannot be received for both PHSC 514/515/515L and PHSC 418/419/419L.

Prerequisites: Enrollment is limited to students who have declared Pharmaceutical Science as a major or permission of the course director.

PHSC 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.

Prerequisites: PHAR 412 or PHSC 512. This course is co-listed as PHAR 518.

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 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/Laboratory

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/Laboratory

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 418/419/419L 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 Laboratory

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 toxicants 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 physiochemical 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 581 – Pharmacology & Medicinal Chemistry III

Credit: 4 hours

This course is designed to provide the student with a firm foundation in the various therapeutic agents available to effectively manage central nervous system, paracrine/ inflammatory, gastric erosion, and endocrine 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.

PHSC 582 – Botanical Medicine 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.

PHSC 583 – Pharmacology & Medicinal Chemistry IV

Credit: 3 hours

This course is designed to provide the student with a firm foundation in the various therapeutic agents available to effectively manage infections and cancers. 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.

PHSC 590/590L – Advanced Pharmacology & Toxicology/Laboratory

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 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, public speaking, 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, public speaking, 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
- Statistics (3 credit hours)
- 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* (12 credit hours)
 - General Biology (4 credit hours)
 - Anatomy & Physiology (4 credit hours)
 - Microbiology (4 credit hours)

**Biological Sciences, Physics, General Chemistry, and Organic Chemistry must have a lab associated with the course.*

Non-Science Requirements

- 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.
- English Composition** (6 credit hours)
 - English courses must be writing intensive. Basic literature courses will not be accepted.
- Public Speaking
 - Public Speaking may count as a humanities course if the applicant has 64 hours of credit at matriculation.
- Humanities and Social Sciences** (12 credit hours)
 - Literature, Philosophy, Music, Art, Drama, Foreign Language, Religion, History, Political Science, Psychology or Sociology

Electives

- Electives** (12 credit hours)
 - Suggested: Pharmaceutical Sciences or Clinical Research courses, advanced biology or chemistry. Several business electives may also meet the requirements of the joint dual 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 and a business headshot 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 of the affiliated institutions may have a negative impact on the candidate's ability to matriculate into the program.

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Supplemental Materials

A supplemental application and business headshot 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 process incorporates a multiple mini interview (MMI) format. This interview style is composed of six stations and is designed to assess non-cognitive qualities, such as communication skills, critical thinking, ethical reasoning, and leadership. The applicant will participate in six MMI stations. Each station lasts 7 minutes, with a short break in between interviews. MMI interviews are moderated by faculty, alumni, staff, clinicians, and/or residents affiliated with CPHS. Applicants are notified by email of admissions decisions following the interview process.

Early Decision Program

An Early Decision Program is available for eligible applicants and the deadline for Early Decision is determined by PharmCAS. 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 at Campbell, the applicant must have taken the PCAT examination by September 30. The completed PharmCAS application with the Early Decision designation along with three letters of recommendation, the supplemental application (fee waived for Early Decision applicants) and photograph must be submitted by September 5, 2017.

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

Please refer to the General Information section of this bulletin for more information regarding the CPHS Refund Policy.

Technical Standards for Admission & Matriculation

The American Council on Pharmaceutical Education (ACPE), the accrediting body for colleges and schools of pharmacy, 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 nonacademic 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, with or without appropriate accommodations in compliance with the Americans with Disabilities Act.

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, emergency treatment, general care and basic physical assessment (e.g. blood pressure assessment, palpation for edema, injection of vaccines, cardiopulmonary resuscitation, etc.). Motor function must also be sufficient to perform drug distribution duties in both a community and hospital pharmacy setting. 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. Candidates must possess the motor function sufficient to direct and supervise the accurate compounding and preparation of medications for dispensing to patients. 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. They must be able to use computer-based information systems. These motor actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing. Additionally, some aspects of patient care require that the student-pharmacist be able to act quickly and speed of motor function may be an essential requirement.

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.

Equal Access to the CPHS Doctor of Pharmacy Program

In accordance with Campbell University's nondiscrimination policy, the College of Pharmacy and Health Sciences does not discriminate against otherwise qualified individuals with disabilities who apply for admission to the Doctor of Pharmacy Program. It is recognized that the on-site interview may not adequately evaluate a student's ability to meet the technical standards. Students who are unsure that they meet the technical standards because of a disability are responsible for disclosing that to the Campbell University Office of Student Success. The Director of Access and Outreach in that office will consult with the student regarding possible accommodations. At the time an applicant accepts an offer to the CPHS Doctor of Pharmacy Program, students must attest in writing that they are able to meet the CPHS Doctor of Pharmacy Program Technical Standards for Admission & Matriculation with or without accommodations. Students will continue to attest in writing during orientation through the fourth year that they are still able to meet the standard. The Campbell University College of Pharmacy and Health Sciences (CPHS) Doctor of Pharmacy Program is committed to providing reasonable accommodation to ensure that equal access is provided to all otherwise qualified students in the course of study leading to the Doctor of Pharmacy degree and licensure.

Accommodations

Accepted students with a disability who believe they may require accommodations to meet these standards should contact the Campbell University Director of Access and Outreach immediately upon accepting the offer of admission. The Director of Access and Outreach will consult with CPHS faculty and administration to determine what reasonable accommodations can be made. Candidates pursuing the academic program who lack the ability to appropriately meet these standards and who do not seek accommodations may place themselves in academic jeopardy. The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted.

Should a candidate develop a condition during their education in the Doctor of

Pharmacy Program that would affect their ability to meet the above technical standards, they must contact the Director of Access and Outreach to determine whether or not a reasonable accommodation can be made. Again, candidates pursuing the academic program who lose the ability to appropriately meet these standards and who do not seek accommodations may place themselves in academic jeopardy.

The Director of Access and Outreach will meet with the student to discuss areas of concern. The Director will then develop an accommodation plan, consulting regularly with the CPHS Office of Academic Affairs, the CPHS Office of Admissions & Student Affairs, the CPHS Office of Experiential Education, the CPHS Pharmacy Practice Department, and other offices as needed during the process. The accommodation plan will require the approval of the above departments, Student Success, and the student.

Appeals Process

Accepted students who are unable to meet the Technical Standards, with or without accommodation, will not be offered admission and will be notified by the Admissions Committee. Enrolled students who are found not to meet the Technical Standards, with or without accommodation, will be evaluated by the CPHS Academic Performance and Standards Committee and will use the appeals process for that committee's work. Student-pharmacists who disagree with an accommodation decision made by the office of Student Success will use that office's grievance process which can be found in the "Student Guide to Accessing Disability Services" on the Student Success website.

The above standards mirror our current CPHS PA program technical standards and were modified based on language incorporated from the Technical Standards documents of University of Mississippi, University of Iowa, Kentucky University, and University of California, San Francisco 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/dismitted 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 for 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 for 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.
- 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.

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.

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 for 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 for 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 for academic affairs within three 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 for academic affairs is final.

Any student on probation or suspension for a stated period is automatically ineligible to:

- Hold or run for elected office in student professional organizations;
- Represent the University in any capacity either on campus or away from campus (see policy below for additional information);
- Compete for honors and distinctions;
- Participate as an elected representative or member of an honorary organization;
- Obtain reimbursement monies from any funders in the College of Pharmacy & Health Sciences (see policy below for additional information).

Event Attendance Policy

While on any level of probation or suspension, students are unable to represent the university in any outside event such as regional or national conferences/meetings. A student may appeal this decision by submitting a written petition to the Academic Performance and Standards Committee addressing the conference or meeting they desire to attend, why they want to attend this meeting, how attendance at this meeting would benefit their education and provide documentation of how they have improved their academic studies during the semester.

Reimbursement Policy

While on any level of probation or suspension, students are unable to receive any reimbursement monies from any funders in the College of Pharmacy & Health Sciences. The student's academic status will be confirmed upon any request for such funds.

Remediation Policy

After a Failure Occurs

If a student fails a course despite the efforts made for early academic difficulty detection, re-taking of the course will be required. The student may be allowed to re-take the course during summer session or may be required to re-take the course during the next academic year when the course is regularly offered. The determination will be made by the Academic Performance and Standards Committee (APSC) and the decision can be appealed to the associate dean for academic affairs, College of Pharmacy & Health Sciences.

As directed by the APSC, the student may take the course again in the following summer session after the original course was taken. For example, if a student fails PHAR/PHRD XXX, he/she will register for and re-take it as a summer course. This will result in additional tuition charges for the summer course, which may be assessed on a per-credit hour basis. A student may only take the remediation course at the direction of the APSC with authorization by the CPHS Associate dean for academic affairs. The

remediation course will be a Summer Session III registered course. The actual duration and schedule for the course will be determined by the course director. It is recommended that the course duration meets the following criteria: a minimum of 1 week per credit hour and a maximum of 2 weeks per credit hour.

The remediation course should be similar in scope and content to the original course. The remediation course will be available to the student primarily as a self-directed module with the student(s) viewing the lectures that were recorded at the time the student was originally enrolled in the course. The remediation course will be supplemented with weekly conferences with the instructor(s) to ensure student progress. Weekly conferences with the instructor(s) may be held in person, via email, by phone, or with other technology (at the discretion of the individual instructor). A comparable number of exams should be administered during the remediation course. Exams may be of a different format, with a different number of questions; however, the exams should cover the same material covered during the regular course. Exams may be given via ExamSoft.

The student will be required to take all course exams ON CAMPUS as offered through the coursemaster or his/her affiliate. Exam dates will be communicated at the beginning of the course. Exam dates, office hours, or conference times with the instructor(s) will also be specified in the syllabus. Whether the student passes or fails the remediation course, his or her progression in the curriculum will be determined by the APSC.

In addition, any student who has NOT failed a course, but has a cumulative GPA lower than 2.2, may also take a remediation course if it is recommended by the APSC and approved by the CPHS associate dean for academic affairs. Students will only be allowed to take 1 summer remediation course per summer. If greater than 1 course is required for remediation, the student should repeat any additional courses during the regularly scheduled Fall/Spring semester. Students may only take a summer remediation course when recommended by the APSC.

Remediation Policy for Class of 2021

The goal of this remediation policy is to provide the underperforming student with a means to overcome any deficiencies in achieving the competency in the required course material if failure of one examination in one course results in course failure. The student is expected to seek individualized assistance during the course as needed. Students having academic difficulties should utilize tutoring services and meet with the

course director/instructor for guidance. Remediation is only available for course failure related to academic performance and not failures due to academic dishonesty, honor code violations, or other professionalism issues.

Eligibility:

- 1) A student is eligible for remediation if they fail a required course based on underperformance on a single examination. A student is NOT eligible for remediation if failure is based on lack of attendance, multiple examination failures, or failure to complete assigned work.
- 2) Students may remediate only one course assessment during the remediation period.
- 3) A student is allowed only one attempt at remediation for a given course.
- 4) Students will be allowed to remediate no more than three times during years one to three of the professional degree program with no more than one course remediated in the same block. A student is not allowed to remediate a fourth didactic course and is automatically dismissed from the program. This dismissal may be appealed to the Academic Performance and Standards Committee (APSC) and then to the associate dean for academic affairs.

Procedures and Grading

- 1) The remediation process occurs during the week between each block and the week at the end of an academic semester.
- 2) Remediation procedures will include assessment as deemed appropriate by the course director. The student and the course director/instructor will agree upon the remediation plan. Examples of plan content may include items such as exam date, meeting times, or assignments.
- 3) Students may not remediate and take an IPPE or an APPE at the same time.
- 4) A student who is unsuccessful at remediation will earn a failing grade and will be required to retake the course either utilizing the After a failure occurs remediation policy or the next time the course is offered.
- 5) The student is required to achieve a score of 70% or better for the assessment. The maximum score recorded for the assessment is 70%. The new grade will replace the failed examination in the calculation of the course grade. Failure to pass the course after remediation will result in an F grade in the course and a requirement to retake the course.

- 6) Multiple course failures in a semester will prevent student progression and require repeating the unsuccessful semester after review and recommendation of the APSC.

Academic Progression for the Classes of 2018, 2019, and 2020

During the fall of 2017 the new Doctor of Pharmacy Curriculum will begin. In the event of academic probation, suspension or other academic issues for students matriculating in the previous curriculum, the College will work with the student pharmacist and make reasonable accommodations that allow the student pharmacist to matriculate in the curriculum in which they started. If a student pharmacist has multiple deficiencies as defined in the academic standards published in the CPHS academic bulletin, then the student pharmacist may be dismissed from the program. In the event of multiple deficiencies, the student pharmacist may be allowed to remediate up to two of these deficiencies during summer school per approval of the Academic Performance and Standards Committee (APSC) and the associate dean of academic affairs. If a decision is made by APSC and the associate dean of academic affairs to allow the student pharmacist to continue with more than two deficiencies, the remaining deficiencies will need to be corrected during the fall and/or spring semesters either when the courses are repeated or as an independent study after the courses are no longer offered. If the deficiencies cannot be corrected by independent study, the student pharmacist will be required to restart the curriculum beginning with the P1 year.

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 for academic affairs within three 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 for academic affairs is final.

Advancement to a Higher Class

Advancement to a higher class requires:

To a Second Professional Year

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

To Third Professional Year

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 for 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 prerequisites). 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, August, 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. Refer to the General Information section of this bulletin for detailed information about the withdrawal policy of the College of Pharmacy & Health Sciences.

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 associate dean for academic affairs.

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 determine the applicant's status for enrollment or acceptance to the doctor of pharmacy program and payment of the matriculation deposit. The associate dean of admissions & student affairs will communicate in

writing the status of the application to the applicant, including any requirements that must be met by the applicant prior to processing the request.

3. The associate dean of admissions & student 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 for academic affairs for evaluation and recommended disposition.
4. The associate dean for academic affairs will evaluate the transcript, course(s) and documentation submitted. If the associate dean for academic affairs has any question as to the equivalence of the course(s), he or she may contact the previous institution to secure additional information. If the associate dean for academic affairs determines that the submitted documentation is insufficient to determine equivalency, he or she may contact the applicant or previous institution to secure adequate documentation, or return the application to the applicant with an explanation of the required documentation to determine equivalence.
5. If the associate dean for 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 for academic affairs shall make a recommendation to the dean whether to accept or deny the course transfer or course-waiver.
7. The associate dean for academic affairs 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 associate dean shall be final.

Grading System for classes of 2018, 2019 and 2020

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

Grade	Quality of Work	4-Pt. Scale
A	Superior/Excellent	4
B	Above average	3
C	Average	2
D*	Below average	1
F	Failure	0
I	Incomplete	0
IC	Incomplete continued	0
AU	Audit	0
P	Passing (graduate only)	0

* Not eligible for Class of 2021

Grades of "A, B, C, D, F, and I" are included in semester hours attempted and will affect the grade point average. Grades of "IC, 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 in the CPHS will be available through the University's WebAccess system at the end of each semester. The official records of each student in CPHS will be maintained securely 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 maintained by the Office of Admissions & Student Affairs within the university archival system. 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 affairs.

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, IPV (polio), MMR, influenza, and a TB test. Students should note that the Hepatitis A series is delivered in two injections over a six month period and the Hepatitis B series is delivered in three injections over a six month period. Ideally while the Hepatitis A and B series should be completed by the first day of classes, students whose acceptance is not granted in a sufficient time to permit this may complete the series during the first year providing they have started the immunization series.
- Students must maintain an up-to-date record of all required documentation (including, but not limited to: immunizations, HIPAA certification training, chest radiograph, emergency contact information, drug allergies, drug screen, and immunization certification) in Magnus.
- 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.
- Confirm there are no CU Business Office "holds" on their student account(s).

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

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, submission of a rotation preference sheet, or they may opt to work with the Office of Pharmacy Experiential Education (OPEE) to contract new rotation sites.

Advanced Pharmacy Practice Experiences

In the final year of the curriculum, P-4 students are divided into four geographic areas to complete nine required advanced pharmacy practice experiences (APPE). These regions include:

- Buies Creek/Fayetteville/Lumberton
- Greenville/Wilson/Rocky Mount
- Raleigh/Durham
- Winston-Salem/Greensboro

After geographical areas are established, students may enter preferences for clinical rotation sites and/or preceptors for each of the six required rotations. Within the nine rotations, six rotations are required and three are electives. A lottery is held to assist students in selecting their three elective practice experiences.

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

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.

Registration of Rotations and Billing

Introductory Pharmacy Practice Experiences and Advanced Pharmacy Practice Experiences

Student pharmacists with any CU Business Office holds on their student accounts cannot register for the next semester; therefore, they will not be able to start any rotation (IPPE or APPE) until the CU Business office has cleared the student through the CPHS Office of Academic Affairs.

Student pharmacists who successfully complete all required prerequisite work in the first and second years will complete a one month (160 hour) introduction to community and introduction to hospital rotation, respectively. Students will earn either a grade of pass (P) or fail (F) in an IPPE. These rotations will be completed in either December (of the fall term) or in the summer term (May, June, or July). Student pharmacists will register for the IPPE in the term the rotation is completed and the earned grade will be recorded during the corresponding term. Students completing their IPPE during the summer term will not be charged any additional tuition beyond the fall and spring term for that year.

