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Introduction

Administration

Campbell University

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Executive Assistant to the President

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Provost and Vice President, Academic Affairs

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Vice President, Student Life

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Vice President, Institutional Advancement & Senior Advisor to the President

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Dean

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Associate Dean, Academic Affairs

James A. Boyd, PharmD, MBA
Associate Dean, Administration

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Director/Chair, Department of Physical Therapy

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Director/Chair, Catherine W. Wood School of Nursing

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Director/Chair, Department of Physician Assistant Practice

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Chair, Department of Pharmaceutical Sciences

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Chair, Department of Public Health

Charles Carter, PharmD, MBA
Interim Chair, Department of Clinical Research

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

On January 5, 1887, James Archibald Campbell—a 26-year-old Baptist minister—welcomed 16 students to a small church in Buies Creek, North Carolina, for the first day of classes, thus marking the founding of Buies Creek Academy. From that humble beginning, Buies Creek Academy evolved to become Campbell Junior College (1926), Campbell College (1961), and Campbell University (1979). Throughout these transformations, the institution has remained true to its founding principles to address the most pressing needs of North Carolina and to educate men and women for Christian service and leadership around the world.

The University enjoys an autonomous and voluntary relationship with the Baptist State Convention of North Carolina. The founding principles still guide Campbell University today. In 2013, Campbell launched the Jerry M. Wallace School of Osteopathic Medicine, North Carolina’s first new medical school in over 35 years. In August 2016, the Catherine W. Wood School of Nursing—housed within the College of Pharmacy & Health Sciences—welcomed its first cohort. Simultaneously, Campbell opened its School of Engineering, which was only the second engineering school at a private university in North Carolina. They joined Campbell’s other established colleges and schools: the College of Arts & Sciences, the Norman Adrian Wiggins School of Law (1976), the Lundy-Fetterman School of Business (1983), the School of Education (1985), the College of Pharmacy & Health Sciences (1985), and the Divinity School (1996).

In addition to its main campus in Buies Creek, Campbell University has off-campus instructional sites in Camp Lejeune (Jacksonville), Fort Bragg & Pope (Fayetteville), Raleigh (2009 relocation of the law school), Tunku Abdul Rahman
University College (Kuala Lumpur, Malaysia), and a vibrant online presence through Campbell Online.

Today, Campbell University enrolls approximately 7,000 students per year, including more than 5,000 undergraduate and graduate students on its main campus. More than 100 degree programs in the liberal arts, health sciences, fine arts, and professions are offered to them, continuing Campbell’s tradition of preparing students for purposeful lives and meaningful service.

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’ Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 190 South LaSalle Street, Suite 2850, Chicago, IL 60603, 312/664-3575; fax 866/228-2631, web site www.acpe-accredit.org.

The College of Pharmacy & Health Sciences is a member of the American Association of Colleges of Pharmacy.

Commission on Accreditation in Physical Therapy Education
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
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. In May of 2018, the NCBON completed an onsite review and acknowledged Full Approval Status.

2018 Commission on Collegiate Nursing Education
The baccalaureate degree program in nursing at Campbell University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791.

Council on Education for Public Health
Campbell University’s Master of Science in Public Health program is fully accredited 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
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

Accommodation
Students with documented disabilities who desire modifications or accommodations must contact the Director of Disability Services 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 Disability Services
ADA/SO4 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 constitute 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.


Assignment Grade Appeal
An assignment is considered a required work product that is formally evaluated and calculated as a portion of the course grade. Examples of an assignment include but are not limited to the following:

- Project
- Quiz
- Exam (e.g., Block exam or OSCE)
- Assignment (e.g., debate paper, PPCP, presentation)

Graduate and professional students wishing to appeal a grade must do so within three (3) business days upon receipt of the assignment grade in Blackboard and will discuss the matter with the course director, who will consult with instructors, as necessary. A written description justifying the grade appeal and supporting evidence must be submitted to the course director. Note: If the assignment is a group assignment, all individuals must be in agreement to the grade appeal.
If necessary, the student can continue the appeal of the grade by submitting a written description of the situation and justification for the appeal to the department chair assigned to oversee the course. Appeals of assignments will end with the department chair, whose decision is final.

**Final Course Grade Appeals**

A final course grade appeal may be considered under the following grounds:

- Mathematical or clerical error
- Evidence of bias

1. When a final course grade is officially verified by the Registrar’s Office, the student may file a formal appeal to the course director. The appeal must be received within three business days of the final course grade notification and include all evidence for the basis of the appeal. The course director will submit a written response to the student within five (5) business days of the receipt of these materials.

2. If the student wishes to appeal the course director’s decision, the student has three (3) business days to submit an appeal, including all evidence for the basis of the appeal, to the respective department chair. Upon submission to the department chair, the student will receive notification of a decision no later than seven (7) business days upon receipt of the appeal and evidence.

3. If the student wishes to appeal the department chair’s decision, the student has three (3) business days to submit the original appeal and evidence with a written petition, to the appropriate Associate Dean. The petition must contain the specific variance requested that was not met with the course director and department chair and a description of any extenuating circumstances intended to justify granting the variance. The student will receive notification of a decision no later than seven (7) business days upon receipt of the appeal and evidence. The decision of the associate dean is final.

**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.

**Counseling**

Counseling and additional psychosocial support services are offered free to all students of the College of Pharmacy & Health Sciences through Campbell University’s student assistance program (i.e., StudentLinc). These services can be accessed 24 hours a day, 7 days a week, 365 days a year via the StudentLinc website portal (https://www.mystudentlinc.com) and/or mobile app. Counseling services are also offered through CUSOM Behavioral Health Monday-Friday from 12:00-5:00 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. 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.

CHPS 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 CHPS undergraduate and professional degree programs. If accepted applicants or current students in CHPS 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 CHPS 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 CHPS committee for actions as related to professional behaviors.

Sanctions may include loss of eligibility:
• to receive university scholarships
• to hold leadership positions
• to receive CHPS 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 CHPS 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 CHPS 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.
• CHPS does not accept responsibility to continually seek educational training sites who will accept CHPS students previously denied access to any assigned site.
• CHPS 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
CHPS 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 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, CHPS 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 CHPS 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 are required to notify the designated experiential faculty member within three (3) business days of any new relevant criminal convictions or pending charges acquired since enrollment. Those students who fail to disclose new charges or convictions within three (3) business days may result in reconsideration of a student’s enrollment status. CHPS 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 CHPS 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.
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 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 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 through a program or ability to graduate. 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 and/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(s) 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 report any new charges or convictions to the designated program representative within three (3) business days.
12. For current health professions students, failure to disclose new criminal charges within three (3) business days to the designated experiential faculty member may result in program specific action and/or referral to the appropriate CPHS committee for possible professional behavior 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 SAST 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), the designated experiential education office 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 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. Some clinical training sites may also require a SAST of their own in addition to the SAST completed by CPHS. 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(s) 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 and 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
DPT program students are to wear.

Men in the PA Program are 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 are 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 & 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.

Family Education Rights and Privacy Act (FERPA)

Family Education Rights and Privacy Act information is found in this link on the Campbell website: https://www.campbell.edu/registrar/family-education-rights-and-privacy-act-ferpa/.

Grade Reports, Records & Transcripts

A report of grades attained by a student in the CPHS will be available through the University’s Student Planner 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 health professions students are required to have health insurance coverage. Students with coverage must opt-out of the University provided plan and provide proof of health insurance coverage. Failure to opt-out will result in a charge for insurance even if enrollment information is not provided by student. 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 requirement is mandated 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 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 numerical 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.

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 complete online modules regarding OSHA Bloodborne Pathogens (BBP). 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.
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 the Student Health Center (910-893-1562), 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 Pharmacy Experiential Education by phone, 800-760-9697, or email (Shawn Carrillo, ext. 1709/email: scarrillo@campbell.edu or Dr. Tina Thornhill, ext. 1402/email: thornhill@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 Center.

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 07747
     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 the Student Health Center. 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: https://www.campbell.edu/campus-safety/parking/vehicle-bicycle-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 who 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. Visit https://www.campbell.edu/campus-safety/emergency-preparedness to register for campus alerts.

**Sexual Harassment Title IX Policies & 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 Center 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 https://www.campbell.edu/health-center/.

**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 at 910-893-1690.

Technology Devices (Computers/Tablets)

Technology devices are distributed to the students at orientation prior to the first year of, and for use in, their respective professional program. In accepting this program-issued device, the student agrees to the following:

• The student will maintain the device in good working condition throughout the entirety of the respective CPHS program.
• The student will do due diligence to protect the device against instances of loss, theft, and/or damage.
• The student will uphold the terms and conditions of the required software.
• The student agrees not to use the device and any software for commercial purposes.
• The student ultimately agrees to follow all University rules and policies which govern computer usage.

Technology devices distributed to the students by the program are considered program property until graduation from the College of Pharmacy & Health Sciences (CPHS). In the event a student leaves the program prior to graduation, program-issued devices along with any additional issued equipment, are to be returned prior to exit from the University. Technology devices distributed by the program are to be used for program-related needs (in-class lectures, out-of-class assignments, clinical rotations, etc.) and required software platforms (Blackboard, ExamSoft, etc.). CPHS is aware social network sites are in high demand for active communication and social interaction. These sites can contain viruses so make sure to protect devices, as instructed by Campbell University IT Services.

In General:

• Students are responsible for any and all actions stemming from their activities on the program-issued device.
• Students are responsible for needed maintenance and updates of the hardware and software on their program-issued device.
• Students should maintain updated virus protection.
• Students are to contact Campbell University IT Services Helpdesk (x1208) (helpdesk@campbell.edu), with any program-issued device needs and/or concerns (i.e. software issues, hardware issues, broken parts, etc.).

Program-issued devices are not the sole property of the student until the student has graduated CPHS. Therefore, devices are not to be given away or sold until they are no longer considered the property of CPHS. Violation of this agreement/policy is considered to be a professionalism issue and may result in referral to the student conduct and professionalism committee for possible probation or dismissal.

Campbell University will carry a warranty on the program-issued technology device. This warranty coverage may vary from year-to-year, as well as the provisions included within it. Detailed information regarding warranties will be provided, along with the issue of technology devices, at first year orientation. Students should consult the Campbell University IT Services Helpdesk for ALL warranty issues. However, in the event the technology device is lost, stolen, or damaged beyond repair, the student will be responsible for repairing the device or replacing it with a similar product, in order to meet the in-class and testing needs of the program. As well, batteries are considered consumables and may not be covered under warranty.

Tuition & Fees

Tuition and fees are determined annually and are available at https://www.campbell.edu/business-office/tuition-fees/cphs/. 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

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 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 Director of Student Affairs. The 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. Additionally, the appropriate committee must evaluate any student, who was on probation or suspension due to performance at the time of withdrawal (i.e. academic probation or suspension is evaluated by the APSC). These evaluations are intended to provide a framework to assist the individual for a successful return to the program of study.

**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 prohibited activity 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. 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’ or professors’ 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 firsthand 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. Purposefully 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

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 a 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. Test: Any student who is 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.

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 & 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 director of student affairs (ex-officio). An ad-hoc member will be chosen to replace any member who cannot or
C. Instigation of Hearings

The accused student has the right to a personal interview with the director of admissions & student affairs. The associate dean of admissions & student affairs will appoint this member.

This committee serves as a hearing board for incidents of misconduct involving violations of the Honor Code. The Honor Code includes standards for academic, non-academic, and clinical behavior. The Student Conduct and Professionalism Committee will make recommendations to the associate dean of admissions & student affairs. The associate dean of admissions & student affairs will then notify the student in writing of actions concerning alleged violations. A record of disciplinary actions is normally maintained by the dean’s office until the student graduates or leaves CPHS. Students may examine the contents of their file by appointment with the director of admissions & student affairs.

C. Instigation of Hearings

When there is a suspicion of academic misconduct, investigation and appropriate actions may be pursued by either the professor of the course in which the alleged misconduct occurred or by the Student Conduct and Professionalism Committee. In either case, the matter must be promptly resolved.

If the professor decides to deal with the incident, he or she should report the student’s actions to the chair of the Student Conduct and Professionalism Committee. Individual faculty policies concerning misconduct should be clearly stated in the course syllabus. The accused student has the right to appeal any action by the faculty member to the Student Conduct and Professionalism Committee, in which normal committee procedures will be followed.

Charges of misconduct may arise from a student (or group of students), professor, adjunct professor or preceptor. Within seven (7) days of the alleged misconduct or discovery of alleged misconduct, the accuser(s) should discuss the situation with either the director of 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 later 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.

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 setting is not a court of law. In the 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 & 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 for admissions & student affairs in a timely manner.

Students should read, discuss and sign the Honor Code prior to enrollment to CPHS. This code of conduct was created by the students and faculty of CPHS. Modifications of this code will require majority approval of both the faculty and student body.

The students attending CPHS will:

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.

- 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
Wesley Rich, PhD, MEd, MA, Associate Dean for Health Sciences
Pam Roberts, Executive 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, MA, Director of Pre-Professional Advisement & Retention
Emily Drake, Admissions Coordinator
Kim Dunn, MS, Director of Enrollment Management
Lynanne Fowle, Admissions Coordinator
Wesley Gaylor, MDiv, Admissions Coordinator
Dayna Harper, EdD, MS, GCDF, Director of Student Affairs
Lori McLean, MAT, Admissions Coordinator
Steph Olson, MS, Sr. Coordinator of Academic Support
Jayna Strong, MS, Admissions Counselor
Kendra Sumler, MDiv, Admissions Counselor
William J. Taylor, PharmD, Director of Recruitment & Retention

Office of Academic Affairs

C. Scott Asbill, PhD, Associate Dean, Academic Affairs
Dawn Carroll, MHS, Education and Testing Coordinator
Lois Hupfeld, Academic Affairs Coordinator
Myrah Stockdale, MS, BBA, Director of Assessment

Office of Interprofessional Education

K. Paige Dickens Brown, PharmD Assistant Dean, Interprofessional Education
Marisa Vaskalis, Director, Interprofessional Education

Office of Alumni Relations & Advancement

James A. Boyd, PharmD, MBA, Associate Dean for Administration and Director, Dual PharmD/MBA Program
Meredith Bland, Chair of Communications & Marketing
Will Bratton, Director of Advancement
Alissa Loo, Alumni Relations Coordinator

Department of Clinical Research

Charles Carter, PharmD, MBA, Interim Chair of Clinical Research
Melissa Holland, PharmD, Vice Chair of Curriculum and Education Development
Stefanie Twist, Program Manager

Catherine W. Wood School of Nursing

Nancy Duffy, DNP, CNE, Program Director
Tonya Williams, Assistant Director
Callie Manning, Program Manager
Vicki Crowell, Administrative Assistant

Department of Pharmaceutical Sciences

David Eagerton, PhD, Chair 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 & Program Administrator
Crystal Dark, Office Manager & Program Coordinator
Shanesa Dixon, Research Scientist I
Michael Gallagher, MA, Director of Pharmaceutical Sciences
Mali R. Gupta, PhD, Director, Pharmaceutical Education & Research Center
Kimberly Jackson, Research Technician II
Paul Johnson, Manager, QC/Analytical R&D, Pharmaceutical Education & Research Center
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
Shawn Carrillo, 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
Phyllis Strickland, Administrative Assistant for Experiential Education
Tina Thornhill, PharmD, FASCP, BCGP, Vice-Chair for Experiential & Professional Education
Lisa West, Department Manager

Department of Physical Therapy

Gregory Dedrick, PT, ScD, Chair & Program Director
Jennifer Bunn, PhD, Director of Research
Kim East, Program Coordinator
Rachel Ennis, Program Manager
Scott Sawyer, PT, DPT, Assistant Director
Heidi Shearin, PT, DPT, Director of Clinical Education
Jennifer Shewmaker, Clinical Coordinator