Due to the Office of the Registrar's closing date for submission of fall grades (early to mid-December), students completing an IPPE in December will receive an incomplete (IC) recorded as their initial course grade. Once all rotation requirements are satisfied and the final grade is recorded in the rotation management system, the OPEE will submit a Grade Change Form to the registrar's office. Student pharmacists completing their IPPE in the summer term will receive a grade during the same term. However, due to the Office of Registrar's closing date for submission of summer grades (middle of July), students completing an IPPE in July will receive an IC recorded as their initial course grade. Once all rotation requirements are satisfied and the final grade is recorded in the rotation management system, the OPEE will submit a Grade Change Form to the registrar's office.

In the event that a student pharmacist cannot or elects not to complete the IPPE in either the summer term or in December following the first year, he/she must complete both IPPEs during the summer term following the second year or in December.

If a student pharmacist receives a grade of Fail (F) on an IPPE, the grade will be submitted to the registrar's office and recorded on the student's transcript. The student will not be allowed to reschedule the failed rotation in the same term; therefore, the grade will remain on the transcript. If a student pharmacist is unsuccessful at either of the IPPEs, then he/she will be rescheduled for another

introductory rotation of the same type either the following fall term (December), or the next summer term where applicable.

The OPEE will communicate the IPPE schedule of all student pharmacists with the Office of Academic Affairs prior to the beginning of each term. The OPEE will submit grades for all IPPEs and APPEs.

Student pharmacists successfully completing all required coursework in the preceding three years, including both IPPEs, are classified as P4s and can register for their P4 rotations (APPEs). A minimum of nine rotations (1440 hours) in advanced community, ambulatory care, geriatrics, internal medicine I, internal medicine II, advanced hospital, and three electives is required. Grades for APPEs are recorded as A, B, C, or F (fail). Students usually complete their APPEs in May through April of the following year of expected graduation. All students will register according to his/her actual rotation schedule. Students will only be charged one program fee for the fourth year; one-half of the fee will be incurred in the fall term and the other half during the spring term. In the sample schedule below, the student will be registered in the summer, fall, and spring terms; however, one-half of the program fee will be assessed in the fall and the other half in the spring. No program fee will be incurred in the summer.

May	Advanced community
June	Ambulatory care
July	Geriatrics
August	Off
September	Elective 1
October	Advanced hospital
November	Elective 2
December	Off
January	Internal medicine 1
February	Internal medicine 2
March	Off
April	Elective 3

Students registering for less than two APPEs in either the fall or spring term will be classified as a half-time student. The OPEE will communicate with the Office of Academic Affairs all student pharmacist APPE schedules prior to the beginning of each term and if/when rescheduling becomes necessary.

If a student pharmacist receives a grade of F in an APPE, the grade will be recorded on his/her transcript; moreover, the student will not be rescheduled for the rotation again within the same term preventing grade replacement. APPEs are not completed in succession.

If an APPE must be rescheduled for any reason (including, but not limited to: a rotation cancellation, rotation failure, course failure, not documenting all necessary requirements

for site clearance, medical illness, etc.), the OPEE will make every effort to reschedule the rotation for the next semester or term; however, the OPEE implies no guarantee of on-time graduation if placement for a rotation is not available.

If a student pharmacist's rotation cycle exceeds more than one calendar year (12 months) for any reason beyond OPEE's inability to find suitable placement, he/she will be responsible for the per credit hour cost of each rotation. If a student pharmacist's rotation cycle exceeds more than one calendar year (12 months) due to the OPEE's inability to find suitable placement, there will be no additional cost for the rotation.

Once a student pharmacist begins his/her P4 rotations, all rotations must be completed within a two-year (24 month) time frame. If a student pharmacist is granted a leave of absence during the APPE cycle that exceeds two years (24 months), then all rotations from prior to the leave must be repeated. If a student pharmacist is granted a leave of absence during the APPE cycle that exceeds one year (12 months), he/she will automatically be referred to the Academic Performance and Standards Committee for recommendations regarding successful re-entry into the program.

Clinical Rotation Sites

Within the four 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, and long-term care facilities.

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*
- Hospital Management
- Infectious Disease
- Intensive Care
- Internal Medicine I & II*
- Nuclear Pharmacy
- Oncology
- Pediatrics
- Pharmacy Administration

- Psychiatry
 - Surgery
 - Veterinary
- *Required rotation*

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. It should be noted that the CPHS experiential clerkship program will suffice for the internship requirement in North Carolina.

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 175 requests per month from a variety of settings including community pharmacies, clinics, and hospitals.

The DIC is an optional rotation site for students to complete an elective 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, residents, and other student health care professionals in which drug information skills can be developed;
- To function as a resource center for faculty, students, and other health care professionals;
- To aid in the promotion of CPHS by offering drug information services throughout the state.

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)
(910) 893-1200 Ext. 2701
Fax: (910) 893-1476
Mobile App (iOS only): "Campbell DIC"
Online requests: <http://bit.ly/DrugInfoCenter>

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 Health Care 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. 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.

Ambulatory Care

PGY2 Residency, Ambulatory Care, Campbell/Benson Area Medical Center/Duke Family Medicine

The Campbell University College of Pharmacy & Health Sciences PGY2 Ambulatory Care residency, coordinated between Benson Area Medical Center and Duke Family Medicine, is designed to develop the knowledge, attitude and skills required to provide exemplary patient care in the ambulatory care setting. The two primary practice locations will provide the resident with exposure to a diverse patient population consisting of all age groups, literacy levels, and financial status. Pharmacist managed services include diabetes mellitus, anticoagulation, hypertension, dyslipidemia, obesity, asthma, COPD and smoking cessation with a focus on reducing the burden of disease for patients and families, the community and the healthcare system as a member of an interdisciplinary team.

As the residency progresses, the resident will be given increasing responsibility for the management of the programs at each health center to ensure continuity of care and develop long-term opportunities for positive therapeutic and lifestyle interventions. Additionally, the resident will be involved in the didactic and experiential training of pharmacy students by taking the lead on precepting students on Advanced Pharmacy Practice Experience (APPE) Ambulatory Care rotation, as well as, opportunities to teach on campus in several courses including Therapeutics, Nonprescription Drug Therapy, and Pharmacy Practice Skills.

The residency consists of a 12-month training program designed to comply with the most current ASHP standards for PGY2 residency. A minimum of 4 months will be spent at each of the two practice locations, Duke Family Medicine and Benson Area Medical Center. In addition, up to three elective rotations may be selected to be included in the residency program to meet the individual goals and interests of the resident. Upon completion of the residency, the resident should be able to practice as a pharmacist clinician in ambulatory care and have met the requirements to apply for certification as a Board Certified Ambulatory Care Pharmacist (BCACP).

East Carolina University, Department of Family Medicine

CPHS offers a PGY2 residency with East Carolina University Department of Family Medicine to develop advanced knowledge, attitudes and skills to provide

pharmacotherapy for elderly patients.

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. 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.

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 services. Didactic teaching experience is obtained through participation in the therapeutics series, ID elective, and therapeutic drug monitoring 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 local and/or national meetings.

Many opportunities are available to the resident to prepare and deliver seminars to local, state and national organizations.

Internal Medicine

Duke Regional Hospital

The PGY2 pharmacy residency in Internal Medicine at CPHS and Duke Regional Hospital (DRH) is designed to prepare a motivated, ambitious pharmacist to practice and teach on an internal medicine service while contributing to organizational and departmental leadership in both hospital and academic settings. The focus of this program is to further the Duke Regional Hospital mission of caring for our patients and the health of our community while providing the resident with opportunities for clinical and didactic teaching, research, and scholarship at Campbell University College of Pharmacy & Health Sciences (CPHS). Upon completion of this residency, the graduate will be well equipped to develop and foster a clinical practice site with a strong medicine teaching service for pharmacy students, residents, and inter-professional learners. In addition, the resident will develop the necessary research, scholarship and teaching skills to assume a clinical faculty position within a school of pharmacy.

The service component consists of patient care rounds with a multi-disciplinary clinical team on the Internal Medicine teaching services at DRH for at least six months. The resident is responsible for providing comprehensive patient-centered care. The remaining time will be spent in elective rotations between DRH and CPHS. The resident will also participate on various committees at both DRH and CPHS, attend faculty and department meetings and retreats and assist preceptors with course coordination at CPHS.

Teaching activities include participation in inter-professional education within the clinical setting, as well as within the academic setting at Campbell University. The resident will serve as primary preceptor for student pharmacists. Academic experience will involve development and presentation of educational activities for multi-disciplinary practitioners at DRH and Campbell University, as well as opportunities for teaching in small group and large lecture settings.

The resident will undertake at least two research projects, one with an economic focus that will be initiated and completed during the year, with results being presented both locally and nationally. Written manuscripts with an internal medicine-related focus and intent of submission to a peer-reviewed medical journal will include at least one of the research project results and at least one other work identified by resident and residency program directors

and/or preceptors. There will be opportunities available to the resident to prepare and deliver seminars to local, state and national organizations.

PGY1 Residencies

PGY1 Community Pharmacy

Walgreens

CPHS offers two community pharmacy residencies. The residencies are offered in conjunction with Walgreens, located in Dunn, NC and Walgreens Specialty in Durham, NC.

Residents develop leading-edge community pharmacy practice skills and gain valuable experience in immunizations, medication therapy management and disease state management.

In addition to direct patient care responsibilities, the resident is 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 Research in Education and Practice Symposium.

Harnett Health System

CPHS and Harnett Health System offer a PGY1 residency that is designed to develop the knowledge and skills necessary to provide exemplary pharmaceutical care to inpatients. Upon completion of the residency program, residents should be able to practice as clinical pharmacists responsible for the medication related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY2) pharmacy residency training.

The program will offer 2 PGY1 positions. The required clinical rotations include two months in internal medicine, cardiology, pharmacy administration, drug information, and infectious disease. Elective rotations include pediatrics, emergency medicine, ambulatory care, information systems, and critical care. Harnett Health System is comprised of two hospitals, six physician offices, and seven outpatient centers.

In addition to direct patient care responsibilities, the resident will gain experience in research and teaching. The resident will complete an original research project as well as a medication use evaluation (MUE). The resident will also participate in a teaching certificate program at CPHS. Teaching experiences include clinical instruction of advanced pharmacy practice experience students, pharmacy student lectures, facilitation of cases, inservice presentations, and continuing education seminars.

Curriculum for Classes of 2018, 2019 and 2020

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

First Year

Semester 1

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 315 - Intro. to Pharmacy Practice I	0.5
PHAR 335 - Community Service I	0
Total	18.5

Semester 2

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 316 - Intro. to Pharmacy Practice II	0.5
PHAR 335 - Community Service I	0
Total	19.5

Summer (one month)

Courses	Credit Hours
PHAR 505 - Introductory Pharmacy Practice Experience I	1
Total	1

Second Year

Semester 3

Courses	Credit Hours
PHAR 412 - Principles of Pharmacology & Medicinal Chemistry	3
PHAR 417 - Pharmacology & Medicinal Chemistry II	4
PHAR 408 - Biology of Disease	5
PHAR 404 - Pharmaceutics I	3
PHAR 410 - Pharmacokinetics	2
PHAR 409 - Intro. to Pharmacy Practice III	0.5
PHAR 435 - Community Service II	0
Total	17.5

Semester 4

Courses	Credit Hours
PHAR 421 - Pharmacology & Medicinal Chemistry III	4
PHAR 423 - Pharmacology & Medicinal Chemistry IV	3
PHAR 403 - Financial Mgmt. & Pharmacoeconomics	2
PHAR 405 - Nonprescription Drug Therapy	3
PHAR 406 - Pharmaceutics II with Lab	4
PHAR 419 - Intro. to Pharmacy Practice IV	0.5
PHAR 435 - Community Service II	0
Total	16.5

Summer (one month)

Courses	Credit Hours
PHAR 507 - Introductory Pharmacy Practice Experience II	1
Total	1

Third Year

Semester 5

Courses	Credit Hours
PHAR 501/503 - Therapeutics I & II	6
PHAR 528 - Experimental Design & Biostatistics	4
PHAR 511 - Jurisprudence	3
PHAR 508 - Top 300 Drug Review	1
PHAR 5XX - Electives	3
PHAR 515P - Intro. to Pharmacy Practice V	0.5
PHAR 564 - Community Service III	0
Total	17.5

Semester 6

Courses	Credit Hours
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 5XX - Electives	3
PHAR 516P - Intro. to Pharmacy Practice VI	0.5
PHAR 564 - Community Service III	0
Total	17.5

Fourth Year

Nine Month Rotations

Courses	Credit Hours
PHAR 6XX - Advanced Pharmacy Practice Experiences (nine one-month)	36
PHAR 699 - Prof. Presentation Seminar	1
PHAR 690 - Community Service IV	0
Total	37

Required APPE Rotations

PHAR 604 Advanced Community Pharmacy	
PHAR 605 Ambulatory Care	
PHAR 606 Geriatrics	
PHAR 607 Internal Medicine I	
PHAR 608 Internal Medicine II	
PHAR 610 Advanced Hospital Three (3) PHAR 6XX Electives	

Course Descriptions for Classes of 2018, 2019 and 2020

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. Health care System

Credit: 2 hours

This course will focus on introducing the pharmacy student to the US Health care System and its components, health care systems of various foreign countries, the profession of pharmacy and the expanding roles of pharmacy and pharmacists in the health care 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 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 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 health care 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 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 (egs., immunizations, portfolio development, HIPAA training and other requirements).

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 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 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 (egs., immunizations, portfolio development, HIPAA training and other requirements).

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 recommendation(s), 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 (egs., 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 419 – 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 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 (egs., immunizations, portfolio development, HIPAA training and other requirements).

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 510 – Cardiology

Credit: 1 hour

This elective is designed for students with an interest in cardiology. The purpose of the course is to enhance students understanding of cardiovascular pathophysiology and pharmacotherapy. Advanced concepts related to cardiovascular pharmacotherapy therapy will be emphasized.

PHAR 510P – Pharmaceutical Care for Patients with Diabetes

Credit: 1 hour (P/F)

This course includes a 15 hour on-line self-study (maximum time allotted) and 8 hour live training which will be offered over the last 5 weeks of the semester. The self-study modules are a review of the medical management (pharmacologic and non-pharmacologic) for diabetes and include case studies and activities that must be completed prior to attending the live training. The live training portion is designed to be application of the self-study modules. Participants will be assessed on ability to take blood pressure measurements, perform monofilament foot exams, provide insulin injection, and perform a fingerstick blood glucose using a blood glucose monitor. Case-based learning is also utilized throughout the live portion to apply knowledge of guidelines and therapeutic management (pharmacologic and non-pharmacologic). Participants must also complete an on-line final exam in order to receive a certificate of completion. Students wishing to pursue opportunities in the community or ambulatory care setting would be well-positioned with a certificate in diabetes on the CV; however, issues addressed in this program are not as intense as the information provided in the Diabetes Elective offered through Campbell. *This course requires an additional fee.*

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 (egs., 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 (egs., 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.

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 – Non-Sterile 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.

This course requires an additional fee.

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.

This course requires an additional fee.

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 health care 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 528 – 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 health care 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 & Alternative Medicine

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 health care 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 health care 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 PHAR 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 – Herbal & 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 health care law in seminar format. Class discussion will include the application of ethics and values to factual situations involving the use of drugs in health care.

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 552P – Medication Therapy Management (MTM) II

Credit: 2 hours

This course is designed to provide the student pharmacist with an in depth knowledge of medication therapy management (MTM) services. This course is designed to foster professionalism through inter-professional teamwork. Through patient interaction, student pharmacists will increase their working pharmacotherapy knowledge and will apply core principles and guidelines to direct patient care. Student pharmacists will provide MTM services to patients in a clinic or community pharmacy 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 Pharmacotherapy

Credit: 1 hour

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 554P – Geriatric Pharmacotherapy II

Credit: 1 hour

This course is designed to introduce student pharmacists to the concepts of geriatric care and build upon knowledge from pharmacotherapy lectures with a focus on older adult patients. The course will review physiologic changes and altered presentation of the elderly patient, geriatric syndromes and pharmacotherapy in the older adult. The course will utilize didactic lectures, case-based discussion and will conclude with an application-based exercise utilizing actual patients. Topics covered include psychiatric diseases, neurologic issues, consultant pharmacy, palliative care and SOAP documentation in the medical record.

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: 2 hours

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: 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 health care systems with analysis of methods to provide high-quality/low-cost health care 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: 1.5 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 health care. 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.

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

Health care 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 rationale and efficacious drug therapy. Each individually numbered rotation of four week's (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, and emergency medicine), to clinics and long- term care (ambulatory care, 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 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 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.

Curriculum for Classes of 2021 and Beyond

P1 Year, Block 1

Courses	Credit Hours
PHRD 510 - Pharmacy Seminar I	0
PHRD 511 - Biomedical Foundations	4.0
PHRD 512 - US Health Care	1.5
PHRD 513 - Pharmacy Practice Skills I	0.5
PHRD 514 - Personal/ Professional Development I	0.5
PHRD 515 - Pharmaceutics, Pharmacokinetics & Calculations	1.5
PHRD 516 - Drug Information I	1.0
Total	9.0

P1 Year, Block 2

Courses	Credit Hours
PHRD 510 - Pharmacy Seminar I (continued)	0.0
PHRD 521 - Pharmaceutical Sciences Foundations	3.0
PHRD 522 - Nonprescription Therapeutics	3.0
PHRD 523 - Pharmacy Practice Skills II	0.5
PHRD 524 - Personal/ Professional Development II	0.5
PHRD 525 - Pharmaceutics, Pharmacokinetics, & Calculations II	2.0
PHRD 526 - Drug Information	1.0
Total	10.0

P1 Year, Block 3

Courses	Credit Hours
PHRD 530 - Pharmacy Seminar II	0.0
PHRD 531 - Integrated Pharmacotherapy I Infection & Immunity	5.5
PHRD 532 - Medical Literature Evaluation I	1.0
PHRD 533 - Pharmacy Practice Skills III	0.5
PHRD 534 - Personal/ Professional Development III	0.5
PHRD 535 - Pharmaceutics, Pharmacokinetics, & Calculations III	2.0
Total	9.5

P1 Year, Block 4

Courses	Credit Hours
PHRD 530 - Pharmacy Seminar II (continued)	0.0
PHRD 541 - Integrated Pharmacotherapy II Endocrine	5.0
PHRD 542 - Medical Literature Evaluation II	1.0
PHRD 543 - Pharmacy Practice Skills IV	0.5
PHRD 544 - Personal/Professional Development IV	0.5
PHRD 545 - Pharmaceutics, Pharmacokinetics, & Calculations IV	3.0
Total	10.0

P2 Summer 1

Courses	Credit Hours
PHRD 705 - Community: IPPE	1.0
Total	1.0

P2 Year, Block 5

Courses	Credit Hours
PHRD 610 - Pharmacy Seminar III	0.0
PHRD 611 - Integrated Pharmacotherapy III	
Cardiovascular I	5.0
PHRD 612 - Health Outcomes and Informatics I	1.0
PHRD 613 - Pharmacy Practice Skills V	0.5
PHRD 614 - Personal/Professional Development V	0.5
PHRD 615 - Public Health & Wellness I	1.5
PHRD 65X - Elective	1.0
Total	9.5

P2 Year, Block 6

Courses	Credit Hours
PHRD 610 - Pharmacy Seminar III (continued)	0.0
PHRD 621 - Integrated Pharmacotherapy IV Cardiovascular II/Renal	5.0
PHRD 622 - Health Outcomes and Informatics II	1.0
PHRD 623 - Pharmacy Practice Skills VI	0.5
PHRD 624 - Personal/Professional Development VI	0.5
PHRD 625 - Public Health & Wellness II	1.5
PHRD 65X - Elective	1.0
Total	9.5

P2 Year, Block 7

Courses	Credit Hours
PHRD 630 - Pharmacy Seminar IV	0.0
PHRD 631 - Integrated Pharmacotherapy V	
Gastrointestinal	5.0
PHRD 632 - Pharmacogenomics I	1.0
PHRD 633 - Pharmacy Practice Skills VII	0.5
PHRD 634 - Personal/Professional Development VII	0.5
PHRD 635 - Law & Ethics I	2.0
PHRD 65X Elective	1.0
Total	10.0

P2 Year, Block 8	
Courses	Credit Hours
PHRD 630 - Pharmacy Seminar IV (continued)	0.0
PHRD 641 - Integrated Pharmacotherapy VI Neurology/ Psychiatry	4.0
PHRD 642 - Pharmacogenomics II	1.0
PHRD 643 - Pharmacy Practice Skills VIII	0.5
PHRD 644 - Personal/Professional Development VIII	0.5
PHRD 645 - Law & Ethics II	2.0
PHRD 65X - Elective	1.0
Total	9.0

P3 Summer 1	
Courses	Credit Hours
PHRD 707 - Hospital: IPPE	1.0
Total	1.0

P3 Year, Block 9	
Courses	Credit Hours
PHRD 710 - Pharmacy Seminar V	0.0
PHRD 711 - Integrated Pharmacotherapy VII Musculoskeletal	4.5
PHRD 712 - Clinical Research Design Project I	1.0
PHRD 713 - Pharmacy Practice Skills IX	0.5
PHRD 714 - Personal/Professional Development IX	0.5
PHRD 715 - Operations I	2.0
PHRD 75X - Elective	1.0
Total	9.5

P3 Year, Block 10	
Courses	Credit Hours
PHRD 710 - Pharmacy Seminar V (continued)	0.0
PHRD 721 - Integrated Pharmacotherapy VII Pulmonary Otic, Ophthalmic	5.0
PHRD 722 - Clinical Research Design Project II	1.0
PHRD 723 - Pharmacy Practice Skills X	0.5
PHRD 724 - Personal/Professional Development X	0.5
PHRD 725 - Operations I	1.0
PHRD 75X - Elective	1.0
Total	9.0

P3 Year, Block 11	
Courses	Credit Hours
PHRD 730 - Pharmacy Seminar VI	0.0
PHRD 731 - Integrated Pharmacotherapy IX Dermatology & Nutrition	2.0
PHRD 732 - Clinical Research Design Project III	1.0
PHRD 733 - Pharmacy Practice Skills XI	0.5
PHRD 734 - Personal/Professional Development XI	0.5
PHRD 735 - Operations III	1.0
PHRD 736 - Integrated Pharmacotherapy X Hematology/ Oncology	5.0
PHRD 75X - Elective	1.0
Total	11.0

P3 Year, Block 12	
Courses	Credit Hours
PHRD 730 - Pharmacy Seminar VI (continued)	0.0
PHRD 741 - Integrated Pharmacotherapy XI Special Populations	5.0
PHRD 742 - Clinical Research Design Project IV	1.0
PHRD 743 - Pharmacy Practice Skills XII	0.5
PHRD 744 - Personal/Professional Development XII	0.5
PHRD 745 - Integrated Pharmacotherapy XII Clinical Updates	1.0
PHRD 75X - Elective	1.0
Total	9.0

P4 Year — Nine Rotations Required to Graduate	
Required Rotations	
Courses	Credit Hours
PHRD 8XX - Advanced Pharmacy Practice Experiences (nine one-month)	36
Total	36
Required Rotations Courses	
PHRD 804 - Advanced	
PHRD 805 - Ambulatory Care	
PHRD 806 - Geriatrics	
PHRD 807 - Internal Medicine I	
PHRD 808 - Internal Medicine II	
Three (3) PHRD 8XX Electives	

Course Descriptions for Classes of 2021 and Beyond

PHRD 510 – Pharmacy Seminar I

Credit: 0.0 hours

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 511 – Biomedical Foundations

Credit: 4.0 hours

This course is designed to give the student pharmacist a strong foundation in biochemical principles and metabolic pathways at the molecular and cellular levels; cellular and tissue physiology and basic anatomical structures; and aspects of medically-related microbiology.

PHRD 512 – US Health Care

Credit: 1.5 hours

This course will focus on introducing the student pharmacist to the US Healthcare System and its components, the profession of pharmacy and the expanding collaborative roles of pharmacists in the healthcare system, and contrast the US Healthcare System to systems from different countries.

PHRD 513 – Pharmacy Practice Skills I

Credit: 0.5 hours

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student pharmacist for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 514 – Personal/Professional Development I

Credit: 0.5 hours

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This course is taught longitudinally throughout all three years of the didactic curriculum, and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 515 – Pharmaceutics, Pharmacokinetics & Calculations I (PPC I)

Credit: 1.5 hours

This course exposes the student pharmacist to fundamental pharmaceutical calculations encountered in pharmacy practice and serves as a foundation for the future concepts in pharmaceutics and pharmacokinetics.

PHRD 516 – Drug Information

Credit: 1.0 hour

This course is designed to introduce the student pharmacist to sources of drug information and how it is used in pharmacy practice and in the pharmaceutical industry. Student pharmacists will gain practical experience utilizing drug information resources to answer basic and moderately complex biomedical questions. This experience provides student pharmacists with a foundation for developing skill sets related to drug information, literature evaluation, and communication.

PHRD 521 – Pharmaceutical Sciences Foundations

Credit: 3.0 hours

This course is designed to incorporate the principles of pharmaceutics, pharmacokinetics, medicinal chemistry, and pharmacology to provide the student pharmacist with a foundation in the Pharmaceutical Sciences that is critical to the understanding of Pharmacotherapy. This course will emphasize the physicochemical properties of drugs and their effects on drug handling and biological activity.

PHRD 522 – Nonprescription Pharmacotherapy

Credit: 3.0 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, triaging of serious healthcare problems and referral to other healthcare settings as appropriate, therapeutic intervention, product recommendation(s), and patient education regarding health promotion and disease management with nonprescription medications. Student pharmacists will have to tailor product selection to special populations, including children, geriatrics, patients with certain medical conditions, etc. when appropriate. Student pharmacists will also learn and apply skills in patient interviewing techniques and medication counseling through the use of mock patients and simulated patients.

PHRD 523 – Pharmacy Practice Skills II

Credit: 0.5 hours

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student pharmacist for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 524 – Personal and Professional Development II

Credit: 0.25 hours

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 525 – Pharmaceutics, Pharmacokinetics & Calculations II (PPC II)

Credit: 2.0 hours

This course covers the basics of Pharmacokinetic and biopharmaceutic concepts to enable student pharmacists monitor drug concentrations effectively.

PHRD 526 – Drug Information II (Introduction to Evidence-Based Medicine)

Credit: 1.0 hour

This course is designed to further develop proficiency in literature evaluation and the application of biomedical knowledge to individual patients. This experience will provide a foundation for the utilization of literature to support evidence-based decision making and refine student pharmacist's ability to communicate complex biomedical information.

PHRD 530 – Pharmacy Seminar II

Credit: 0.0 hours

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 531 – Integrated Pharmacotherapy I Infection & Immunity

Credit: 5.5 hours

This course is designed to integrate biomedical sciences, pharmaceutical sciences, and clinical therapeutics with an emphasis on pharmacotherapeutic management of

infectious diseases and the immune system. The student pharmacist will learn about the structure and function of the human body as well as medications and their effects on the body. The student pharmacist will apply this knowledge to develop appropriate, evidence-based pharmacologic and non-pharmacologic therapeutic plans that include monitoring parameters for both acute and chronic disease processes.

PHRD 532 – Medical Literature Evaluation I

Credit: 1.0 hour

This course is designed to teach the basic background skills necessary to evaluate and effectively communicate medical literature.

PHRD 533 – Pharmacy Practice Skills III

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student pharmacist for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 534 – Personal and Professional Development III

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 535 – Pharmaceutics, Pharmacokinetics & Calculations III (PPC III)

Credit: 2.0 hours

This course is designed to provide the student pharmacist with a basic understanding of medicinal products' physical and chemical properties and how these properties influence the design of dosage forms. It will enable the student pharmacist to become proficient in general compounding techniques and provides a basic knowledge of dosage formulation. A weekly laboratory is designed to enhance the technical capability of student pharmacists in this area of practice.

PHRD 541 – Integrated Pharmacotherapy II: Endocrine

Credit: 5.0 hours

This course is designed to integrate biomedical sciences, pharmaceutical sciences, and clinical therapeutics with an emphasis on

pharmacotherapeutic management of the reproductive, genitourinary and endocrine systems. The student pharmacist will learn about the structure and function of the human body as well as medications and their effects on the body. The student pharmacist will apply this knowledge to develop appropriate, evidence-based pharmacologic and non-pharmacologic therapeutic plans that include monitoring relevant parameters for both acute and chronic disease processes.

PHRD 542 – Medical Literature Evaluation II

Credit: 1.0 hour

This course is designed to reinforce basic skills and teach intermediate level skills necessary to evaluate and effectively communicate medical literature. Through journal club active learning sessions, emphasis will be placed upon learning how to evaluate medical literature and apply this literature to patient care.

PHRD 543 – Pharmacy Practice Skills IV

Credit: 0.5 hour

This course is intended to provide students-pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student pharmacist for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 544 – Personal and Professional Development IV

Credit 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 545 – Pharmaceutics, Pharmacokinetics & Calculations IV (PPC IV)

Credit: 3.0 hours

This course is a continuation of PHRD 535, and 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. It will enable the student pharmacist 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 student pharmacists in this area of practice.

PHRD 610 – Pharmacy Seminar III

Credit: 0.0 hours

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 611 – Integrated Pharmacotherapy IV: Cardiovascular-Renal Integrated Pharmacotherapy (IP) Module I

Credit: 5.0 hours Module I

This course is designed to incorporate the dynamic nature of the profession through an integration of basic science, pharmacology, and clinical therapeutics. Emphasis will be placed on layered learning with cumulative content continuously incorporated to most closely mimic the intricacies of clinical practice. In learning about structure and function of the human body as well as drugs and their effects, the student will be able to determine optimal therapy with monitoring parameters for both acute and chronic disease processes.

PHRD 612 – Health Outcomes and Informatics I

Credit: 1.0 hour

To be determined.

PHRD 613 – Pharmacy Practice Skills V

Credit 0.5 hour

This course is intended to provide students-pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 614 – Personal and Professional Development V

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 615 – Public Health & Wellness I

Credit: 1.5 hours

This course is designed to provide students with an overview of central concepts and the role of the pharmacist in public health, with a focus on how public health processes and services impact individual patients.

Students will also be taught the approaches, strategies, and skills pharmacists need to optimize wellness and encourage behavior change in their patients and apply factors that affect health to promote healthy lifestyles in patients.

PHRD 621 – Integrated Pharmacotherapy IV: Cardiovascular-Renal Integrated Pharmacotherapy II

Credit: 5.0 hours

This course is designed to incorporate the dynamic nature of the profession through an integration of basic science, pharmacology, and clinical therapeutics. Emphasis will be placed on layered learning with cumulative content continuously incorporated to most closely mimic the intricacies of clinical practice. In learning about structure and function of the human body as well as drugs and their effects, the student will be able to determine optimal therapy with monitoring parameters for both acute and chronic disease processes.

PHRD 622 – Health Outcomes and Informatics II

Credit: 1.0 hour

To be determined.

PHRD 623 – Pharmacy Practice Skills VI

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 624 – Personal and Professional Development VI

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 625 – Public Health & Wellness II

Credit: 1.5 hours

This course is designed to provide students with a more in-depth look at the systems that influence public health and the pharmacist's role in impacting these systems to affect a larger population. Students will also be taught the approaches, strategies, and skills pharmacists need to optimize wellness and

encourage behavior change in their patients as well as promote population health and primary care.

PHRD 630 – Pharmacy Seminar IV

Credit: 0.0 hour

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 631 – Integrated Pharmacotherapy V: Gastrointestinal

Credit: 5.0 hours

This course is designed to integrate anatomy & physiology, pathophysiology, pharmacology and medicinal chemistry with an emphasis on clinical application for the gastrointestinal system. In learning about structure and function of the human body as well as medications and their effects on the body, the student will be able to determine optimal pharmacologic and non-pharmacologic therapy including monitoring parameters for both acute and chronic disease processes.

PHRD 632 – Pharmacogenomics I

Credit: 1.0 hour

To be determined.

PHRD 633 – Pharmacy Practice Skills VII

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 634 – Personal/Professional Development VII

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 635 – Law & Ethics I

Credit 2.0 hours

Discussions and analysis of federal law, regulations, and standards of practice 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. Students will be introduced to ethical principles. Cases involving ethical and legal situations as well as article reviews of ethics topics will be incorporated into the course for student groups to identify issues and the consequences of decisions.

PHRD 641 – Integrated Pharmacotherapy VI: Neurology/Psychiatry

Credit: 4.0 hours

This course is designed to provide the student pharmacist with a foundation in the biomedical sciences, pharmaceutical sciences, and pharmacotherapeutic management of neurological and psychiatric conditions. In learning about structure and function of the nervous system as well as drugs and their effects, the student pharmacist will be able to design therapeutic treatment plans with a patient-centered focus and appropriate monitoring. Students will be expected to provide rationale, critique, and communicate and defend their therapeutic plans to their peers.

PHRD 642 – Pharmacogenomics II

Credit: 1.0 hour

To be determined.

PHRD 643 – Pharmacy Practice Skills VIII

Credit 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 644 – Personal and Professional Development VIII

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 645 – Pharmacy Jurisprudence and Ethics II

Credit: 2.0

Discussions and analysis of North Carolina laws, regulations, and standards of practice 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. Students will be introduced to ethical principles. Cases involving ethical and legal situations as well as article reviews of ethics topics will be incorporated into the course for student groups to identify issues and the consequences of decisions.

PHRD 705/PHRD 707 – Community/Hospital IPPE

Credit: 1.0 hour

These two, month-long practice experiences are designed to expose the student pharmacist to the practice of pharmaceutical care in the community and in 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.

PHRD 710 – Pharmacy Seminar V

Credit: 0.0 hour

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 711 – Integrated Pharmacotherapy (IP) IX: Musculoskeletal

Credit: 4.5 hours

This course focuses on the pharmacotherapy of problems associated with the musculoskeletal system.