Department of Physician Assistant Practice

Betty Lynne W. Johnson, MEd, PA-C Emeritus, Chair & Program Director
Ramona Albrecht, MMS, PA-C, Clinical Skills Coordinator
Peter Fenn, DHSc, MPAS, PA-C, Director of Professional & Programmatic Development
Justin Gambini, MSPAS, PA-C, Assistant Professor

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Jennifer Hastings, MSHS, PA-C, Director of Pre-Clinical Education
Ashley Nordan, MSCR, MPAP, PA-C, Assistant Professor
April Pope, MPAS, PA-C, Assistant Director of Clinical Partnerships
Shannon Rosser, Clinical Education Specialist
Christopher Stewart, MD, Medical Director
Kristen Stiltner, MBA, Program Manager
Rachel Tutterow, MBA, Medical Education Specialist
Shelly Vahue, Program Coordinator
Ian Ward, MMS, PA-C, Assistant Director of PA Accreditation

Department of Public Health
David Tillman, PhD, MEd, Chair of Public Health
J. Kate Thomas, Program Manager

Faculty

Department of Clinical Research

Charles Carter, Interim Chair of Clinical Research and 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

Melissa A. Holland, Associate Professor and Vice Chair of Curriculum & Education Development; BS, Biology, Pennsylvania State University (1998); MS, Clinical Research, PharmD, Campbell University (2007); RPh, MD, NC


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Catherine W. Wood School of Nursing

Nancy D. Duffy, Director/Chair 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)

Krystle Edge, Instructor; BS, Nursing, Chamberlain College of Nursing (2013); MSN, East Carolina University (2017)

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)

Kathleen Jones, Instructor; BS, Nursing, University of Mount Olive (2014); MSN, Nursing Education, University of Phoenix (2018)

Jennifer Strom, Instructor; BS, Psychology, Campbell University (2004); BS, Nursing, Winston Salem State University (2012); MS, Psychology, Walden University (2008); MSN, Nursing Education, Capella University (2016)

Tonya Willingham, Assistant Director and 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 Pharmaceutical Sciences; BS, Biological Sciences, University of South Carolina (1997); PhD, Pharmaceutics, University of South Carolina (2000)

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

David H. Eagerton, Chair and Associate Professor of Pharmaceutical Sciences; BS, Biology, University of South Carolina (1985); 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, Director of Pharmaceutical Sciences, Instructor and Lab Manager; BS, Biochemistry, Pennsylvania State University (1989); MA, Human Services, Liberty University (2014)

Jinsong Hao, Associate Professor of Pharmaceutical Sciences; B.Eng. Pharmaceutics, Shenyang College of Pharmacy (1990); Ph.D., Pharmaceutics, Shenyang Pharmaceutical University (1995)

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)

Paul Johnson, Instructor of Pharmaceutical Sciences; BA, Chemistry & Biology, University of Hawaii @ Hilo (1979); MS, Chemistry, Oregon State University (1982)
Qinfeng (Sarah) Liu, Associate 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)

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)

Kristian 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, Assistant Dean, Interprofessional Education and Clinical Assistant Professor of Pharmacy Practice; PharmD, Campbell University (2006); RPh, NC

April A. Cooper, Clinical Assistant Professor of Pharmacy Practice; BS, Pharmacy, University of North Carolina at Chapel Hill (1993); 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

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

Stephen H. Fuller, Vice-Chair of Faculty Development & Leadership and Professor of Pharmacy Practice; BS, Chemistry, Wake Forest University (1981); BS, Pharmacy, Medical College of Virginia (1985); PharmD, Medical College of Virginia (1988); RPh, NC

Erika Giblin, Clinical Assistant Professor of Pharmacy Practice, PharmD, University of Florida (2015); RPh, NC, FL

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

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

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

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

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

Kathey Fulton Rumley, Clinical Associate Professor of Pharmacy Practice; PharmD, Campbell University (1994); RPh, NC
Tina H. Thornhill, Vice-Chair for Experiential & 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, Bouve’ College of Health Sciences at Northeastern University (2012); PharmD, Bouve’ College of Health Sciences at Northeastern University (2013); RPh, NC

Catherine L. Went, 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

Department of Physical Therapy

Jennifer Bunn, Director of Research and Associate 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 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, Chair & Director, 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)

Bradley J. Myers, Assistant Professor of Physical Therapy; BS, Health Fitness, Central Michigan University (2006); DPT Physical Therapy, Duke University (2009); DScPT, Physical Therapy, Andrews University (2017)

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

Bridget Ripa, Assistant Director of Clinical Education and Assistant Professor of Physical Therapy, BS, Psychology, Virginia Tech (2010); DPT, Duke University (2013)

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)

Victoria Smith, Clinical Assistant Professor of Physical Therapy, BS, Kinesiology, University of Louisiana at Monroe (2004); DPT, Duke University (2007)

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

Ramona Albrecht, Clinical Skills Coordinator and Assistant Professor of Physician Assistant Practice; BS, Biology, University of North Carolina at Chapel Hill (2001); PA-C, Wake Forest University School of Medicine (2005)

Pete Fenn, Director of Professional & Programmatic Development and Associate Professor of Physician Assistant Practice; PA-C, Bowman Gray School of Medicine, Physician Assistant Program (1984); MPAS, University of Nebraska (2012), DHSc, A.T. Still University (2017)

Justin Gambini, Assistant Professor of Physician Assistant Practice; BS, Biology, West Virginia University Eberly College of Arts and Sciences (2006); PA-C, Shenandoah University (2009)

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, Director of Pre-Clinical Education and Assistant Professor of Physician Assistant Practice; BS, Exercise Science, Virginia Tech (2003); MSHS, George Washington University (2005)

Betty Lynne W. Johnson, PA Program Chair and Director and Associate Professor of Physician Assistant Practice; BS, Campbell University (1979); PA-C, Bowman Gray School of Medicine, Wake Forest University (1981); MEd, Campbell University (1986)

Ashley Nordan, Assistant Professor of Physician Assistant Practice; BS, Biological Sciences, North Carolina State University (2010); BS, Biochemistry, North Carolina State University (2010); MSCR, Campbell University (2013); PA-C, Campbell University (2013)

April Pope, Assistant Director of Clinical Partnerships 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)

Ian Ward, Assistant Director of PA Accreditation and Assistant Professor of Physician Assistant Practice; BSc, (Computing & Information Systems), Manchester University (1989); PA-C, Methodist University (2013); DHSc, Health Sciences, Nova Southeastern University (anticipated 2019)

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 Associate 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, AZ, 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)

Professors Emeritus

Emanuel J. Diliberto, Jr. (Retired 2017), Chair and Professor of Pharmaceutical Sciences, BS Pharmacy, Albany College of Pharmacy, Union University (1967); PhD Pharmacology, University of Rochester, School of Medicine and Dentistry (1972)

Robert B. Greenwood (Retired 2017), Professor of Pharmaceutical Sciences and Associate Dean for Academic Affairs, BS Pharmacy, University of North Carolina, Chapel Hill (1971); PhD Pharmaceutics, University of North Carolina, Chapel Hill (1980)

Thomas J. Holmes, Jr. (Retired 2014), Professor of Pharmaceutical Sciences, BS Pharmacy, Duquesne University (1971); PhD Medicinal Chemistry, University of Michigan (1975)

Ronald W. Maddox (Retired 2014), Vice President of Health Programs and founding Dean of the College of Pharmacy & Health Sciences, BS Pharmacy, Auburn University (1969); PharmD, University of Tennessee (1973)

John H. Minnear (Retired 1996), Professor and Chairman of Pharmaceutical Sciences, BS Pharmacy, Ferris State College; MS Pharmacology, Purdue University; PhD Pharmacology, Purdue University, RPh

David K. Ohashi (Retired 2001), Assistant Professor of Pharmaceutical Sciences, BA Zoology, University of Colorado (1959); MS Clinical Microbiology, Thomas Jefferson University (1974); PhD Tropical Medical and Medical Microbiology, University of Hawaii (1983)