PHRD 712 – Clinical Research Design Project 1

Credit: 1.0 hour

To be determined.

PHRD 713 – Pharmacy Practice Skills IX

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice

in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 714 – Personal and Professional Development IX

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 715 – Pharmacy Operation 1 (Human Resource Management)

Credit: 2.0 hours

This course will present principles of marketing and human resource management as they may be applied to pharmacy practice.

PHRD 721 – Integrated Pharmacotherapy (IP) VIII: Pulmonary, Otic and Ophthalmic

Credit: 5.0 hours

This course is designed to integrate anatomy and physiology, pathophysiology, pharmacology and medicinal chemistry with an emphasis on clinical application for the pulmonary, otic and ophthalmic body systems. In learning about structure and function of the human body, as well as medications and their effects on the body, the student pharmacist will be able to determine optimal pharmacologic and non-pharmacologic therapy including monitoring parameters for both acute and chronic disease processes.

PHRD 722 – Clinical Research Design Project II

Credit: 1.0 hour

To be determined.

PHRD 723 – Pharmacy Practice Skills X

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 724 – Personal and Professional Development X

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as

a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 725 – Operations II (Financial Management)

Credit: 1.5 hours

The fundamentals of financial management are applicable and necessary in all pharmacy practice settings. All organizations, companies and services must be profitable to survive. The first part of the course includes a discussion about financial statements. The majority of the course focuses on the application of the financial information in decision making. Budgeting, pricing, break-even analysis, inventory control, trend analysis and justifying new services are topics that are included in the course.

PHRD 730 – Pharmacy Seminar VI

Credit: 0.0 hour

Through participation in this course student pharmacists will complete the necessary requirements for enrollment in experiential experiences, the co-curriculum, and for matriculation through the Doctor of Pharmacy curriculum.

PHRD 731 – Integrated Pharmacotherapy (IP) Dermatology, Nutrition, Obesity, and Weight Management (IP-IX: Derm, Nutrition)

Credit: 2.0 hours

This course is designed to help the student pharmacist integrate principles of the basic sciences with the clinical application of drug and non-drug solutions for the management of conditions of the skin. In addition, this course is designed to provide a firm foundation of clinical and scientific knowledge for the treatment of nutritional issues (excess or depletion) that will be faced in the clinical setting.

PHRD 732 – Clinical Research Design Project III

Credit: 1.0 hour

To be determined.

PHRD 733 – Pharmacy Practice Skills XI

Credit: 0.5 hour

This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice

in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 734 – Personal and Professional Development XI

Credit: 0.5 hour

This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 735 – Pharmacy Operations III

Credit: 1.0 hour

The purpose of this course is to introduce and familiarize student pharmacists with the fundamental concepts and methods of pharmacoeconomic evaluation. Subject matter examined includes the lexicon of pharmacoeconomics, pharmacoeconomic methodology, assumptions and controversies, and the role of pharmacoeconomics and practical applications in drug development and decision making relevant to pharmacy practice and health care delivery. This foundation will help prepare student pharmacists for future educational activities where the student will develop and implement individualized treatment plans, taking into consideration pharmacoeconomic factors.

PHRD 736 – Integrated Pharmacotherapy X: Hematology Oncology

5.0 hours

This course is designed to illustrate the appropriate clinical application of biochemistry, pharmacology, immunology, pharmacodynamics, pathophysiology and pharmacokinetics to a wide variety of acute and chronic hematology and oncology disease states. Emphasis will be placed on data collection and decision making required for optimal drug therapy.

PHRD 741 – Integrated Pharmacotherapy (IP) XI: Special Populations

Credit: 5.0 hours

This course is designed to integrate anatomy and physiology, pathophysiology, pharmacology and medicinal chemistry with an emphasis on clinical application for special populations with an emphasis on geriatrics, pediatrics, pregnant women and end of life patients. In learning about

structure and function of the human body as well as medications and their effects on the body, the student pharmacist will be able to determine optimal pharmacologic and non-pharmacologic therapy including monitoring parameters for both acute and chronic disease processes in the special populations groups.

PHRD 742 – Clinical Research Design Project IV

Credit: 1.0 hour
To be determined.

PHRD 743 – Pharmacy Practice Skills XII

Credit: 0.5 hour
This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice in order to help prepare the student for the experiential component of the Doctor of Pharmacy curriculum.

PHRD 744 – Personal and Professional Development XII

Credit: 0.5 hour
This course is designed to provide the student pharmacist with the tools necessary to excel as a professional throughout both the pharmacy curriculum and their professional career. This co-curricular course is taught longitudinally throughout all three years of the didactic curriculum and its aim is to impart knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate the key elements of personal and professional development: self-awareness, leadership, innovation and entrepreneurship, and professionalism.

PHRD 745 – Integrated Pharmacotherapy (IP) XII: Clinical Updates

Credit: 1.0 hour
Following completion of the Integrated Pharmacotherapy Courses I-XI, this course is designed to allow the student pharmacist to determine and apply the most up-to-date treatment guidelines and utilize the most current evidence to develop and prioritize the optimal therapeutic plan for the patient.

PHRD 8XX – 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 rationale and efficacious drug therapy. Each individually numbered rotation of four week's (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, and emergency medicine), to clinics and long-term care (ambulatory care, skilled and assisted living communities) to community practice (compounding, medication therapy management services, and community management).

PHRD 804 – 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.

PHRD 805 – 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.

PHRD 806 – 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.

PHRD 807 – 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.

PHRD 808 – 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.

PHRD 810 – 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.

Physical Therapy

Department of Physical Therapy

Campbell University
Tracey F. Smith Hall
4150 Highway 421 S.
Lillington, NC 27546
Phone: 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 health care. The curriculum utilizes integrated, interdisciplinary education to prepare students to enter one of the most rewarding and fastest growing health care 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 health care team. Our educational foundation is broad and focuses on understanding disease processes across the lifespan with acquisition of contemporary examination/evaluation skills and interventions. Interprofessional learning experiences provided throughout the program are designed to integrate profession specific knowledge with other health care members that will prepare graduates for real world situations and changes in health care 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 health care 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 graduate doctors of physical therapy who deliver compassionate, patient-centered care from a service-oriented, Christian guided view, with a special emphasis on rural

health care 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:

- graduate service oriented individuals primed to practice evidence supported physical therapy serving the individual, employer, and profession
- graduate individuals prepared to practice in rural regions
- graduate individuals prepared to serve within a comprehensive health care system as members of an interdisciplinary health care team

Upon completion of all the requirements at Campbell University's DPT program, the graduate will be able to:

1. Delivery:
 - Practice physical therapy competently, ethically, and legally in a caring manner within a variety of practice environments
 - Practice physical therapy in an interactive fashion using innovative and adaptable evaluation and management skills to diverse patient/client populations in a variety health care settings
 - Integrate evidence supported and outcomes based practice in a professional manner to enhance the well-being of patients/clients in a variety of health care settings
 - Collaborate as a member of an interprofessional health care team, advocating for patient/client and profession, in a variety of health care settings with an emphasis on rural areas
 - Administer, manage, and supervise in a variety of professional settings and regulatory environments
2. Education:
 - Promote educational principles to facilitate patient/client ownership of their health and well-being
 - Advocate for the patient/client and the profession in health care, community, and legislative settings at the local, state, and federal arenas
 - Integrate the characteristics of a life-long learner to professional development

3. Research:

- 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.

Admissions 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 multi task.

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 DPT program;
- To assess the candidate's commitment and aptitude as a future practicing physical therapist.

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 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
2. All pre-professional academic work must be completed at a regionally accredited college or university in the United States
3. Science prerequisite coursework must be completed within the last 10 years
4. All prerequisite courses must have earned college credit hours
5. 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 credit hours
- One semester of general chemistry with lab-total 4 credit hours
- Two semesters of general physics (algebra-based) with lab-total 8 credit hours
- One semester of upper level biology (300+) with or without lab-total 3-4 credit hours**
- One semester of statistics (math or psychology)-total 3 credit hours
- Two semesters of social sciences (psychology, sociology)-total 6 credit hours
- One semester of math (algebra or higher with trigonometry preferred)-total 3 credit 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

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.

Admissions Process – for classes beginning in Jan 2014-Jan 2018

The application cycle for the DPT program begins February 1st and the application deadline is September 1st. Applications and

interviews will be considered on a rolling basis. The earlier an applicant applies, the better the chances are for acceptance.

Before your application can be considered, the following items must have been received by the CPHS admissions office:

1. A completed application
2. Application fee of \$50
3. Official transcripts from all universities attended
4. Graduate Record Examination (GRE) scores (Campbell DPT program code of 4575)
5. 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.

PTCAS – for class beginning in Jan 2019

Starting with the class beginning in January 2019, applicants must submit an application through the Physical Therapist Centralized Application Service (PTCAS) online at www.ptcas.org.

PTCAS launches each year in late June and the deadline is January 15. Visit the official PTCAS website for the launch and deadline dates for the current cycle. The earlier an applicant applies, the better the chances for acceptance.

Original official transcripts from all US postsecondary schools (including the planned fall courses) and Graduate Record Examination (GRE) scores must be submitted to PTCAS. All college coursework attempted must be submitted to PTCAS.

For applicants currently enrolled in classes, it is imperative to update newly completed coursework. Follow the instructions for the Academic Update on the PTCAS website to update your transcript through PTCAS. Final transcripts reflecting a conferred degree must be sent directly to the CPHS Admissions Office.

Applicants are also required to submit three letters of recommendations to PTCAS. At least two letters must be from a licensed physical therapist.

Applicants gaining acceptance to the Doctor of Physical Therapy program are required to submit to a criminal background check through the PTCAS 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.

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Supplemental Application

A supplemental application with the required application fee and passport-sized photograph must be submitted to CPHS. The link to the supplemental application is available online on the CPHS DPT website.

Failure to complete the required supplemental components of the admissions process will delay the review of the application package until all elements are submitted and received.

Once a verified PTCAS application and a supplemental application have been received, 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. 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 health care 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 nonrefundable 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.

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 degrees that have been evaluated as United States equivalent will not fulfill this requirement. International applicants may be asked to submit Test of English as a Foreign Language (TOEFL) score if English is a second language.

Financial Aid

For information on financial aid availability, please contact the Office of Financial Aid by telephone at (910) 893-1310, or by email at financialaid@campbell.edu, or visit the website: <http://www.campbell.edu/financialaid/>.

Policies and Procedures

CPHS student policies that pertain to the DPT Program:

The following list of policies can be found in the General Policies section of the CPHS academic bulletin:

- Accommodation
- Anti-Hazing
- Attendance
- Complaints/Grievances
- Computers and iPads
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Grade Appeals
- Grade Reports, Records, and Transcripts
- Health Insurance
- Immunization
- Incident Reporting
- Inclement Weather
- Meal Plan
- Parking
- Professional Liability Insurance
- Refunds
- Safety and Emergency Preparedness
- Sexual Harassment
- Social Media
- Student Health
- Student Services
- Tuition & Fees
- Withdrawal

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.

Building Access

Access to Smith Hall 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 Smith Hall 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 7am and 10pm 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.

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.

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.

Complaints Outside of Due Process for Programs

Written complaints can be taken by anyone within the College. Upon receipt of a complaint, the program director/chair is notified and expected to investigate the complaint. Upon completion of the review, the appropriate action or resolution, if any, is implemented (per Bob Cogswell, Campbell Office of Legal Affairs, 3-1-13). Anonymous complaints will not be accepted.

If a faculty/staff member receives a complaint, they are to report the concern to the Department program director/chair. The director/chair has discretionary authority to gather additional information and to make a judgment about the appropriate action or the need for involvement of the Dean or other University official. Should the complaint involve the program director/chair, the written grievance should be submitted to the Dean of the College of Pharmacy and Health Sciences. Internal policies are in place within the University and College to protect complainants from retaliation.

Complaints regarding the Doctor of Physical Therapy Program should be addressed to: Campbell University Program Director-Department of Physical Therapy P.O. Box 1090 Buies Creek, NC 27506-1090

Equal Access to the Doctor of Physical Therapy Program

In accordance with Campbell University's nondiscrimination policy, the College of Pharmacy and Health Sciences does not discriminate against otherwise qualified individuals with disabilities who apply for admission to the Doctor of Physical Therapy Program. It is recognized that the on-site interview may not adequately evaluate a student's ability to meet the technical standards. Students who are unsure that they meet the technical standards because of a disability are responsible for disclosing that to the Campbell University Office of Student Success. The Director of Access and Outreach in that office will consult with the student regarding possible accommodations. At the time an applicant accepts an offer to the CPHS Doctor of Physical Therapy Program,

students must attest in writing that they are able to meet the CPHS Doctor of Physical Therapy Program Technical Standards for Admission & Matriculation with or without accommodations. Students will continue to attest in writing during orientation through the third year that they are still able to meet the standard. The Campbell University College of Pharmacy and Health Sciences (CPHS) Doctor of Physical Therapy Program is committed to providing reasonable accommodation to ensure that equal access is provided to all otherwise qualified students in the course of study leading to the Doctor of Physical Therapy degree and licensure.

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.

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.

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, North Carolina 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, and these 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. Students should exhibit flexibility and cultural sensitivity must be ensured during times of indecision to reflect the expectations of clinical and academic settings. Additionally, students must be able to function in a collegial environment demonstrating proper levels of assertiveness, cooperation, mutual respect, and task delegation, along with organization and time management skills. Adequate emotional health is necessary to deal with strenuous environments and to 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. Campbell University's DPT Program integrates the ten Generic Abilities¹ in our expected student professional behaviors. Faculty assess progression of professional behaviors from beginning level to entry level using identified criteria as a guide¹. These essential behaviors are: Commitment to Learning, Interpersonal Skills, Communication Skills, Effective Use of Time and Resources and Resources, Use of Constructive Feedback, Problem-Solving, Professionalism, Responsibility, Critical Thinking, and Stress Management. Behaviors consistent with the APTA Core Values are essential for doctoral level professional behaviors in physical therapy and are expected of Campbell DPT students. These behaviors are: Accountability, Altruism, Compassion/Caring, Excellence, Integrity, Professional Duty, and Social Responsibility².

1. Developed by the Physical Therapy Program, University of Wisconsin-Madison, May, W., et al. *Journal of Physical Therapy Education*. 9:1, Spring 1995.

2. American Physical Therapy Association (APTA): Core values; <http://www.apta.org/Professionalism/>

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 three-dimensional 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 health care 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 and/or professional/behavioral performance of all students. Any discussions regarding type of academic and/or professional/behavioral 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:

- Description of academic standing (remediation, probation, suspension, dismissal)
- Rationale for academic standing
- Criteria required to regain good academic standing
- Contact information of the program director to discuss items outlined in the letter
- 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 ExamSoft 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 per semester grade point average (GPA) and cumulative of ≥ 3.0 .

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, cannot participate in the full-time internship portion of a 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). 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 health sciences. 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. illness, financial hardship, family responsibilities, 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 all the following criteria are met:

- Maintenance of GPA requirements
 - Per semester GPA of ≥ 2.8
 - Cumulative GPA of ≥ 3.0
- 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 and expectation for remediation will be directed by the course instructor within a week of receiving a grade. Upon successful remediation, grades are not modified.

Successful remediation of an 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 due to violation of professional/behavioral expectations.

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 progression in the program. Should a student fail a clinical/experiential rotation, this rotation must be remediated prior to progression in the program. Clinical internships cannot be completed out of sequence. Clinical internships may be repeated providing student has adhered to all stipulations in the letter of suspension from the Program Director. Upon successful completion, the student will rejoin in the normal curriculum sequence and graduate, assuming all didactic courses have been completed. See Graduation after Deceleration policy. 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 GPA requirements
- 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 two times throughout the program. 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 student's GPA returns to a level that meets or exceeds the minimal requirement
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 per semester GPA less than 2.8, 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;
- Has academic deficiencies which preclude continuation in full-time clinical internships

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 health sciences may be consulted as needed.

Academic Dismissal

Academic dismissal from the DPT program and CPHS may be recommended to the Associate dean for 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
- Failure to maintain GPA requirements for > 2 semesters
- 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 for health sciences 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 for health sciences 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 for health sciences 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 for health sciences is final.

Professional Behavior Concerns

Professional behaviors are expected of Campbell University DPT Students at all program-sponsored activities’ including but not limited to: classes, service activities, pro bono and migrant camp work, experiential/ internship assignments, and professional conferences. Faculty and staff are required to document unprofessional behaviors using the CU DPT Remediation form. Completed forms should be placed in the student advising folders with notification sent to assigned advisor for reference. Unprofessional behaviors are assessed by faculty and the APS Committee using a decision tree indicating severity of violation, and required follow-up action if needed. These actions can range from a meeting with the involved faculty/staff member, advisor follow-up, consultation with APS Committee, referral to Program Director, referral to appropriate CPHS Committee, or recommendation for dismissal. Repeated or significant unprofessional behaviors have the potential to impact didactic, service, and clinical activities required for the successful completion of the Doctor of Physical Therapy

Program and ultimately licensure eligibility. The decision tree is meant to be a guide. Faculty/ staff are encouraged to consult with the APS committee for guidance when clarity is required.