I. Daniel Shin (Retired 2018), Professor of Pharmaceutical Sciences, BA Agricultural Chemistry, Korea University (1976); MS Chemistry, Western Illinois University (1988); PhD Chemistry, North Carolina State University (1992)

William C. Stagner (retired 2015), Professor of Pharmaceutical Sciences, BS Pharmacy, University of Iowa College of Pharmacy (1973); MS Pharmaceutics, University of Iowa College of Pharmacy (1977); PhD Pharmaceutics, University of Iowa College of Pharmacy (1979)

Gilbert A. Steiner (Retired 2014), Associate Professor of Pharmacy Practice, BS Pharmacy, Wayne State University (1971); PharmD, Wayne State University (1975)

Larry N. Swanson (Retired 2012), Chair and Professor of Pharmacy Practice, PharmD, University of Southern California School of Pharmacy (1969)
BS General Science: Pre-Nursing

Admissions Contact
Campbell University’s Admissions Office
Phone: 1-800-334-4111 ext. 1290
Website: www.campbell.edu
Mailing Address
P.O. Box 1090
Buies Creek, NC 27506

Program Contact
Catherine W. Wood School of Nursing
Pre-Professional Office
Phone: 910-814-4711
Email: nurse@campbell.edu

The BS General Science: Pre-Nursing (BSGS: Pre-Nursing) degree program is specifically designed to prepare students for entry into Campbell University’s competitive College of Pharmacy & Health Sciences’ (CPHS) nursing program.

The BSGS: 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.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 111 or 112 – Western Civilization I or II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>NURS 100 – Nursing</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MATH 111 (or greater)</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 100 – Connections</td>
<td>.5</td>
</tr>
<tr>
<td>ENGL 102 – Academic Writing &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 222 – General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 275 – Clinical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHRS 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>A/M/T 131 – Intro to Art, Music, or Theater</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.5</strong></td>
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<tr>
<th>Second Year</th>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 200 – Connections</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>SOCI 225 – Principles of Sociology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 285 – Human Anatomy &amp; Physiology I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PSYC 260 – Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELECTIVE (Humanities)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 286 – Human Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>COMM 261 – Team &amp; Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 160 – Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVES</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

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

Degree Requirements
BS in General Science with a concentration in Pre-Nursing
GCC—ENGL 101 3h, 102 3h, literature 2XX (3h), Fine Art (Music, Art or Theater) 131 3h, PE 185 2h, HIST 111 or 112 3h, MATH 111 3h, MATH 160 3h, CHRS 125 3h, social & behavioral sciences/humanities & fine arts electives (9h), CUC (as required).
*Upper level science courses—12 credit hours in upper level (300 level or above) in residence (BIOL, CHEM, PHYS, CLNR, or PHSC).

Additional courses—NURS 100 1h, BIOL 111 4h, BIOL 285, 286, 275 (4h each), PSYC 222, 260 (3h each), SOCI 225 3h, COMM 261 3h, FOREIGN LANGUAGE 201 3h, CHEM 111, 113, 227, 228 (4h each), and PHYS 221, 222 or 251, 252 (4h each), additional electives to complete a total of 124 credit hours for degree completion.

(FOREIGN LANGUAGE, CHEMISTRY and PHYSICS courses not required for BSN program)
BS General Science: Pre-Pharmacy

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

Program Contact
Campbell University College of Pharmacy & Health Sciences
Pre-Professional Office
Phone: 910-814-4711
Email: prepharm@campbell.edu
Mailing Address
P.O. Box 1090
Buies Creek, NC 27506

The BS General Science: Pre-Pharmacy (BSGS: Pre-Pharmacy) degree program is 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 first two years of the BSGS: Pre-Pharmacy curriculum helps students complete the requirements for entry into all of these programs.

During the first two years, a pre-professional 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.

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111 – General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHRS 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 100 – Pre-Pharmacy</td>
<td></td>
</tr>
<tr>
<td>Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 100 – Connections</td>
<td>0.5</td>
</tr>
<tr>
<td>ENGL 102 – Academic Writing &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 113 – General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221 – Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 122 – Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Fine Art M/A/T 131</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2xx – Physics II or Biology I</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/Fine Arts or Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1XX – Western Civilization I or II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2XX – Literature</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

1. Physics 2 is required for BSGS: Pre-Pharmacy and Pharmaceutical Sciences; an upper level Biology is required for BS in Clinical Research.
2. Microbiology 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
1. The candidate must be enrolled as a student in the BSGS: Pre-Pharmacy Program at Campbell University.
2. The candidate must be a graduate from an accredited high school in the United States and earn a 3.5 GPA or greater in high school coursework.
3. The candidate will apply for the Pharmacy Scholar Early Assurance Guarantee through the Campbell University Pre-Professional Office during the fall semester of the freshman year.
4. Transfer students are ineligible for the guarantee program.

Academic Requirements
3.5 or higher GPA; 50% or better in the Composite portion of the PCAT

Application Requirements
Pharmacy Scholar candidates must apply to the Doctor of Pharmacy program utilizing the Early Decision process through PharmCAS.

Official PCAT Scores must be available in PharmCAS prior to the September early decision application deadline along with all other requirements for your application to be complete.

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.

Degree Requirements
BS in General Science with a concentration in Pre-Pharmacy
GCC—ENGL 101 3h, 102 3h, literature 2XX (3h), Foreign Language 201 3h, Fine Art (Music, Art or Theater) 131 3h, PE 185 2h, HIST 111 or 112 3h, MATH 122 4h, CHRS 125 3h, social & behavioral sciences/humanities 3h, fine arts electives (9h), CUC (as required).

Upper level science courses—12 credit hours in upper level (300 level or above) in residence (BIOL, CHEM, PHYS, CLNR, or PHSC).

Additional courses—PHAR 100 1h, BIOL 111, 221 or 285 & 286, 334 (4h each), CHEM 111, 113, 227, 228 (4h each), and PHYS 221, 222 or 251, 252 (4h each), MATH 160 3h, THEA 115 3h, ECON 2XX 3h, additional electives to complete a total of 124 credit hours for degree completion.
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.
- 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 21 credit hours of prescribed clinical research courses.

The following courses will comprise the Clinical Research Minor:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 324 – Intro to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 330 – Regulatory Affairs I</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 338 – Scientific Literature Seminar</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 341 – Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 363 – New Product Development</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 364 – Principles of Clinical Research</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 365 – Managing &amp; Monitoring Clinical Trials I</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 379/L – Physical &amp; Clinical Assessment</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 450 – Data Management CLNR</td>
<td>3</td>
</tr>
<tr>
<td>451 – Scientific &amp; Technical Writing</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 21

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 and can be found in the General Policies section of the CPHS academic bulletin:

- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

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 outlined 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: April 30
- Fall I Admission: July 15

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, transcripts 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.

**Admissions 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.
- 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

**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. 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.
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 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, 551, 561 and elective courses numbered 539, 541, 550, 555, 560, 574, 593 and 595.

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.

Academic Standards

BS in Clinical Research

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

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.