Time to Complete the Program

Students have up to 150% of the total normal program length or 13 semesters to complete the DPT program. Approved medical leave and academic deficiencies (e.g. suspension) count toward the total time clock. Should a student take longer than that amount of time to complete the program, additional studies or repeating of semesters may be required to ensure competency in content knowledge and skills.

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.

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.fsbpt.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:

Grade	
A	90-100
B	80-89.99
C	70-79.99
D	60-69.99
F	59.99 or below
P	Pass
NP	No Pass
I	Incomplete

Grades of "A, B, C, D, F, and W" are included in semester hours attempted and will affect the grade point average. Grades of "P, I, and NP" will not affect the grade point average.

A student may appeal a grade within a period of seven days of the student's receipt of the grade notification. 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.

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 one-week summative session before graduation. The program starts in January with graduation in December. Most didactic courses are held on the main campus with an online licensure preparation course 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. Clinical reasoning courses are designed to enhance student interaction through problem-based learning, 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, OSCE, reflective narrative, professional portfolio, and participation in small group activities.

Three clinical rotations occur throughout the curriculum with a six-week introductory internship in the spring of the second year. The remaining clinical internships occur in the third program year with durations of 16 weeks each for a total of 38 weeks of clinical training. Students complete clinical experiences and service learning in rural locations with most completing a clinical internship in a rural location. Clinical internships can be completed in an acute/subacute, neuromuscular, musculoskeletal, general practice, and

specialty settings. Specialized settings may include burn/wound care, aquatic, industrial/vocational, and VA/military locations, home health, and school systems. 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.

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

Spring 1	
Courses	Credit Hours
DPT 700 - Clinical Biomechanics	4
DPT 702- Principles of Inquiry	2
DPT 722- Professional Development	2
DPT 724- Service Learning I	1
DPT 750- Life Span Continuum I	3
DPT 752- Tests, Measures & Mobility	4
Total	16
Summer 1	
Courses	Credit Hours
DPT 704- Human Anatomy	5
DPT 706- Exercise Physiology	2
DPT 708- Human Pathophysiology	4
DPT 726- Clinical Experience 1	1
DPT 754- Burn and Wound Management	2
Total	14
Fall 1	
Courses	Credit Hours
DPT 710- Pharmacology	2
DPT 712- Neuroscience	3
DPT 728- Clinical Education	2
DPT 730- Service Learning 2	1
DPT 756- Therapeutic Exercise 1	3
DPT 760- Hospital Based Practice	3
DPT 762- Musculoskeletal Practice	3
DPT 764- Clinical Reasoning 1	1
Total	18

Spring 2	
Courses	Credit Hours
DPT 714- Motor Control	3
DPT 758- Neurology Practice	3
DPT 766- Therapeutic Exercise 2	3
DPT 768- Cardiopulmonary Practice	3
DPT 770- Orthotics/Prosthetics	2
DPT 800- Clinical Internship 1 (6 weeks)	3
Total	17

Summer 2	
Courses	Credit Hours
DPT 732- Clinical Experience 2	1
DPT 772- Life Span Continuum 2 (pediatric)	3
DPT 776- Life Span Continuum 3 (musculoskeletal)	3
DPT 780- Life Span Continuum 4 (neurological)	3
Total	10

Fall 2	
Courses	Credit Hours
DPT 734- Service Learning 3	2
DPT 774- Life Span Continuum 5 (pediatric)	4
DPT 778- Life Span Continuum 6 (musculoskeletal)	4
DPT 782- Life Span Continuum 7 (neurological)	4
DPT 784- Clinical Reasoning 2	1
DPT 790- Imaging in PT Practice	2
Total	17

Spring 3	
Courses	Credit Hours
DPT 736- Administration & Management	3
DPT 786- Special Populations	4
DPT 788: Clinical Reasoning 3	1
DPT 792- Assistive & Adaptive Technology	1
DPT 796-99- Elective***	2
Total	11

Summer 3	
Courses	Credit Hours
DPT 802 - Clinical Internship 2 (16 weeks)	8
Total	8

Fall 3	
Courses	Credit Hours
DPT 794- Licensure Preparation (online)	1
DPT 804- Clinical Internship 3 (16 weeks)	8
Total	9

Course Descriptions

Spring, Year 1

DPT 700: Clinical Biomechanics (4:3:4)

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 (2:2:0)

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 722: Professional Development (2:2:0)

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 (1:0:1)

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 750: Lifespan Continuum 1 (3:2:3)

Credit: 3 Hours

Lifespan 1 will introduce the patient/client as a unique individual possessing various restrictions in their ability to move, and therefore to fully participate in their desired and/or assigned societal roles. Lifespan I will introduce and incorporate the ICF model to develop the essential foundations of the physical therapy evaluation: examination (subjective/objective), evaluation (diagnosis/prognosis) and the principles of patient/client management (education, activity modification, physical interventions of exercise, manual therapy and modalities). Lifespan I will teach the foundational principles of documentation of the patient/client episode of care. Lifespan I will introduce the foundational curricular concept of health conditions throughout the lifespan, all of which cause movement restrictions and impairments requiring the full range of physical therapy skills not restricted to a single discipline within the profession. Lifespan I will de-emphasize the 'single clinical discipline' approach to patient/client care. Finally, Lifespan I will introduce the concept of prevention; recognizing that the modification of negative lifestyle factors and the promotion of positive ones can have a profound impact upon the overall health of the physical therapy patient/client.

DPT 752: Tests, Measures, & Mobility (4:2:8)

Credit: 4 Hours

This course contains a 3 block modular series encompassing: 1) patient assessment techniques, 2) patient mobility, transfers, gait assistance, and assistive devices, and 3) physical agents and electrotherapeutic intervention. Assessment techniques will be discussed and practiced and can include universal precautions and aseptic technique, vital signs for assessment of physiologic status, goniometry and muscle length/strength testing, and posture. Patient mobility will be discussed and practiced and may include discussion of ADA, positioning/draping, transfers, assistive devices, and safety in all environments. Gait will be discussed from an intervention and prescriptive perspective with an emphasis on appropriate guarding and safety precautions. The science and

reasoning behind use of thermal agents, electrotherapeutics, traction, compression, hydrotherapy, and ultraviolet, lasers, and lights will be discussed and practiced. This course serves as a foundation for clinical and physical therapy science courses later in the curriculum sequence. A solid understanding of this material is necessary to ensure success in future problem based learning activities.

Summer, Year 1

DPT 704: Human Anatomy (5:3:8)

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 organized in a regional approach.

DPT 706: Exercise Physiology (2:2:0)

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 (4:4:0)

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 726: Clinical Experience 1 (1:0:1)

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 754: Burn & Wound Management (2:2:0)

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.

Fall, Year 1**DPT 710: Pharmacology (2:2:0)**

Credit: 2 Hours

This course provides an introduction to pharmacology principles and pharmacokinetics. The focus will be on the effect of drugs (by class) on systems and common side effects. The effects of drugs on the central nervous system, skeletal muscle, cardiovascular, respiratory, gastrointestinal, and endocrine systems will be discussed. Drugs used to treat pain, inflammation, infections, and an introduction to chemotherapy for neoplastic disease will be presented.

DPT 712: Neuroscience (3:3:0)

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 728: Clinical Education (2:2:0)

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 (1:0:1)

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 756: Therapeutic Exercise 1 (3:2:3)

Credit: 3 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 760: Hospital Based Practice (3:2:4)

Credit: 3 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 multidisciplinary 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 (3:2:4)

Credit: 3 Hours

This course primarily addresses screening systems for disease outside the scope of physical therapist practice, examination/evaluation of spinal and peripheral joint systems, and an introduction to patient management. An evidence informed structure is utilized exploring a variety of systems approaches to musculoskeletal examination/evaluation and combined with ICF language and examples to appropriately classify musculoskeletal dysfunction. Management strategies include structure and scope for creating a plan of care [education, activity modification, and physical interventions] with a focus on acute/sub-acute injury and post-surgical populations. An introduction to manual therapy is provided using regional techniques with focus on safety and decision making. Communication between professionals is addressed throughout the course. A variety of learning activities is incorporated into the presentation of course materials including, lecture, demonstration, independent and case study, role play, skills check-off/video assignments, and laboratory practicum.

DPT 764: Clinical Reasoning 1 (1:0:3)

Credit: 1 Hour

This course focuses on clinical reasoning in three parts. The first section of the course provides the elements and processes of critical thinking and reasoning necessary for clinical practice. The second section will apply previously taught foundational research skills at searching the literature, critically appraising the results through use of validated checklists and inventories of research quality and bias, through small group discussion and presentation under faculty/clinician guidance/facilitation to determine the quality of evidence culminating in critical analysis papers. The third section will utilize collaborative small groups to solve simulated clinical cases across the lifespan from primarily the musculoskeletal and hospital-based (acute/sub-acute) perspective. Problem-based and case-based learning activities will be incorporated with simulated patients to develop critical thinking and reasoning skills, practice examination elements, to establish a physical therapy diagnosis, prognosis, and plan of care that incorporates the ICF model. Students will orally present cases to their peers and answer questions related to their clinical reasoning processes and resultant plans of care along with carrying out portions of the plan of care under peer scrutiny. Electronic health databases and documentation software will be used in this course. Students will submit documentation of case findings using the SOAP format.

Spring, Year 2**DPT 714: Motor Control (3:3:0)**

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 758: Neurology Practice (3:2:3)

Credit: 3 Hours

This course addresses evaluation and management skills within the practice of neurological physical therapy. Students will learn a process for hypothesis-driven examination, evaluation and treatment

planning based on task-analysis and HOAC II conceptual frameworks. Emphasis will be placed on accurate choices of assessment tools and screening of body systems/functions to understand the movement dysfunctions of the neurologically impaired patient. ICF domains will guide appropriate selection of outcome measures as part of the whole person examination, evaluation and treatment planning. Outcome measures will be thoroughly reviewed, practiced and applied through case study and patient demonstrations.

DPT 766: Therapeutic Exercise 2 (3:2:4)

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 (3:2:3)

Credit: 3 Hours

The Cardiovascular & Pulmonary unit is designed to provide the student with an understanding of normal and abnormal function of the cardiovascular and pulmonary systems. Emphasis will be placed on application to physical therapy practice. This information will be presented in didactic instruction, literature review, case review and presentation, and laboratory formats. The Cardiovascular & Pulmonary unit will include a review of the pertinent anatomy and physiology presented earlier in the curriculum. Current medical and surgical interventions will be discussed. Elements of patient management will be addressed with focus on diseases specific to the cardiovascular and pulmonary systems.

DPT 770: Orthotics & Prosthetics (2:2:0)

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 800: Clinical Internship 1 (3:0:9)

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.

Summer, Year 2**DPT 732: Clinical Experience 2 (1:0:1)**

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 772: Lifespan Continuum 2 (pediatric) (3:2:4)

Credit: 3 Hours

This course will develop intermediate to entry-level skills in the evaluation and management of the pediatric population aged 0-18. Students will recognize key neuromuscular and musculoskeletal health conditions and lifestyle factors that impact a younger person's ability to fully participate in their desired societal roles or that predict future limitations thereof. The focus of Lifespan 2 will be on the etiology, presentation and assessment of pediatric health conditions. Students will research multiple sources to achieve an understanding of the evidence related to presentations and the associated management models. Students will utilize core concepts of the ICF model and relevant functional outcome measures to quantify individual-specific participation and activity restrictions and measure and record condition specific impairments. Students will synthesize these findings into an evaluation including a physical therapy diagnosis, a prognosis, and a structured, evidence-based management plan. Students will learn specific skills, building upon previous course material

that will enable them to fully execute each step of the evaluation sequence. Finally, students will acquire and develop skills to identify and evaluate specific contextual, societal, and institutional, and policy barriers to full participation of younger persons in a variety of settings, including the rural health care setting.

DPT 776: Lifespan Continuum 3 (musculoskeletal) (3:2:4)

Credit: 3 Hours

This course will develop intermediate to entry-level skills in the evaluation and management of adults across the lifespan. Students will recognize key musculoskeletal health conditions and lifestyle factors considered predictive of future negative impacts on a person's ability to fully participate in their desired societal roles. A focus on musculoskeletal conditions present in the upper half of the body including cervical, thoracic/ribs, shoulder, elbow, wrist and hand will be provided. Students will research multiple sources to achieve an understanding of the evidence related to presentations and the associated management models. Students will utilize core concepts of the ICF model and relevant functional outcome measures to quantify individual-specific participation and activity restrictions and measure and record condition specific impairments. Students will synthesize these findings into an evaluation including a physical therapy diagnosis, a prognosis, and a structured, evidence-based management plan. Students will learn specific skills, building upon previous course material that will enable them to fully execute each step of the evaluation and management process. Finally, students will acquire and develop skills to identify and evaluate specific contextual, societal, and institutional and policy barriers to full participation of adults in the rural health care setting.

DPT 780: Lifespan Continuum 4 (neurological) (3:2:4)

Credit: 3 Hours

This course will develop intermediate to entry-level skills in the evaluation and management of adults aged 18 and older who present with a neurological health problems. Students will be introduced to genetic, congenital, degenerative, active/traumatic and chronic conditions that produce neurological deficits which impact a person's ability to fully participate within their societal roles. Students will research multiple sources to achieve an understanding of the evidence

related to presentations and the associated management models. Students will utilize core concepts of the ICF model and relevant functional outcome measures to quantify individual-specific participation and activity restrictions and measure and record condition-specific impairments. Students will synthesize these findings into an evaluation including a physical therapy diagnosis, a prognosis, and a structured, evidence-based management plan. This information will be applied across the lifespan to aide clinical reasoning related to the differences and challenges that exist within varying decades of life. Students will learn specific skills, building upon previous course material that will enable them to fully execute each step of the evaluation sequence. Finally, students will acquire and develop skills to identify and evaluate specific contextual, societal, and institutional and policy barriers to full participation of adults in the rural health care setting and how this setting may impact the management of these conditions.

Fall, Year 2

DPT 734: Service Learning 3 (2:0:2)

Credit: 2 Hours

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 774: Lifespan Continuum 5 (pediatric) (4:3:3)

Credit: 4 Hours

This course will develop intermediate to entry-level skills in the treatment and management of the pediatric population aged 0-18. Students will recognize key health conditions and lifestyle factors that impact a younger person's ability to fully participate in their desired societal roles or that predict future limitations thereof. The focus of Lifespan 3 will be on treatment and management (including medical management) of pediatric health conditions commonly seen by pediatric physical therapists. Students will research multiple sources to achieve an understanding of the evidence related to common treatment approaches in pediatric physical therapy and the associated management models. Students will utilize core concepts of the ICF model to develop meaningful, measurable

goals for patients based on diagnosis, life stage, and personal/environmental factors as well as patient structure/function, activity, and participation limitations. Students will synthesize evaluation findings to hypothesize a prognosis, and to create a structured, evidence-based management plan applicable to the myriad settings of pediatric PT practice. Students will develop skills to identify and evaluate specific contextual, societal, and institutional, and policy barriers to full participation of younger persons in a variety of settings, including the rural health care setting, and formulate ongoing strategies for assisting patients in accessing community resources.

DPT 778: Lifespan Continuum 6 (musculoskeletal) (4:2:3)

Credit: 4 Hours

This course will develop intermediate to entry-level skills in the evaluation and management of adults across the lifespan. Students will recognize key musculoskeletal health conditions and lifestyle factors considered predictive of future negative impacts on an adult's ability to fully participate in their desired societal roles. Students will research multiple sources to achieve an understanding of the evidence related to presentations and the associated management models. Students will utilize core concepts of the ICF model and relevant functional outcome measures to quantify individual-specific participation and activity restrictions and measure and record condition specific impairments. Students will synthesize these findings into an evaluation including a physical therapy diagnosis, a prognosis, and a structured, evidence-based management plan. Students will learn specific skills, building upon previous course material that will enable them to fully execute each step of the evaluation and management sequence. Finally, students will acquire and develop skills to identify and evaluate specific contextual, societal, and institutional and policy barriers to full participation of adults in the rural health care setting.

DPT 782: Lifespan Continuum 7 (neurological) (4:2:3)

Credit: 4 Hours

This course will develop intermediate to entry-level skills in the management of adults over the age of 18. Students will recognize key neuromuscular health conditions and lifestyle factors considered predictive of future negative impacts on an adult and geriatric patient's ability to fully participate in their desired societal roles. Additionally, students will consider specific contextual,

societal, and institutional and policy barriers to full participation of these same patients in the rural health care setting. Students will learn a framework for clinical reasoning aimed at reducing the impact of impairments for improved task performance which will require recall of prior coursework in anatomy, biomechanics, physiology and motor control. Students will research multiple sources to achieve an understanding of the evidence related to associated management models common seen for neurologically involved patients. Students will utilize core concepts of the ICF model and relevant functional outcome measures to develop individualized, task-specific interventions which will enhance functional abilities and participation. Techniques aimed at both recovery and compensation will be presented. Students will be expected to manage and educate these patients acutely, through rehab and chronically as well as transitioning to community based health and wellness. Students will be expected to research health conditions, life style factors and related evidence-based interventions and develop basic teaching materials and educate fellow students about their findings. This will also include identifying case studies, solving case related problems and independently developing impairment and function-based treatment sequences that build on prior course-work in these areas.

Spring, Year 3

DPT 736: Administration & Management (3:3:0)

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 786: Special Populations (4:4:0)

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 along with school based practice.

DPT 788: Clinical Reasoning 3

Credit: 1 Hour

The evidence-based medicine section will apply previously taught foundational research skills at searching the literature, critically appraising the results through use of validated checklists and inventories of research quality and bias. Written assessment of evidence using the PICO method to answer clinical questions will be utilized along with presentation of mini-evidence summaries for health conditions through a critically appraised topic paper. Student groups will provide a presentation to peers and in an open public forum related to conditions across the lifespan. The presentation is comprehensive, evidence based, and entails all elements of PT practice including background information and typical patient presentation. The patient assessment and clinical reasoning section will utilize collaborative small groups and student pairs to solve simulated clinical cases across the lifespan in the primary PT practice domains (cardiopulmonary, musculoskeletal, and neuromuscular) from a continuum of acute to chronic and simple to complex. Problem-based and case-based learning activities will be incorporated with simulated patients to develop critical thinking and reasoning skills, practice examination elements, to establish a physical therapy diagnosis, prognosis, and plan of care that incorporates the ICF model. Students will orally present cases to their peers and answer questions related to their clinical reasoning processes and resultant plans of care along with carrying out portions of the plan of care under peer scrutiny. Electronic health databases and documentation software will be used in this course. The final comprehensive, graded OSCE will be completed as part of this course.

DPT 790: Imaging in PT Practice (2:2:0)

Credit: 2 Hours

This course will review the basic science behind multiple imaging modalities (x-rays, MRI, CT, Doppler, PET scan, arthrograms, DUS, etc), positives and negatives of each

intervention, and how and when to refer for imaging services or consultation. The most common views and anatomical structures will be identified by joint/region/system that may include: anatomy of bone, joint, cartilage, soft tissue, CNS structure, and cardiovascular systems. Clinical reasoning algorithms for assistance with imaging selection and interpretation will be discussed and practiced through case studies. Evidence based utilization of imaging will be discussed and practiced along with impact of overutilization on healthcare costs in didactic classroom activities and case presentations. The American College of Radiology guidelines will be implemented throughout along with validated clinical decision rules.

DPT 792: Assistive & Adaptive Technology (1:0.5:2)

Credit: 1 Hour

This course is designed to provide entry-level physical therapists with the theories and tools necessary to systematically prescribe and modify assistive technology provisions to maximize the participation and minimize functional limitations across diagnosis. Students will have the opportunity to participate in a 1-2 day hands-on workshop where seating and mobility devices will be available for hands-on learning of the products. Class work will allow application of this learning to cases involving a variety of conditions across the lifespan. Issues in funding and an introduction to writing letters of medical necessities will allow for immediate use of the skill in the clinical setting.

DPT 796: Contemporary Topics in Musculoskeletal Physical Therapy

Credit: 2 Hours

This course expands upon existing knowledge and provides students with advanced theory and skills in the evaluation and management of various topics within musculoskeletal physical therapy. Different topics will be addressed, representing areas that are either early in their development within the physical therapy profession or that are not widely addressed within the entry-level curriculum. Specific topics to be covered include: trigger point dry needling, strain-counter-strain, muscle energy technique, and advanced spinal manipulation techniques. This will be a student driven course, where information will be researched and presented by students, with faculty leading problem solving sessions to deal with complex patient issues.

DPT 797: Independent Study

Credit: 2 Hours

This course is designed to allow flexibility for select students to participate in research with CPHS faculty members. Depending on the stage of faculty research, student will gain exposure to research qualifications (e.g. CITI training), IRB processes, literature review, data collection, data reduction, data analysis, technical writing, and presentation. Students wishing to pursue community awareness and intervention can create an education course and carry it out in the community.

DPT 798: Physical Therapy Management of Vestibular Disorders and Concussion

Credit: 2 Hours

This course expands upon existing knowledge of the neurological system and neurological disorders and provides students with advanced skills in the examination, evaluation and treatment of vestibular disorders and concussion across the lifespan. The course will review the underlying anatomy and physiology of the vestibular system followed by problem-based clinical scenarios of vestibular disorders, including concussion, for patients throughout the lifespan. Current evidence on the management of vestibular disorders, including prevention, will be woven through the course and students will be encouraged to integrate evidence into proposed assessment and treatment methods.

DPT 799: Health and Wellness Promotion in the Practice of Physical Therapy

Credit: 2 Hours

This course focuses on the role of the physical therapist in health promotion, wellness, and prevention. The purpose of the course is to gain an understanding of fundamental concepts of health, wellness, screening for risk, and the theoretical bases underlying behavior change. Students will learn how to assess risk for specific conditions, generate goals to decrease risk and increase health and wellness, develop and implement a plan to achieve his or her goals, and assess the results in both individuals and within specific populations. Understanding the factors underlying health behaviors and use of techniques to more effectively motivate or coach individuals through lifestyle changes to positively impact health and wellness will be a particular focus of this course. In addition, inter-professional collaboration with community health providers will be emphasized, according to the principles of family-centered care.

Summer, Year 3**DPT 802: Clinical Internship 2 (8:0:24)**

Credit: 8 Hours

Sixteen weeks of full-time experiential training (approximately 640 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, general practice, or elective.

Fall, Year 3**DPT 794: Licensure Preparation (1:1:0)**

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 or purchased licensure preparation software.

DPT 804: Clinical Internship 3 (8:0:24)

Credit: 8 Hours

Sixteen weeks of full-time experiential training (approximately 640 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, general practice, neuromuscular, or elective. (approximately 640 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.

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 Ethics, Values and Responsibilities

- **7D1.** Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
- **7D2.** Report to appropriate authorities suspected cases of abuse of vulnerable populations.
- **7D3.** Report to appropriate authorities suspected cases of fraud and abuse related to the utilization of and payment for physical therapy and other health care services.
- **7D4.** Practice in a manner consistent with the APTA Code of Ethics.
- **7D5.** Practice in a manner consistent with the APTA Core Values.
- **7D6.** Implement, in response to an ethical situation, a plan of action that demonstrates sound moral reasoning congruent with core professional ethics and values.
- **7D7.** Communicate effectively with all stakeholders, including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policymakers.
- **7D8.** Identify, respect, and act with consideration for patients'/clients' differences, values, preferences, and expressed needs in all professional activities.
- **7D9.** Access and critically analyze scientific literature.
- **7D10.** Apply current knowledge, theory, and professional judgment while considering the patient/client perspective, the environment, and available resources.
- **7D11.** Identify, evaluate and integrate the best evidence for practice with clinical judgment and patient/client values, needs, and preferences to determine the best care for a patient/client.
- **7D12.** Effectively educate others using teaching methods that are commensurate with the needs of the learner, including participation in the clinical education of students.

- **7D13.** Participate in professional and community organizations that provide opportunities for volunteerism, advocacy and leadership.
- **7D14.** Advocate for the profession and the health care needs of society through legislative and political processes.
- **7D15.** Identify career development and lifelong learning opportunities, including the role of the physical therapist in the clinical education of physical therapist students.

Patient/Client Management/Screening

- **7D16.** Determine when patients/clients need further examination or consultation by a physical therapist or referral to another health care professional.

Examination, Evaluation and Diagnosis

- **7D17.** Obtain a history and relevant information from the patient/client and from other sources as needed.
- **7D18.** Perform systems review⁵¹.
- **7D19.** Select, and competently administer tests and measures appropriate to the patient's age, diagnosis and health status including, but not limited to, those that assess:
 - a. Aerobic Capacity/Endurance
 - b. Anthropometric Characteristics
 - c. Assistive Technology
 - d. Balance
 - e. Circulation (Arterial, Venous, Lymphatic)
 - f. Self-Care and Civic, Community, Domestic, Education, Social and Work Life
 - g. Cranial and Peripheral Nerve Integrity
 - h. Environmental Factors
 - i. Gait
 - j. Integumentary Integrity
 - k. Joint Integrity and Mobility
 - l. Mental Functions
 - m. Mobility (including Locomotion)
 - n. Motor Function
 - o. Muscle Performance (including Strength, Power, Endurance, and Length)
 - p. Neuromotor Development and Sensory Processing
 - q. Pain
 - r. Posture
 - s. Range of Motion
 - t. Reflex Integrity
 - u. Sensory Integrity
 - v. Skeletal Integrity
 - w. Ventilation and Respiration or Gas Exchange

- **7D20.** Evaluate data from the examination (history, health record, systems review, and tests and measures) to make clinical judgments.
- **7D21.** Use the International Classification of Function (ICF) to describe a patient's/client's impairments, activity and participation limitations.
- **7D22.** Determine a diagnosis that guides future patient/client management.

Prognosis and Plan of Care

- **7D23.** Determine patient/client goals and expected outcomes within available resources (including applicable payment sources) and specify expected length of time to achieve the goals and outcomes.
- **7D24.** Establish a safe and effective plan of care in collaboration with appropriate stakeholders, including patients/clients, family members, payors, other professionals and other appropriate individuals.
- **7D25.** Determine those components of the plan of care that may, or may not, be directed to the physical therapist assistant (PTA) based on (a) the needs of the patient/client, (b) the role, education, and training of the PTA, (c) competence of the individual PTA, (d) jurisdictional law, (e) practice guidelines policies, and (f) facility policies.
- **7D26.** Create a discontinuation of episode of care plan that optimizes success for the patient in moving along the continuum of care.

Intervention

- **7D27.** Competently perform physical therapy interventions to achieve patient/client goals and outcomes. Interventions include:
 - a. Airway Clearance Techniques
 - b. Assistive Technology: Prescription, Application, and, as appropriate, Fabrication or Modification
 - c. Biophysical Agents
 - d. Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
 - e. Integumentary Repair and Protection
 - f. Manual Therapy Techniques (including mobilization/manipulation thrust and nonthrust techniques)
 - g. Motor Function Training (balance, gait, etc.)
 - h. Patient/Client education
 - i. Therapeutic Exercise

Management of Care Delivery

- **7D28.** Manage the delivery of the plan of care that is consistent with

professional obligations, interprofessional collaborations, and administrative policies and procedures of the practice environment.

- **7D29.** Delineate, communicate and supervise those areas of the plan of care that will be directed to the PTA.
- **7D30.** Monitor and adjust the plan of care in response to patient/client status.
- **7D31.** Assess patient outcomes, including the use of appropriate standardized tests and measures that address impairments, functional status and participation.
- **7D32.** Complete accurate documentation related to 7D15 - 7D30 that follows guidelines and specific documentation formats required by state practice acts, the practice setting, and other regulatory agencies.
- **7D33.** Respond effectively to patient/client and environmental emergencies in one's practice setting.
- **7D34.** Provide physical therapy services that address primary, secondary and tertiary prevention, health promotion, and wellness to individuals, groups, and communities.
- **7D35.** Provide care through direct access.
- **7D36.** Participate in the case management process.

Participation in Health Care Environment

- **7D37.** Assess and document safety risks of patients and the health care provider and design and implement strategies to improve safety in the health care setting as an individual and as a member of the interprofessional health care team
- **7D38.** Participate in activities for ongoing assessment and improvement of quality services.
- **7D39.** Participate in patient-centered interprofessional collaborative practice.
- **7D40.** Use health informatics in the health care environment.
- **7D41.** Assess health care policies and their potential impact on the health care environment and practice.

Practice Management

- **7D42.** Participate in the financial management of the practice setting, including accurate billing and payment for services rendered.
- **7D43.** Participate in practice management, including marketing, public relations, regulatory and legal requirements, risk management, staffing and continuous quality improvement.

Physician Assistant Program

Department of Physician Assistant Practice

Campbell University
College of Pharmacy & Health Sciences
Smith Hall
4150 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 medical 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 health care delivery system throughout the continuum of care. The program promotes patient-centered, evidence-based medicine preparing students to be competent health care providers.

Goals

The Campbell Physician Assistant Program strives 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.

Accreditation

Please refer to the accreditation information in the introduction section of this academic bulletin for more details or our website: www.campbell.edu/paprogram

Admission Policies

The PA program is committed to selecting applicants who have demonstrated academic success and strong critical thinking skills. In order to be an asset to the physician assistant profession, candidates should also possess integrity, compassion, empathy, flexibility, and the ability to multitask. 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 PA program;
- To assess the candidate's commitment and aptitude as a future practice physician assistant.

CASPA

Campbell PA program applicants must use the Central Application Service for Physician Assistants (CASPA) online at www.caspaonline.org. CASPA launches each year in mid April and the deadline is October 1. Visit the official CASPA website for the launch and deadline dates for the current cycle. The earlier an applicant applies, the better the chances for acceptance. Original official transcripts from all US postsecondary schools (including the planned fall courses) and Graduate Record Examination (GRE) scores must be submitted to CASPA (The Campbell PA program CASPA code is 0406.) All college coursework attempted must be submitted to CASPA.

For applicants currently enrolled in classes, it is imperative to update newly completed coursework. Follow the instructions for the Academic Update on the CASPA website to update your transcript through CASPA. Final transcripts reflecting a conferred degree must be sent directly to the CPHS Admissions Office.

Applicants are also required to submit three letters of recommendations to CASPA. Preference is given to applicants with two of three letters from physicians, PAs or clinical supervisors, and others familiar with your clinical experience. One academic recommendation is acceptable. Personal recommendations are discouraged.

Applicants gaining acceptance to the PA program are required to submit to a criminal background check and substance abuse screening. 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.

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Supplemental Application

A supplemental application must also be submitted with a \$50 application fee to the College of Pharmacy & Health Sciences' (CPHS) Admissions Office. A passport-sized personal photograph must be included.

All application material must be received by October 1. Once a verified CASPA application and a supplemental application have been received, it will be reviewed by the Admissions Committee. Applicants are strongly encouraged to apply early due to interviews and acceptances being conducted on a rolling basis. Notification of on-site 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 PA program
- The physician assistant profession
- Educational background
- Communication skills
- Problem-solving skills
- Leadership skills
- Inter-disciplinary cooperation
- Work and personal experience

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

All accepted students will be required to submit to criminal background checks and substance abuse screening tests as directed by the program. Accepted students must submit a non-refundable deposit of \$1,500 to the University Business Office, as described in the acceptance letter, to secure a position in the PA 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.
- Completion of all prerequisite work
- Required minimum overall and/or last 60 credit hours GPA > 3.2
- Recommended prerequisites GPA > 3.4
- Recommended GRE >1100 (>300 revised format) within 5 years of application. View details below regarding the revised GRE test.
 - Verbal > 500 (>150 revised GRE)
 - Quantitative > 600 (>150 revised GRE)
 - Analytical > 4.0
- At least 1,000 hours of direct hands-on patient care experience must be completed at the time of submitting application.
 - Hours earned from pharmacy technician, veterinarian technician, or laboratory technician experiences can be used as supplemental hours in addition to the 1,000 hours of direct hands-on patient care experience.
 - Hours obtained for course credit during educational training will not count toward the required 1,000 hours.
- Recommended shadowing of a clinically practicing PA for a minimum of 20 hours
- Three letters of recommendation:
 - Preference is given to applicants with two of three letters from physicians, PAs or clinical supervisors, and others familiar with your clinical experience
 - One academic recommendation is acceptable
 - 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:
 - 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 Admissions Process
- One semester of Organic Chemistry or Biochemistry
- One semester of Statistics or Biostatistics
- One semester of Psychology
- One semester of Genetics is recommended

Please note that all prerequisite courses that require a lab must be completed in person. Online labs will not be accepted.

Examples of Qualifying Health Care Experience

- Athletic Trainer
- Emergency Room/Medical Technician
- Laboratory Technologist (with direct patient contact)
- Medical Assistant
- Military Medic
- Nurse
- Nursing Assistant
- Occupational Therapist
- Phlebotomist
- Physical Therapist
- Physical Therapy Assistant
- Radiological Technologist
- Respiratory Therapist
- Scribe
- 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 degrees that have been evaluated as United States equivalent will not fulfill this requirement. International applicants may be asked to submit Test of English as a Foreign Language (TOEFL) score 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 for graduation. Optional fees include a yearly parking permit and student illness insurance.

Refund Policy

Reference the General Information section of this bulletin for more information regarding the CPHS refund policy.

Financial Aid

For information on financial aid availability, please contact the Office of Financial Aid by telephone at (910) 893-1310, or by email at financialaid@campbell.edu, or visit the website: <http://www.campbell.edu/financialaid/>.

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.

Attendance

Attendance is required at all classes, labs, and examinations. Attendance is a part of class participation and professionalism. Students should notify their advisor and course coordinator of any scheduled, recurrent, or emergent absences. One reason we want to know where you are is to ensure you're safe. Excused absences include illness, injury, doctor's appointments, death in the student's immediate family, car problems, or inclement weather. Students who have one unexcused absence will receive a warning. For any subsequent unexcused absence there will be a two-point deduction from the final grade for the course. Refer to the Clinical Year Manual for detailed information on clinical year absences.