Graduation

The MSCR program will not approve a request to participate in commencement ceremonies unless all credit hours have been completed.
Curriculum for BS in Clinical Research

### First Year

#### 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
**Total** | **17**

#### 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
A/M/T 131 – Intro to Art, Music, Theatre | 3
CUC 100 – Connections | 0.5
**Total** | **18.5**

### Second Year

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

#### Semester 4 Courses | Credit Hours
---|---
CHEM 228/228L – Organic Chemistry II | 4
BIOL XXX – Biology Elective^ | 3 / 4
HIST 1XX – Western Civilization I or II | 3
Humanities Elective (see listing) | 3
Social Science Elective (see listing) | 3
**Total** | **16-17**

### Third Year

#### Semester 5 Courses | Credit Hours
---|---
CLNR 341 – Medical Terminology | 1
CLNR 363 – New Product Development | 2
CLNR 364 – Principles of Clinical Research | 2
CLNR 324 – Introduction to Biostatistics | 3
CLNR 338 – Scientific Lit Seminar | 2
**Total** | **13**

#### Semester 6 Courses | Credit Hours
---|---
CLNR 328 – Introduction to Pharmacology | 4
CLNR 330 – Regulatory Affairs I | 2
CLNR 365 – Manage/Monitor Clin Trials I | 2
CLNR 442 – Interpersonal Skills | 2
CLNR 379/L – Physical & Clinical Assessment | 2
CLNR 451 – Scientific & Technical Writing | 2
ENGL 20X – Literature I or II | 3
**Total** | **17**

### Fourth Year

#### Semester 7 Courses | Credit Hours
---|---
CLNR 465 – Manage/Monitor Clin Trials II | 2
CLNR 440 – Regulatory Affairs II | 2
CLNR 450 – Data Management | 3
CLNR 425 – Medical Ethics/Clinical Research | 2
UNIV XXX – Humanities/Social Science Elective (see listing) | 3
**Total** | **12**

#### Semester 8 Courses | Credit Hours
---|---
CLNR 420 – Senior Internship*** | 12
CLNR 416 – Senior Seminar | 3
**Total** | **15**

**Total credit hours = 127 – 128**

^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 is 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.cphs.campbell.edu for the most up to date curriculum information.

*Statistics is 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.cphs.campbell.edu for the most up to date curriculum information.
Curriculum for 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.

### First Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111/111L – General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111/111L – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
</tr>
<tr>
<td>CHRS 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 100 – Pre-Pharmacy Seminar*</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Semester 3 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 101 – &gt; Intro to Clinical Research</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 227/227L – Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL XXX – ^Biology Elective</td>
<td>3 / 4</td>
</tr>
<tr>
<td>A/M/T 131 – Intro to Art, Music, or Theatre</td>
<td>3</td>
</tr>
<tr>
<td>UNIV XXX – Humanities Elective (see listing)</td>
<td>3</td>
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<tr>
<td>CUC 200 – Connections</td>
<td>0.5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>14.5-15.5</strong></td>
</tr>
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</table>

### Third Year

<table>
<thead>
<tr>
<th>Semester 4 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228/228L – Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL XXX – ^Biology Elective</td>
<td>3 / 4</td>
</tr>
<tr>
<td>ENGL 20X – Literature I or II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 160 – &gt;Statistics</td>
<td>3</td>
</tr>
<tr>
<td>UNIV XXX – Social Science Elective (see listing)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16-17</strong></td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Semester 5 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 341 – Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 363 – New Product Development</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 364 – Principles of Clin. Research</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 324 – Introduction to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 338 – Scientific Literature Seminar</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 6 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 328 – Intro. to Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>CLNR 442 – Interpersonal Skills</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7 – Fall I Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 525 – Medical Ethics</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 559 – Man./Mon. Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 7 – Fall II Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 517 – Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 568 – Project Management</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 8 – Spring I Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 518 – Intro to Biostats. Model</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 520 – Adv. Data Management</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>
### Fourth Year (continued)

#### Semester 8 – Spring II Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 530 – Regulatory Affairs</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 566 – Adv. Study Design/Ana.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
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</tbody>
</table>

#### Semester 8 – Summer 2 Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 420 – Senior Internship</td>
<td>12</td>
</tr>
<tr>
<td>CLNR 416 – Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 568 – Project Management</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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</tbody>
</table>

### Fifth Year

#### Semester 9 – Fall I Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 606 – Clinical Research Seminar</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 690 – Research Project I</td>
<td>1</td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

#### Semester 9 – Fall II Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 691 – Research Project II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

#### Semester 10 – Spring I Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 694 – Research Project III</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 5XX – Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

#### Semester 10 – Spring II Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 695 – Research Project IV</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

**Total = 149-151 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 for MS in Clinical Research

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

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 505 – Principles of Clinical Research*</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 515 – New Product Development</td>
<td>1.5</td>
</tr>
<tr>
<td>CLNR 517 – Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 518 – Introduction to Biostatistical Modeling</td>
<td>2</td>
</tr>
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<td>CLNR 519/L – Physical &amp; Clinical Assessment with Lab</td>
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<td>CLNR 520 – Advanced Data Management</td>
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<td>CLNR 525 – Medical Ethics</td>
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<td>CLNR 530 – Regulatory Affairs</td>
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<td>CLNR 552 – Scientific Communication</td>
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<td>CLNR 559 – Managing &amp; Monitoring</td>
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<td>Clinical Trials</td>
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<td>CLNR 561 – Healthcare Economics</td>
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<td>CLNR 566 – Advanced Study Design &amp; Analysis</td>
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<td>CLNR 568 – Project Management</td>
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<td>CLNR 606 – Clinical Research Seminar</td>
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<td>CLNR 690 – Research Project I</td>
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<td>CLNR 691 – Research Project II</td>
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<td>CLNR 694 – Research Project III</td>
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<td>CLNR 695 – Research Project IV</td>
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<table>
<thead>
<tr>
<th>Electives Courses</th>
<th>Credit Hours</th>
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<tr>
<td>CLNR 504 – Special Research in Clinical Research*</td>
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<td>CLNR 527 – International Clinical Trials</td>
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<td>CLNR 529 – Epidemiology</td>
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<td>CLNR 539 – Medical Genomics</td>
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<td>CLNR 541 – Behavioral Medicine</td>
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<td>CLNR 550 – Introduction to Public Health</td>
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<td>CLNR 555 – Special Populations in Clinical Research</td>
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<td>CLNR 560 – Pharmacoeconomics</td>
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<td>CLNR 562 – Preclinical Drug Development</td>
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<td>CLNR 573 – Evidence-Based Medicine</td>
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<td>CLNR 574 – Integrated Drug Safety</td>
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<td>CLNR 578 – Biopharmaceutics*</td>
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<td>CLNR 581 – Pharmaceutical Compliance &amp; QA</td>
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<td>CLNR 593 – Leadership Development</td>
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<tr>
<td>CLNR 595 – Bioterrorism &amp; Mass Public Health Threats</td>
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With approval from the course instructor and associate dean of academic affairs, PHRD 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 cphs.campbell.edu 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, CHEM 227 & 228

**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 338 – Scientific Literature Seminar**
Credit: 2 hours
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 Clinical Research literature. In addition to learning how to apply these skills with a team, complete comprehension of these skills are applied in the form of oral presentations.

**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
over view 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. 

Prerequisites: BIOL 221 or equivalent Anatomy & Physiology course

CLNR 416 – Senior Seminar
Credit: 3 hours
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: 12 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 425 – Medical Ethics in Clinical Research
Credit: 2 hours
This course provides a review of past medical and research historical events that have shaped the ethical standards in clinical research. Students in this course will analyze and discuss recent medical ethics cases on special topics including current events as appropriate.

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: 2 hours
Scientific and Technical Writing is a required course for Clinical Research majors designed to enable students to become more effective writers and literature evaluators. Students will focus on the format and customs of scientific writing, ethics of writing and use of reference management software. Focus will be on confidently and accurately producing written scholarly documents related to clinical research.

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 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 527 – International Clinical Trials  
Credit: 2 hours  
This course is intended for students who are contemplating a career in clinical research. The content presents fundamental knowledge of conducting global, international clinical trials.

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

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 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.