Entering class late is inconsiderate of other students and the instructor. 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 course grade for each subsequent infraction.

Refer to the General Information section of this academic bulletin for the College's attendance policy.

Complaint Procedure

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

Sexual Harassment Policy

Refer to the General Information section of this Academic Bulletin for the sexual harassment policy.

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 basic laboratory techniques; 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) and 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 PAs 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 PAs, 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, perceive three-dimensional relationships and 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, display flexibility and 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.

Disclaimer: Accepted students with a

disability who believe they may require special accommodations should contact the Director of Access & Outreach immediately upon accepting the offer of admissions and before matriculation. Before matriculation, accepted students must attest in writing that they have read and are able to meet the program’s technical standards.

Academic Standards

PA Academic Performance and Standards Committee

The Academic Performance and Standard Committee (APSC) of the Campbell University Physician Assistant program consists of the principal faculty: the program director (chair), medical director, academic coordinators, clinical coordinators, and general faculty members. The committee meets at the end of each block and 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 candidates 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, as determined by the student’s advisor, with input from the academic/ clinical teams:

Didactic Remediation

Students having academic difficulty can request tutoring by contacting the Coordinator for Academic Support Services. There is no fee for this service. The number to call is 910-814-5693. Advisors may refer students for tutoring and assessment as part of a remediation plan.

1. Didactic Exam Remediation

Each student is required to have a satisfactory understanding of all course material presented

during the program in order to become a competent clinician. An exam failure with a grade of less than 70% in any course will result in a required remediation exercise at the discretion of the Course or Unit Coordinator. Examination grades will not change following remediation. If a student fails to successfully meet all remediation requirements following an exam failure, the APSC will meet to discuss student progression in the Program.

In addition, following any exam failure, the program may require any or all of the following interventions, or others, as appropriate:

1. The student may be required to meet with their Faculty Advisor, and/or Course Coordinator, and/or Academic Success Team and/or Program Director to discuss exam performance.

2. The student may be placed on academic probation.

3. The student may be required to complete an Academic Contract.

Failure of a third exam in any one block or failure of four exams during the didactic year will result in a meeting of the APSC to discuss whether, and under what conditions, a student may continue in the Program.

2. Unit Remediation

Clinical Medicine I, II, III and IV courses are composed of several units. Each unit has one or more exams.

A unit failure with a grade of less than 70% in the Clinical Medicine course will result in a required remediation exercise at the discretion of the Unit Coordinator. Examination grades will not change following remediation. If a student fails to successfully meet all remediation requirements following a unit failure, the APSC will meet to discuss student progression in the Program.

In addition, following any unit failure, the program may require any or all of the following interventions, or others, as appropriate:

1. The student may be required to meet with their Faculty Advisor, and/or Course Coordinator, and/or Academic Success Team and/or Program Director to discuss exam performance.

2. The student may be placed on academic probation.

3. The student may be required to complete an Academic Contract.

Failure of any third unit during the didactic year will result in a meeting of the APSC to discuss whether, and under what conditions, a student may continue in the Program.

3. Course Remediation

Students must successfully complete all required courses of the Physician Assistant program with a minimum grade of 70%.

First Course Failure: Failure of three exams in a course and/or receiving a final grade of less

than 70% will result in failure of the course.

The student will be given one opportunity to remediate the course. Remediation of the course may occur during the remediation week between blocks. The student must successfully pass remedial exercises within the time frame directed by the academic coordinator. After successful remediation the course grade will be advanced to 70% and the student will be able to continue in the program on academic probation. Failure to successfully remediate the course in the prescribed manner and time will result in dismissal from the program.

Second Course Failure: 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 a unit in which he or she received a grade of less than 70%,
2. Failure of one didactic course with a grade of less than 70%, but which was successfully remediated.

A student placed on academic probation will be on probation for the remainder of the didactic year. 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 advising and tutoring, restricting participation in non-academic clubs and committees, or a combination of interventions.

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 remain in the program. Students will remain on administrative probation for the remainder of the program.

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.

Academic or administrative probation, counseling, and remediation are not to be viewed as punitive, but as a means to help the student succeed. These measures are instituted in recognition that, given the responsibilities of a health care professional, it is untenable for the program to advance a student who is not performing at a satisfactory level.

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%, or
2. Failure of a second course.

Students who are dismissed from the program have three (3) business days to appeal the decision to the associate dean for health sciences. The associate dean will review the case within seven (7) business days and deliver a decision. The decision of the associate dean for health sciences is final.

Students who are dismissed must return the program provided laptop, iPad mini, identification card, name tags, and the Campbell logo patch.

Administrative Dismissal

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 College of Pharmacy & Health Sciences Student Conduct and Professionalism Committee or the Campbell University Behavioral Intervention Team, as appropriate. After discussion of the circumstances for probation and potential dismissal, the Committee or Team will either recommend further investigation and/or counseling, or uphold the recommendation for dismissal.

Students who are dismissed from the program have three (3) business days to appeal the decision to the associate dean for health sciences. The associate dean will review the case within seven (7) business days and deliver a decision. The decision of the associate dean for health sciences is final.

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 end-of-rotation (EOR) exam grades, preceptor evaluation, written assignments, and the professionalism evaluation, as outlined in the course syllabus. Failure of any EOR exam, with a score of less than 65%, must be successfully remediated with a written exam and assignment. The grade earned on the initial EOR exam will be the grade used to calculate the final course grade. If a student does not successfully remediate a failed EOR exam, s/he will fail the rotation and be placed on academic probation. Failure of the rotation results in deceleration, delayed graduation, and additional tuition and fees.

Failure to successfully remediate a second EOR exam failure will result in dismissal from the program.

Students may successfully remediate up to two failed EOR exams, without being placed on academic probation. Failure of a third EOR exam will result in academic probation and evaluation by the PA Academic Performance & Standards Committee. The committee will review each student's overall academic performance on an individual basis to determine whether deceleration with delayed graduation is in the student's best interest.

Failure of a fourth EOR exam will result in the student being evaluated by the PA Academic Performance & Standards Committee. The committee will review the student's overall academic performance to determine whether, and under what conditions, the student may continue in 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). If failure by the preceptor is upheld by the APSC, the student will receive a failure for the rotation. If the first failure was upheld, 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 placed 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%, but was successfully remediated, or
3. Failing a preceptor evaluation for any rotation, upon recommendation of the APSC.
4. Failure of a third EOR exam.

Clinical Year Dismissal

Clinical students will be dismissed from the Physician Assistant program for the following:

1. Failure of a second clinical rotation,
2. Failure of two preceptor evaluations, following review by, and on the recommendation of the APSC.
3. 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 for health sciences 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 for health sciences 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 contest 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 6 weeks 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 December, May, or August 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 or 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 be 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 on 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 receive a 10% reduction in 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.

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 affairs. Student withdrawal will follow the "Withdrawal" protocol in the general section of this bulletin.

Students returning after a medical leave-of-absence must obtain a medical clearance letter clearing them for return to the program.

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

The Campbell PA program is 24 months long. The graduate degree program consists of 12 months of didactic education and 12 months of supervised clinical experiential education. Graduates will receive the Master of Physician Assistant Practice (MPAP) degree upon successful completion of the program. The program starts in July, with graduation after six semesters of training, also in July. All didactic courses are held on the health sciences campus in Lillington, NC.

The PA program curriculum is a competency-based graduate medical education curriculum. The sequence of courses is designed to start with foundation courses in the basic sciences as well as clinical skills. Following the initial foundational coursework, subsequent courses teach clinical medicine, surgery, and pharmacotherapeutic 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 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.

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 four-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 was designed to meet these accreditation requirements.

Clinical Education

Clinical rotations in the second year consist of four-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.

Didactic Courses

Block 1

Courses	Credit Hours
MPAP 501 - Anatomy	4
MPAP 502 - Physiology	3
MPAP 511 - Genetics	1
MPAP 512 - History & Physical	3
MPAP 519 - Health Policy	1
Total	12

Block 2

Courses	Credit Hours
MPAP 504 - Clinical Medicine I	4
• Prevention & Nutrition	
• Infectious Disease	
• ENT	
• Pulmonology	
MPAP 522 - Clinical Skills I	2
MPAP 515 - Pharmacology I	2
MPAP 503 - Behavioral Medicine	3
Total	11

Block 3

Courses	Credit Hours
MPAP 505 - Clinical Medicine II	4
• Cardiology	
• Hematology/Oncology	
• Gastroenterology	
MPAP 509 - Evidence-Based Medicine	1.5
MPAP 516 - Pharmacology II	2
MPAP 521 - Surgery	3
MPAP 523 - Clinical Skills II	3
Total	13.5

Block 4

Courses	Credit Hours
MPAP 506 - Clinical Medicine III	4
• Endocrinology	
• Nephrology/Urology	
• Reproductive Health	
• Rheumatology	
MPAP 509 - Evidence-Based Medicine	1.5
MPAP 514 - Orthopaedics	2
MPAP 517 - Pharmacology III	2
MPAP 524 - Clinical Skills III	3
Total	12.5

Block 5

Courses	Credit Hours
MPAP 526 - Clinical Medicine IV	4
• Dermatology	
• Pediatrics	
• Neurology	
• Geriatrics	
MPAP 527 - Pharmacology IV	2
MPAP 510 - Emergency Medicine	2
MPAP 524 - Clinical Skills IV	3
Total	11

Clinical Rotations

Courses	Credit Hours
MPAP 601 - Emergency Medicine	5
MPAP 602 - Family Practice	5
MPAP 603 - Internal Medicine	5
MPAP 604 - Surgery	5
MPAP 605 - Pediatrics	5
MPAP 606 - Psychiatry	5
MPAP 607 - OB/GYN	5
MPAP 608 - Primary Care	5
MPAP 609 - Evidence-Based Med. II	5
MPAP 611 - Elective 1	5
MPAP 612 - Elective 2	5
MPAP 613 - Senior Seminar	5

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 predominately 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 costs. Students may qualify for discounted housing rates that the program may arrange 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

Human Anatomy prepares the student for clinical practice with an understanding of functional human anatomy. The course consists of lecture and cadaver lab. The lecture and lab sections are organized in an organ system approach, correlating with the physical diagnosis unit that runs concurrently. Lecture and lab are taught by experienced clinicians.

MPAP 502 – Physiology

Credit: 3 hours

Physiology provides the student with an understanding of pathophysiological processes that inform 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 and psychosocial disorders and behaviors. Presented in lecture and seminar format the major psychiatric disorders are studied. Led by experienced clinicians, clinical reasoning exercises include small-group clinical case study discussions 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 four didactic clinical medicine courses presented in the first year. The course concentrates 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, infectious diseases, pulmonology, and diseases of the head, eyes, ears, nose and throat. The course is presented in lecture format taught by 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: 4 hours

This is the second of four 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 cardiology, hematology & oncology, and gastroenterology. 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: 4 hours

This is the third didactic clinical medicine course 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, covering endocrinology, women's health, and nephrology/urology. 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 526 – Clinical Medicine IV

Credit: 4 hours

This is the fourth didactic clinical medicine course presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; covering dermatology, pediatrics, neurology, and geriatric medicine. 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 the principles and practice of Evidence-based Medicine (EBM). 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. Clinical simulation in the simulation lab prepares students for emergent patient care.

MPAP 511 – Genetics

Credit: 1 hour

This one semester course is an introduction to medical genetics and genomics. Presented in lecture format and group and case discussions, this course explores the genetic basis of disease as well as principles of genomics, current research, ethical dilemmas, and cancer genetics. 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

History and Physical Examination introduces the student to the art of acquiring a patient history and performing the physical examination using lecture and laboratory, and small group formats. 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 course presents the student with an overview of the discipline of orthopedics. 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 orthopedics as seen in primary care.

MPAP 515 – Pharmacotherapeutics I

Credit: 2 hours

This course is the introductory section of a four course 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 faculty from the Department of Pharmacy Practice.

MPAP 516 – Pharmacotherapeutics II

Credit: 2 hours

This is the second of four pharmacotherapeutics courses. 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 faculty from the Department of Pharmacy Practice.

MPAP 517 – Pharmacotherapeutics III

Credit: 2 hours

This is the third Pharmacotherapeutics 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 faculty from the Department of Pharmacy Practice.

MPAP 527 – Pharmacotherapeutics IV

Credit: 2 hours

This is the fourth pharmacotherapeutics 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 faculty from the Department of Pharmacy Practice.

MPAP 519 – Health Policy & Professional Practice I

Credit: 1 hour

This one semester course introduces the student to the issues of physician assistant professional practice including PA history, state laws and rules, certification, licensure, DEA regulation, and malpractice insurance. The course also presents topics in healthcare delivery systems, quality improvement, health policy, medical ethics, patient safety, healthcare reform, the patient-centered medical home, population health, public health, cultural competence, and healthcare disparities. 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 in an interprofessional seminar.

MPAP 521 – Surgery

Credit: 4 hours

This 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 I

Credit: 2 hours

This course is the first in a sequence of four 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 block's clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 523 – Clinical Skills II

Credit: 2 hours

This course is the second in a sequence of four 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 block's clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 524 – Clinical Skills III

Credit: 3 hours

This course is the third in a sequence of four 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 block's clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 525 – Clinical Skills IV

Credit: 3 hours

This course is the fourth in a sequence of four 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 block's clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

Clinical Courses

MPAP 601 – Emergency Medicine

Credit: 5 hours

This 4 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 4 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 4week rotation gives the student the opportunity to apply medical interventions for internal medicine patients in the inpatient 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. 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 4 week rotation is located at one of our affiliated general surgical units/practices. 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 may 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 4 week rotation will expose the student to the clinical practice of pediatric medicine. Rotations will be at an affiliated inpatient or 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 4 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 4 week rotation in women's health provides the student with an opportunity to gain experience in common gynecological conditions. The student will learn about screening for breast and gynecologic cancers, normal and abnormal menstrual patterns, infectious diseases, and family planning. The student will participate in providing routine prenatal and postnatal care. The student may also have the opportunity to assist in GYN surgeries and with labor & delivery.

MPAP 608 – Primary Care

Credit: 5 hours

This 4 week rotation introduces the student to the basics of outpatient primary care medicine. The student may rotate in an internal medicine office, family practice, inpatient internal medicine group, geriatrics, inpatient pediatrics, or urgent care. 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 4 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 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.

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.

MPAP 613 – Senior Seminar

Credit: 5 hours

This 5 credit hour seminar concludes professional practice training following completion of supervised clinical practice experiences (SCPEs). The seminar is required in order to successfully complete the SCPE year. Seminar contents include a PANCE preparation course and practice examination; a self-assessment examination; summative clinical practical skills evaluations; a summative written examination, completion of a professionalism module, and lecture and seminar content designed to prepare the graduating physician assistant for professional practice.

Competencies for Graduates

In order to prepare for certification and professional practice as a Physician Assistant, the PA student must graduate from a competency based, entry level, and accredited PA program. The Campbell PA program consists of didactic and clinical education guided by the Standards for Physician Assistant Education, as set forth by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Upon completion of the program the graduate should possess defined basic competencies required to deliver high quality health care in a dynamic clinical environment.

In an effort to define PA competencies the National Commission on Certification of Physician Assistants (NCCPA), the ARC-PA, the American Academy of Physician Assistants (AAPA), and the Physician Assistant Education Association (PAEA) have developed a list of suggested clinical competencies for the PA profession. The competencies are based on the Accreditation Council for Graduate Medical

Education (ACGME) model with areas specific to PA practice.

With respect to the guidelines for PA competencies specific knowledge, skills, and attitudes are addressed in PA education. Students graduating from the Campbell PA program must be able to demonstrate competency in the following areas:

Medical Knowledge

Physician Assistants are expected to:

- 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 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 collaborating physicians 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 collaborating 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

Public Health

Department of Public Health

Campbell University
College of Pharmacy & Health Sciences
PO Box 1090
Buies Creek, NC 27506
910-814-5386
publichealth@campbell.edu

Academic Program

The Department of Public Health offers a master of science degree in public health providing students with a solid foundation in addressing health disparities in rural populations.

Mission Statement

With deep commitments to service learning and action research, the Campbell University Master of Science in Public Health program prepares students to be public health professionals by engaging rural communities as valuable and accessible partners in achieving health equity.

Admission Policies

Admission Requirements

- Bachelor's degree from an accredited institution
- Recommended minimum cumulative GPA of 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. Submit a complete application with required \$50 fee by the July 1 deadline
2. Submit all official college transcripts
3. Submit GRE scores and TOEFL scores (if applicable)
4. Submit three letters of recommendation

It should be noted the Admissions Committee continues to review the results of pending coursework, test scores and behavior during the admissions and matriculation process. The Admissions Committee reserves the right to rescind the offer of admission due to poor performance or unprofessional behavior.

Tuition, Fees and Financial Information

Tuition and fees are determined annually and 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

Reference the General Information section of this bulletin for more information regarding the CPHS refund policy.

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 semester 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.

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

- International applications are not eligible for provisional acceptance if a US student visa is required.
- International applications must also submit

a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.