**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.

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 a 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.
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.
Pharmaceutical Sciences
Concentration

First Year

Fall Semester 1 Credit Hours Courses
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 – Freshman Seminar 1

Total 17

Spring Semester 2 Credit Hours Courses
CHEM 113/113L – General Chemistry II 4
BIOL 221/221L – Human Anatomy & Physiology 4
ENGL 102 – Academic Writing & Literature 3
MATH 122 – Calculus 4
A/M/T/ 131 – Intro to Art/Music/Thea 3
CUC 100 – Connections .5

Total 18.5

Second Year

Fall Semester 3 Credit Hours Courses
CHEM 227/227L – Organic Chemistry I 4
BIOL 334/334L – Microbiology 4
PHYS 221/221L – Physics 4
HIST 1XX – Western Civilization I or II 3
LANG 201 – Foreign Language 3
CUC 200 – Connections .5

Total 18.5

Spring Semester 4 Credit Hours Courses
CHEM 228/228L – Organic Chemistry II 4
PHRD 511 – Biomedical Foundations 4
PHRD 512 – US Health Care 1.5
PHRD 513 – Pharmacy Practice Skills I 1
PHRD 510 – Personal/Professional Development I 0
PHRD 515 – Pharmaceutics, Pharmacokinetics & Calculations 1.5
PHRD 516 – Principles of drug Information I 1
PHRD 521 – Pharmaceutical Sciences Foundations 3.5
PHRD 522 – Nonprescription Therapeutics 3
PHRD 523 – Pharmacy Practice Skills II 1
PHRD 525 – Pharmaceutics, Pharmacokinetics, & Calculations II 2
PHRD 526 – Principles of drug Information II 1

Total 19.5

Third Year

Fall Semester 5 (B1 PHSC) Courses
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 2
PHSC 220/220L – Quantitative Lab Techniques 2
Elective (SS/Humanities) 3

Total 15.5

Spring Semester 6 (B1 PHSC) Courses
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 442 – Interpersonal Skills 1.5

Total 15.5

Fourth Year

Fall Semester 7 (P1) Credit Hours Courses
PHRD 511 – Biomedical Foundations 4
PHRD 512 – US Health Care 1.5
PHRD 513 – Pharmacy Practice Skills I 1
PHRD 510 – Personal/Professional Development I 0
PHRD 515 – Pharmaceutics, Pharmacokinetics & Calculations 1.5
PHRD 516 – Principles of drug Information I 1
PHRD 521 – Pharmaceutical Sciences Foundations 3.5
PHRD 522 – Nonprescription Therapeutics 3
PHRD 523 – Pharmacy Practice Skills II 1
PHRD 525 – Pharmaceutics, Pharmacokinetics, & Calculations II 2
PHRD 526 – Principles of drug Information II 1

Total 19.5

Spring Semester 8 (P1) Credit Hours Courses
PHRD 531 – Integrated Pharmacotherapy I Infection & Immunity 5.5
PHRD 532 – Medical Literature Evaluation I 1
PHRD 533 – Pharmacy Practice Skills III 1
PHRD 530 – Personal/Professional Development II 0
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 1
PHRD 545 – Pharmaceutics, Pharmacokinetics, & Calculations IV 3

Total 19.5

Total credit hours earned 141.5

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.
Interprofessional Education

Office of Interprofessional Education
Campbell University
College of Pharmacy & Health Sciences
Tracey F. Smith Hall
4150 U.S. Hwy 421 South
Lillington, NC 27546
Mailing Address
P.O. Box 1090
Buies Creek, NC 27506
Phone: 910-893-1842
ipe@campbell.edu

Academic Programs
The Office of Interprofessional Education (IPE) provides students of all Campbell University health science programs with experiences that allow them to interact and collaborate with one another.

Participating Programs
IPE events and activities are typically attended by the following programs:
- Clinical Research
- Medicine
- Nursing
- Pharmaceutical Sciences
- Pharmacy Practice
- Physical Therapy
- Physician Assistant Practice
- Public Health
In addition, other programs such as Law, Business, Social Work and/or Divinity may participate depending on topic.

Mission Statement
The mission of Interprofessional Education at Campbell University is to equip students to function effectively as members of interprofessional rural health care teams.

Vision
Campbell University Interprofessional Education aspires to create a robust program in which students practice collaboratively to provide safe, cost-effective, and efficient patient-centered and team-based care.

Triple Aim
To these ends, the Office of Interprofessional Education centers its strategic plan around the IHI Triple Aim. The framework, designed in 2007 by the Institute for Healthcare Improvement, encourages institutions to pursue the following dimensions:

- Improve the patient experience of care (including quality and satisfaction)
- Improving the health of populations
- Reducing the per capita cost of healthcare

Curriculum

Annual Events & Activities
First Year Event – Fall
COMBINE – Fall
CICS Cases – Fall
Activity Day I – Fall
Activity Day II – Spring
IPE Research Symposium – Spring

Event & Activity Descriptions
The following events make up the major programming of CUIPE. The first three events are required for all on-campus CPHS students, and the activities that follow are additional, optional opportunities.

First Year Event
The IPE First Year Event is held every year in September and is specifically geared toward first-year students. Students participate in an event designed to demonstrate the roles and responsibilities of each discipline represented on the interprofessional healthcare team. This event allows students from all programs, outside of their program “silos,” to discuss common healthcare issues or concepts. The goal of the event is for students to form collaborative relationships across program boundaries.

Health Professions COMBINE
All CPHS students attend COMBINE, a conference-style event that focuses on professionalism and leadership. COMBINE is held every October, and features sessions such as Resume Tips & Tricks, Mindfulness & Meditation for Stress Relief, and The Do’s and Don’ts of Social Media. This event offers students invaluable opportunities for networking and professional development. COMBINE is a joint effort between the Office of Student Affairs and the Office of Interprofessional Education.

Activity Days
Every year, students of the health science programs at Campbell University gather together for an event that spans over two different dates in the spring. The Activity Day events are largely supported by the faculty of CPHS and CUSOM, who create, design, and facilitate activities based on their own interests and expertise. Students also have the opportunity to design and facilitate activities. Participants have the freedom to select an activity to attend based on their own interests, and the result is a veritable smorgasbord of interactive sessions focusing on interprofessional concepts and competencies. Examples of sessions include Anthrax Attack; Cultural Competence in Healthcare Practice; Hypertension Cases; New Drug Development; and IOSCE.

IPE Research Symposium
The annual Interprofessional Education Health Sciences Research Symposium, showcases the research accomplishments of students, residents, and faculty. Every symposium features an esteemed keynote speaker as well as poster awards in a number of categories. Students and faculty are welcome to attend whether they are presenting research or not.

CICS
CICS, or Campbell Interprofessional Case Studies, are specifically aimed to allow students to practice interprofessional communication, collaboration, and teamwork skills and strategies. In interprofessional groups, students interview a patient (an actor who serves as a standardized patient) and collaborate to identify a diagnosis and create a treatment plan. While diagnosis and treatment make up one of the goals of the case, the main focus is interprofessional collaborative practice. Students benefit not only from receiving feedback about their interviewing, diagnosing, and treatment planning skills; but they also pick up skills from other students, and, most importantly, witness the greater scope of treatment and care across the spectrum of professions. CICS cases are held 4 times throughout the year.
Nursing

Catherine W. Wood School of Nursing
Campbell University
College of Pharmacy & Health Sciences
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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 patient 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 reason caring practices that: promote health and well-being, prevent illness and injury across the lifespan in the care of diverse, underserved patients, 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 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.

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 reasoned judgments about evidence-based interventions and evaluation of outcomes for the care of diverse, underserved patients, 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 patient/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.

Policies & Procedures

The following list of policies can be found in the General Policies section of the CPHS academic bulletin:
- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

Admissions 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 BS General Science: Pre-Nursing. 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” in each class. Coursework may be in progress at the time of application, but completed by the start of the BSN Coursework. The minimum for admission is a 2.8 for all pre-requisite 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 for all pre-requisite coursework.
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, special skills, and abilities that enhance the nursing profession.
5. 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.

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 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 must indicate that the student left in good academic and professional standing.
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

- American Heart Association 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: Tetanus-diptheria-pertussis, MMR, Hepatitis B, Varicella, two step annual Tuberculosis (PPD) and Influenza. 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 Bloodborne 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 prior to clinical rotations.

Sensory/Observation Skills
• Ability to gather data from written materials (including, without limitation) illustrations, oral presentations, demonstrations, observations of a patient and his/her environment and observations of procedures performed by others.
• Ability to perform health assessments and interventions; observe diagnostic specimens; and obtain information from digital, analog and waveform representations of physiologic phenomena to determine a patient’s condition.

Examples of relevant activities:
• Visual acuity – to draw up the correct quantity of medication in a syringe or detect changes in skin color or condition.
• Auditory ability – to detect sounds related to bodily functions using a stethoscope or to detect audible alarms generated by mechanical systems used to monitor patient physiological status.
• Tactile abilities – to detect unsafe temperature levels in heat-producing devices used in patient care or detect anatomical abnormalities, such as edema or small nodules.

Communication
• Ability to communicate, comprehend, read, and write in English at a level that allows for accurate, clear, and effective communication.
• Ability to communicate, including ability to ask questions and receive answers, with accuracy, clarity, efficiency and effectiveness with patients, their families and other members of the healthcare team. This includes: expressive and receptive oral and non-verbal communications, such as interpretation of facial expressions, affect and body language.

Examples of relevant activities:
• Communications (expressive and receptive) include: oral, hearing, reading, writing, and computer literacy.

Examples of relevant activities:
• Ability to give verbal directions to or follow verbal directions from other members of the health care team and to participate in health care team discussions of patient care.
• Ability to elicit and record information about health history, current health state or responses to treatment from patients or family members.
• Ability to convey information to patients and others as necessary to teach, direct and counsel individuals.
• Ability to communicate, including ability to ask questions and receive answers, with accuracy, clarity, efficiency, and effectiveness.

Motor
• Motor and psychomotor function to execute movements required to provide general care and treatment to patients in all health care settings.
• Motor functions include: gross and fine motor skills, physical endurance, strength, stamina and mobility to carry out nursing procedures; perform basic laboratory tests and provide routine and emergency care and treatment to patients.

Examples of relevant activities:
• Perform CPR.
• Manipulate small equipment such as syringes, vials, and ampules.
• Physical endurance to complete assigned periods of clinical practice (from 5 – 12 sequential hours).
• Lift or carry objects weighing 25 pounds.
• Mobility sufficient to carry out patient care procedures, such as tracheostomy care or performing emergency airway suctioning.
• Strength to safely carry out patient care procedures, such as assisting in the turning and lifting/transferring of patients.

Behavioral, Interpersonal and Emotional
• Attributes of empathy, compassion, integrity, collegiality, high moral character, excellent interpersonal communication, listening and self-motivation.
• Ability to relate to colleagues, staff and patients with honesty, integrity and non-discrimination.
• Capacity for the development of a mature, compassionate, respectful, sensitive and effective therapeutic relationship with patients and their families, including sufficient emotional and intellectual capacity to exercise good judgment and complete patient care responsibilities promptly and professionally.
• Ability to work constructively in stressful and changing environments with the ability to modify behavior in response to constructive criticism and to maintain a high level of functioning in the face of taxing workloads and stressful situations.
• Ability to participate collaboratively and flexibly as a member of a health care team.
• Capacity to demonstrate ethical behavior, including adherence to the professional nursing and student honor codes, as well as applicable laws and regulations governing nursing profession.
• Ability for cultural sensitivity and openness to examining personal attitudes, perceptions and stereotypes which may negatively affect patient care and professional relationships.

Examples of relevant activities:
• Emotional skills to remain calm in an emergency situation.
• Interpersonal skills to communicate effectively with patients and families of diverse religious, cultural or social backgrounds.
• Behavioral skills to demonstrate the exercise of good judgment and prompt completion of all responsibilities attendant to the diagnosis and care of clients.

Cognitive, Conceptual, and Quantitative
• Ability to exhibit behavior and intellectual functioning which does not differ from acceptable professional standards.
• Ability to read and understand written documents in English and solve problems involving measurement, calculation, reasoning, analysis and synthesis.
• Ability to gather data, develop a plan of action, establish priorities and monitor treatment plans, and modalities.
• Ability to process and understand information and demonstrate the ability to establish a plan of care and set priorities, develop problem-solving skills, and make decisions reflecting consistent and thoughtful analysis of appropriate information throughout the course of the study.
• Ability to learn effectively through a variety of modalities, including, but not
limited to, classroom instruction, small group discussion, individual study, and online assignments.

Examples of relevant activities:
- Ability to exhibit behavior and intellectual functioning which does not differ from acceptable professional standards.
- Ability to read and understand written documents in English.

Other
- Students must maintain good general health, self-care, and hygiene throughout the program.

The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted.

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

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<th>Grade</th>
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1. Courses must be completed in the prescribed sequence and within 3 years of matriculation to the BSN Program.
2. A student must earn a grade of at least 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 occurs only for end of course grades.
4. 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.
5. Two course failures within the BSN division results in dismissal from the program with an ineligible status for readmission.
6. The expectation is that the students meet each clinical objective/behavior with a satisfactory performance by the end of the course.
7. Unsatisfactory clinical performance constitutes a course failure. Failure in either the clinical or didactic portion of the course results in a failure and necessitates repeating the course.

Tuition and Fees
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, Rotation Manager, 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/financial-aid.

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 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 (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
The CWWSON believes that remediation is a process that begins once a student has failed to achieve a passing score (< 75%) on an exam, assignment or clinical performance (safety violations, NI, or U). The Clinical Instructor and/or CD will identify clinical performance issues that require remediation with specific suggestions for improvement. The student is to reach out to the Course Director or BSN Advisor to develop academic strategies that will result in positive outcomes. Strategies may focus on: study habits, testing strategies, test review, small group remediation or referrals to Counseling, Student Success or those listed on the course syllabi. Faculty may notify the student of low performance through Blackboard, Starfish or email. The student is responsible for the follow through in
order to assure academic progression. 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.

**Students provide remediation for:**
- A grade of D or F in any single course
- 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:
- 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

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.
- 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 from the BSN Program 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.
- If a student earns less than 2.0 in a second nursing course, student dismissal from the BSN Program 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 three business days of their receipt of the earned grade. 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.

**Grade Appeal**
Students can initiate an appeal of an assignment grade or final course grade by following the procedure as detailed in the current CPHS Academic Bulletin.

**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 is 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

The Catherine W. Wood School 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
- Application for licensure to state Board of Nursing
- 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 patient 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 patients/families, community groups and populations. The student evaluations demonstrate increasing expectations in clinical performance.
### Freshman Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ENGL 101 – Academic Writing</td>
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<tr>
<td>HIST 111 or 112 – Western Civilization I or II</td>
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<tr>
<td>BIOL 111 – Basic Biology</td>
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<tr>
<td>NURS 100 – Nursing</td>
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<tr>
<td>PE 185 – Lifetime Wellness</td>
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<thead>
<tr>
<th>Semester 2 Courses</th>
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<tbody>
<tr>
<td>CUC 100 – Connections</td>
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<tr>
<td>ENGL 102 – Academic Writing &amp; Literature</td>
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<tr>
<td>PSYC 222 – General Psychology</td>
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</tr>
<tr>
<td>BIOL 275 – Clinical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHRS 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>A/M/T 131 – Intro to Art, Music, or Theater</td>
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### Sophomore Year

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<tr>
<th>Semester 1 Courses</th>
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<tr>
<td>CUC 200 – Connections</td>
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<td>SOCI 225 – Principles of Sociology</td>
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<td>BIOL 285 – Human Anatomy &amp; Physiology I</td>
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<td>PSYC 260 – Developmental Psychology</td>
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*It is strongly recommended that students take CHRS 224 – Christian Ethics.