- 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.
- 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 program's 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 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
4. Failure to complete all coursework within five years of entering the program

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 Public Health program. The Chair of the committee notifies each student, the appropriate department chair, and the associate dean for health sciences 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 for health sciences, 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 petition to the associate dean for health sciences for the College of Pharmacy & Health Sciences within seven days of the student's receipt of notification of the decision. The petition must contain the specific variance requested, a description if 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 health sciences 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 health sciences at the College of Pharmacy & Health Sciences within seven days 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 health sciences 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

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 or from the CPHS Office of Admissions & Student Affairs. 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

Semester 1

Courses	Credit Hours
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

Semester 2

Courses	Credit Hours
PUBH 560 - Epidemiology	3
PUBH 520 - Health Education & Promotion	3
PUBH 542 - Community Health Assessment & Evaluation	3
PUBH 502 - Seminar in Public Health	1
PUBH 699 - Practicum in Public Health	1
Total	11

Second Year

Semester 3

Courses	Credit Hours
PUBH 550 - Environmental Health	3
PUBH 682 - Ethical issues in Public Health	3
PUBH 699 - Practicum in Public Health	1
Elective	2
Elective	2
Total	11

Semester 4

Courses	Credit Hours
PUBH 690 - Research Project	3
Elective	2
Elective	2
Elective	2
Total	9

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 580 - 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 650 - Public Health Surveillance

Credit: 3

This course introduces students to principles and practices of public health surveillance. Public health practice is all about decision making and implementation of sustainable interventions to reduce morbidity and mortality and to improve health. We need information to make good judgment, and surveillance provides that information.

This course will introduce students to the principles that govern surveillance including planning, developing, and implementation of a surveillance system in response to the rapidly changing field of public health.

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 665 - Applications of Pharmacoepidemiology to Pharmacovigilance

Credit: 3

This elective is designed for Master Students in Public Health. The purpose of the course is to introduce students to the core concepts of Pharmacoepidemiology and the challenges for a proactive pharmacovigilance system. Emphasis will be placed on applying these concepts to public health skills and practice. In addition, the course will provide an opportunity for students to develop skills / resources for further developing an understanding of the complexity of a pharmacovigilance program.

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: 3

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. Prerequisite: 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.

Dual Degree Programs

The College of Pharmacy & Health Sciences offers six dual degree programs to provide students with specialized training.

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. 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 dual 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
Economics	3
Statistics	3

This requirement may be satisfied in a variety of ways:

- Completing and passing a three-credit undergraduate course in each of the subject areas. Such courses may be completed at any accredited college or university;
- Obtaining the equivalent credit(s) by passing a competency exam such as CLEP, or;
- Completing and passing one or more self-paced non-credit online courses offered through the Campbell Business School. These courses consist of a pretest, several lessons, practice quizzes and a posttest. Students who score 80% or more will satisfy the prerequisite requirement in the relevant subject area. Students will have two opportunities to achieve this score. The fee for each course is \$200. Students may sign up for courses by paying the relevant fee online through our Graduate Prerequisite Modules Payment Center. Once purchased, please email mba@campbell.edu. The Office of Graduate Programs will verify your payment and place your order once payment is confirmed. You will then receive an email with a link to your module.

Program Requirements

A minimum of 37 credit hours must be completed to earn a MBA degree.

Courses	Credit Hours
MBA 700: Orientation to Innovation, Design Thinking & the CU MBA	1
MBA 710: Accounting for Decision Making	3
MBA 720: Applied Economics for Business Leaders	3
MBA 730: Finance and Capital Management	3
MBA 740: Comm. & Critical Thinking for Ethical Decision Making	3
MBA 750: Organizational Culture in a Changing Environment	3
MBA 760: Business Analytics	3
MBA 770: Digital and Contemporary Marketing Strategies	3
MBA 780: Global Supply Chain Management	3
MBA 790: Strategic Management "Live Case" Seminar (21 hour prerequisite)	3

MBA Electives Courses

Courses	Credit Hours
MBA 741: Legal Environment of Business	
MBA 742: Advanced Negotiation and Analysis	3
MBA 751: Project Management	3
MBA 752: Human Resource Management	3
MBA 772: Marketing Research	3
MBA 755: Study Abroad	3
MBA 708: Special Topics Financial Services Focus Area	3
732: Management of Financial Institutions	3
TRUST 620: Investment Analysis	3
TRUST 633: Advanced Income Taxation	3
TRUST 740: Risk Management Applications	3
Healthcare Management Focus Area	3
MBA 731: Healthcare Finance	3
MBA 743: Health Law and Policy	3
MBA 753: Healthcare Organization and Delivery	3
MBA 754: Healthcare Management	3
MBA 771: Healthcare Strategy and Marketing	3

Transfer of Courses

Students may substitute up to nine hours of CPHS courses as elective courses.

Courses	Credit Hours
PHRD 521: US Health Care	1.5
PHRD 635: Law & Ethics I	2
PHRD 645: Law & Ethics II	2
PHRD 715: Operations I	2
PHRD 725: Operations II	1
PHRD 735: Operations III	1
Research Project: TBD	1-3

PharmD/MS in Clinical Research

The PharmD/MSCR 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.

Program Requirements

The following MSCR courses must be taken in conjunction with the PharmD curriculum for the fulfillment of the dual program:

Courses

CLNR 505 – Principles of Clinical Research
CLNR 515 – New Product Development
CLNR 517 – Biostatistical Inference
CLNR 518 – Into to Biostatistical Modeling
CLNR 520 – Advanced Data Management
CLNR 525 – Medical Ethics
CLNR 530 – Regulatory Affairs
CLNR 552 – Scientific Communications
CLNR 559 – Managing & Monitoring Clinical Trials
CLNR 561 – Healthcare Economics
CLNR 566 – Advanced Study Design & Analysis
CLNR 568 – Project Management
CLNR 606 – Clinical Research Seminar
CLNR 690 – Research Project I
CLNR 691 – Research Project II
CLNR 694 – Research Project III
CLNR 695 – Research Project IV

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 an 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 PhD level.

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 MS-required 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.

Program Requirements

Below is a curriculum example for the pharmacology track showing only the MSPS courses; view the MSPS curriculum for course listings in all four tracks. Students can fulfill the elective requirements for the MSPS program with courses in the PharmD curriculum. The curriculum for the dual degree is worked out on an individual basis due to options for electives and research projects.

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 & Molecular Pharmacology
PHSC 536 – M.S. Seminar II
PHSC 536 – 5XX-Elective

Summer Courses

PHSC 610 – Research Proposal

First Professional Year (P1 Year)

Only PharmD courses (no MSPS this year)

Summer Courses

PHSC 620 – Research Project

Second Professional Year (P2 Year)

P2 Fall Semester

PharmD Courses +
PHSC 508 – Drug Development & Pharmaceutical Regulations

P2 Spring Semester

Only PharmD Courses

Third Professional Year (P3 Year)

P3 Fall Semester

Only PharmD courses

P3 Spring Semester

PharmD Courses +
PHSC 590 – Adv Pharmacology & Toxicology

Fourth Professional Year (P4 Year)

Only PharmD Advanced Pharmacy Practice Experiences

PharmD/MS in Public Health

The PharmD/MSPH dual degree program will give 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 pharmacy students. This additional one-year program provides 32 credit hours of public health courses, and both the PharmD and MSPH degrees are awarded after five years of study.

Interested pharmacy students must complete the dual degree PharmD/MSPH application to receive dual degree status. GRE scores will be waived for students who have a letter of acceptance from the PharmD program.

Students who are pursuing the PharmD/MS in Public Health will complete one year of public health study prior to beginning courses within the pharmacy curriculum. The year as an MSPH student will be solely devoted to public health curriculum.

Program Requirements

A minimum of 32 credit hours of core courses must be completed by all students to earn a MSPH degree.

Fall

PUBH 540 – Statistical Methods I
 PUBH 525 – Overview of Rural Health
 PUBH 580 – Health Policy & Management
 PUBH 502 – Seminar in Public Health
 PUBH 699 – Practicum in Public Health

Spring

PUBH 560 – Epidemiology
 PUBH 520 – Health Education & Promotion
 PUBH 541 – Community Health Assessment & Evaluation
 PUBH 502 – Seminar in Public Health
 PUBH 699 – Practicum in Public Health

Summer

PUBH 682 – Ethical Issues in Public Health
 PUBH 550 – Environmental Health
 PUBH 690 – Research Project
 PUBH 699 – Practicum in Public Health

Electives

In addition to the above core credits, students are required to complete 10 hours of electives from the pharmacy curriculum. The following two courses (6 credit hours) are required electives toward the MSPH degree.

- PHAR 528 - Experimental Design & Biostatistics
- PHAR 544 - Introduction to Clinical Research Design and Literature evaluation

Optional Electives

Students may choose four credits from other elective courses within the pharmacy curriculum. Previously approved courses are listed below. PharmD /MS in Public Health dual degree students may apply for elective credit for completing other courses, participating in faculty-directed public health research independent studies, or completing experiential learning experiences in which there is some clear public health relevance. If students wish to have additional learning experiences considered for MSPH elective credit, the student must submit an online application that articulates the manner in which the experience offers the opportunity to demonstrate at least three CUPHP competencies (Foundational and/or Rural Health). Also, the student must submit the manner in which assignments will be modified or tailored to emphasize the public health relevance of the coursework.

- PHAR 512 – Multicultural Health Practices Health Disparities
- PHAR 531 – Strategic Management in Healthcare
- PHAR 590 – Smoking Cessation
- PHAR 595 – Bioterrorism and Mass Public Health Threats

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 24 month PA curriculum, in addition to their MSPH research project. The year as an MSPH student will be solely devoted to public health curriculum.

Program Requirements

A minimum of 32 credit hours must be completed to earn a MSPH degree.

Fall

PUBH 540 – Statistical Methods I
 PUBH 525 – Overview of Rural Health
 PUBH 580 – Health Policy & Management
 PUBH 502 – Seminar in Public Health
 PUBH 699 – Practicum in Public Health

Spring

PUBH 560 – Epidemiology
 PUBH 520 – Health Education & Promotion
 PUBH 541 – Community Health Assessment & Evaluation
 PUBH 502 – Seminar in Public Health
 PUBH 699 – Practicum in Public Health

Summer

PUBH 682 – Ethical Issues in Public Health
 PUBH 550 – Environmental Health
 PUBH 690 – Research Project
 PUBH 502 – Seminar in Public Health
 PUBH 699 – Practicum in Public Health

Electives

Ten hours of MSPH elective credit is awarded for completion of two MPAP clinical rotations in public health settings (local health departments, Bureau of Prisons, USPHS clinics, Indian Health Services, rural health centers, etc.). While fulfilling requirements for the clinical rotation, in order to receive elective credit in the MSPH program students must also propose and complete a “Public Health Synthesis” project, which includes public health research, health education programs, or other activities which focus on the broader concerns of public health within which public health clinicians operate. These activities will be recorded in an additional activity log, artifacts/deliverables, and a reflection paper. Projects must be approved by the curriculum committee of the Department of Public Health.

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.

Program Requirements

A minimum of 32 credit hours must be completed to earn a MSPH degree.

Fall

PUBH 540 – Statistical Methods I
PUBH 525 – Overview of Rural Health
PUBH 580 – Health Policy & Management
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Spring

PUBH 560 – Epidemiology
PUBH 520 – Health Education & Promotion
PUBH 541 – Community Health Assessment & Evaluation
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Summer

PUBH 682 – Ethical Issues in Public Health
PUBH 550 – Environmental Health
PUBH 690 – Research Project
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

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. In addition, MSPH/JD students may apply for elective credit for completing other courses, participating in faculty-directed public health research independent studies, or completing experiential learning experiences in which there is some clear public health relevance. Students are especially encouraged to consider externships and the Senior Law Clinic, the Community Law Clinic, and the Restorative Justice Clinic. If students wish to have additional learning experiences considered for MSPH elective credit, the student must submit an online application that articulates the manner in which the experience offers the opportunity to demonstrate at least three CUPHP competencies (Foundational and/or Rural Health). Also, the student must submit the manner in which assignments will be 103 modified or tailored to emphasize the public health relevance of the coursework.

- Administrative Law
- Environmental Law
- Family Law
- Health Law Seminar
- Intellectual Property
- Law, Culture, Society and Philosophy
- Law and Medicine
- Local Government Law
- National Security Law
- Scientific Evidence

MSPH 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
- Statistical Methods

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.

Prerequisites

The following is a list of undergraduate prerequisites for the MBA program:

Courses	Credit Hours
Accounting	3
Economics	3
Statistics	3

This requirement may be satisfied in a variety of ways:

- Completing and passing a three-credit undergraduate course in each of the subject areas. Such courses may be completed at any accredited college or university;
- Obtaining the equivalent credit(s) by passing a competency exam such as CLEP, or;
- Completing and passing one or more self-paced non-credit online courses offered through the Campbell Business School. These courses consist of a pretest, several lessons, practice quizzes and a posttest. Students who score 80% or more will satisfy the prerequisite requirement in the relevant subject area. Students will have two opportunities to achieve this score. The fee for each course is \$200. Students may sign up for courses by paying the relevant fee online through our Graduate Prerequisite Modules Payment Center. Once purchased, please email mba@campbell.edu. The Office of Graduate Programs will verify your payment and place your order once payment is confirmed. You will then receive an email with a link to your module.

Program Requirements

MSCR/MBA students will be required to complete the following MSCR courses (31 credit hours):

CLNR 505 – Principles of Clinical Research
CLNR 515 – New Product Development
CLNR 517 – Biostatistical Inference
CLNR 518 – Intro to Biostatistical Modeling
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 – Research Project I

CLNR 691 – Research Project II
 CLNR 694 – Research Project III
 CLNR 695 – Research Project IV

MSCR/MBA students will be required to complete the required, core MBA courses (28 credit hours):

MBA 700 – Orientation to Innovation, Design Thinking & the CU MBA
 MBA 710 – Accounting for Decision Making
 MBA 720 – Applied Economics for Business Leaders
 MBA 730 – Finance and Capital Management
 MBA 740 – Comm. & Critical Thinking for Ethical Decision Making
 MBA 750 – Organizational Culture in a Changing Environment Management
 MBA 760 – Business Analytics
 MBA 770 – Digital & Contemporary Marketing Strategies
 MBA 780 – Global Supply Chain Management
 MBA 790 – Strategic Management “Live Case” Seminar (21 hour pre-requisite)

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.

General Focus Area
 MBA 741 – Legal Environment of Business
 MBA 742 – Advanced Negotiation and Analysis
 MBA 751 – Project Management
 MBA 752 – Human Resource Management
 MBA 772 – Marketing Research
 MBA 755 – Study Abroad
 MBA 708 – Special Topics
 Financial Services Focus Area
 MBA 732 – Management of Financial Institutions
 TRUST 620 – Investment Analysis
 TRUST 633 – Advanced Income Taxation
 TRUST 740 – Risk Management Applications
 Healthcare Management Focus Area
 MBA 731 – Healthcare Finance
 MBA 743 – Health Law and Policy
 MBA 753 – Healthcare Organization and Delivery
 MBA 754 – Healthcare Management
 MBA 771 – Healthcare Strategy and Marketing
 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.

Prerequisites

The following is a list of undergraduate prerequisites for the MBA program:

Courses	Credit Hours
Accounting	3
Economics	3
Statistics	3

This requirement may be satisfied in a variety of ways:

- Completing and passing a three-credit undergraduate course in each of the subject areas. Such courses may be completed at any accredited college or university;
- Obtaining the equivalent credit(s) by passing a competency exam such as CLEP, or;
- Completing and passing one or more self-paced non-credit online courses offered through the Campbell Business School. These courses consist of a pretest, several lessons, practice quizzes and a posttest. Students who score 80% or more will satisfy the prerequisite requirement in the relevant subject area. Students will have two opportunities to achieve this score. The fee for each course is \$200. Students may sign up for courses by paying the relevant fee online through our Graduate Prerequisite Modules Payment Center. Once purchased, please email mba@campbell.edu. The Office of Graduate Programs will verify your payment and place your order once payment is confirmed. You will then receive an email with a link to your module.

Program Requirements

MSPH/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 662 – Public Health Biology
 PUBH 580 – Health Policy and Management
 PUBH 682 – Ethics in Rural Public Health
 PUBH 690 – Research Project I
 PUBH 699 – Public Health Practicum

MSPH/MBA students will be required to complete the required, core MBA courses (28 credit hours):

MBA 700 – Orientation to Innovation, Design Thinking & the CU MBA
 MBA 710 – Accounting for Decision Making
 MBA 720 – Applied Economics for Business Leaders
 MBA 730 – Finance and Capital Management
 MBA 740 – Comm. & Critical Thinking for Ethical Decision Making
 MBA 750 – Organizational Culture in a Changing Environment Management
 MBA 760 – Business Analytics
 MBA 770 – Digital & Contemporary Marketing Strategies
 MBA 780 – Global Supply Chain Management
 MBA 790 – Strategic Management “Live Case” Seminar (21 hour pre-requisite)

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)