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
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<tbody>
<tr>
<td>ENGL 2XX – Literature</td>
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<tr>
<td>BIOL 286 – Human Anatomy &amp; Physiology II</td>
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<td>COMM 261 – Team &amp; Small Group Communication</td>
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<td>MATH 160 – Statistics</td>
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<td>ELECTIVES</td>
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### Junior Year

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<thead>
<tr>
<th>Semester 1 Courses</th>
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<tbody>
<tr>
<td>NURS 300 – Professional Nursing Practice</td>
<td>2</td>
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<tr>
<td>NURS 310 – Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NURS 320 – Fundamentals of Nursing Practice with Older Adults</td>
<td>6</td>
</tr>
<tr>
<td>NURS 330 – Concepts of Pathophysiology &amp; Pharmacology I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
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</thead>
<tbody>
<tr>
<td>NURS 350 – Research &amp; Evidence Based Practice</td>
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</tr>
<tr>
<td>NURS 360 – Adult Health Nursing Practice I</td>
<td>5</td>
</tr>
<tr>
<td>NURS 370 – Psychiatric &amp; Mental Health Nursing Practice</td>
<td>4</td>
</tr>
<tr>
<td>NURS 340 – Concepts of Pathophysiology &amp; Pharmacology II</td>
<td>4</td>
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<td><strong>Total</strong></td>
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### Senior Year

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<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>NURS 400 – Adult Health Nursing Practice II</td>
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</tr>
<tr>
<td>NURS 410 – Nursing Practice of Women &amp; Children</td>
<td>6</td>
</tr>
<tr>
<td>NURS 420 – Leadership in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 430 – Health Policy</td>
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<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>NURS 450 – Population Health</td>
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<tr>
<td>NURS 460 – Focused Patient Experience Practicum</td>
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<tr>
<td>NURS 470 – Transitions to the Role of the Professional Nurse</td>
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<td>NURS 475 – Managing Healthcare for Vulnerable Populations</td>
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<tr>
<td>NURS 480 – Nursing Informatics</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>
Course Descriptions

NURS 100 – Success in Nursing Seminar
Credit: 1 hour
The design of the course is an introduction to the profession of nursing and to the 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: 2 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 patient with consideration of common variations and life span influence. Assessment of the patient is within a cultural, spiritual, member of family and community framework.

NURS 320 – Fundamentals of Nursing Practice with Older Adults
Credit: 6 hours
This is the first course designed to introduce students to the role of critical thinking and the nursing process as a mechanism to synthesize knowledge and master basic nursing skills that promote, maintain and restore health in older adult patients.

NURS 330 – Concepts of Pathophysiology and Pharmacology I
Credit: 4 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: 4 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: 4 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 patients.

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: 4 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 475 – Managing Healthcare for Vulnerable Populations
Credit: 2.0
This course is a synthesis of humanities and aspects of nursing applied to the healthcare of vulnerable populations. Students will distinguish influences on healthcare unique to selected vulnerable populations relevant to the surrounding communities.

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 requirements in Campbell University’s Undergraduate Academic Bulletin.

**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.

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:

- Aerie
- Alcami
- Barry-Wehmiller Design Group
- BioAgilytix
- Biogen
- Carolina Medical Products
- Catalent
- Fujifilm Diosynth
- Grifols
- Innospec
- Luidia
- Medicagio
- Pathene
- Pfizer
- 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 doctorate 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.

**Pharmaceutics**

The track in Pharmaceutics 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.

**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 and can be found in the General Policies section of the CPHS academic bulletin:

- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

**Admissions Policies**

**BSPS Matriculation**

The students in the BSGS: 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 outlined in this academic bulletin.

**MSPS Admission**

Applications for admission to the MSMS 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. 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 MSMS program. Applicants may be considered in one of the following categories:

1. A graduate of a baccalaureate program seeking the MSMS degree: Individuals may apply prior to completion of their undergraduate degree and gain acceptance contingent upon completion of the degree.
2. 3+2 program: A Campbell University undergraduate BSPS student may apply to the MSMS program in the spring of their Junior year. Accepted students can then take MS courses during the final two years. This program allows a student to complete both degrees in five years versus six. Applicants are exempted from the application fee.
3. Dual MSMS/PharmD program: Individuals who meet the PharmD program admissions requirements may apply for the dual MSMS/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.)

**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.

**Application Process**

Complete the online application and submit the following:

- All college transcripts
- 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.

**Admissions Policies**

Students not seeking a degree can receive approval to register for courses if they:

1. 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)
2. 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 MSMS 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.

3. Students taking a leave of absence 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.

**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 MSMS 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 MSMS 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.

3. Any student on academic probation 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 at a scientific conference;
   – Compete for honors, distinctions, and scholarships;
   – Hold any job within the Department of Pharmaceutical Sciences;
   – Conduct any research (e.g., 504, 610, and 620).

4. 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.

5. 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 any change in his/her standing in the program. A student may appeal the dismissal to the Committee (see Rule 3 above). The student must submit a written or email petition to the chair of the GAPS Committee within three (3) business days of the student’s receipt of notification of the dismissal. The student’s failure to submit the petition letter within three (3) business days is acknowledgement of dismissal. 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 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. The student can appeal the committee’s decision to the Associate Dean for Academic Affairs Within three (3) business days of their receipt of notification. The Associate Dean’s decision is final.

MSPS Program Remediation Policy

1. The primary goal of remediation should be to make up a student’s deficiencies in a single unit exam, project, or homework assignment rather than to improve his/her GPA.

2. Only students with an earned final course grade lower than a C (less than 70%) due to poor performance on a single unit exam, project, or homework assignment must be offered remediation, and the highest grade that can be achieved after remediation would be a C. This would discourage students from using remediation as a second chance to significantly enhance their GPAs.

3. Instructors should complete the remediation process as soon as practically possible, e.g., during Christmas break for Fall courses or during the month of May for Spring courses. In addition, instructors must notify the Department Chair and the Chair of the Graduate Academic Performance & Standards (GAPS) Committee of any remediating student and provide an expected completion date.

4. Students may have a grade of IC entered until the remediation is complete and then a final grade can be entered.

5. Students have the option not to remediate and take the course when it is offered again, in which case their grade will not be limited to a C. Students who elect not to remediate must sign documentation provided by the Department of Pharmaceutical Sciences indicating that they were offered remediation.
## Curriculum

### BS in Pharmaceutical Sciences

#### First Year

<table>
<thead>
<tr>
<th>Fall Semester 1 Courses</th>
<th>Credit Hours</th>
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<tr>
<td>CHEM 111/111L – General Chemistry I</td>
<td>4</td>
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<tr>
<td>BIOL 111/111L – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
</tr>
<tr>
<td>CHRS 125 – Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 100 – Freshman Seminar</td>
<td>1</td>
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<tr>
<td>CHEM 113/113L – General Chemistry II</td>
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<td>BIOL 221/221L – Human Anatomy &amp; Physiology</td>
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<tr>
<td>ENGL 102 – Academic Writing &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122 – Calculus</td>
<td>4</td>
</tr>
<tr>
<td>A/M/T 131 Intro Art/Music/Theatre</td>
<td>3</td>
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<tr>
<td>CUC 100 – Connections</td>
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#### Second Year

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<th>Fall Semester 3 Courses</th>
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</thead>
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<tr>
<td>CHEM 227/227L – Organic Chemistry I</td>
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<tr>
<td>BIOL 334/334L – Microbiology &amp; Immunology</td>
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<td>PHYS 221/221L – Physics</td>
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<td>HIST 1XX – Western Civilization I or II</td>
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<td>LANG 201 – Foreign Language</td>
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<td>CUC 200 – Connections</td>
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<tr>
<td>CHEM 228/228L – Organic Chemistry II</td>
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<tr>
<td>PHYS 222 – General Physics</td>
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<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
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<tr>
<td>ENGL 2XX – Literature</td>
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<td>UNIV XXX – Humanities Elective</td>
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#### Third Year

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<th>Fall Semester 5 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 323 – General Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 325/325L – General Biochemistry Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 210 – Laboratory Safety I</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 324 – Intro to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 451 – Scientific &amp; Technical Writing</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 220/220L – Quantitative Lab Techniques</td>
<td>2</td>
</tr>
<tr>
<td>UNIV XXX – SS/Hum Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester 6 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 328 – Intro to Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 410 – Analytical Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 411/411L – Analytical Instrumentation Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 338 – Product &amp; Process Validation</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 326 – Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 327/327L – Molecular Biology Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 442 – Interpersonal Skills</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15.5</strong></td>
</tr>
</tbody>
</table>

#### Fourth Year

<table>
<thead>
<tr>
<th>Fall Semester 7 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 418 – Industrial Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 419/419L – Industrial Pharmacy Prelab/Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 438 – Pharmaceutical Methods &amp; Bioprocessing</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 439L – Pharmaceutical Methods &amp; Bioprocessing Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 336 – Scientific Literature Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>UNIV XXX – Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester 8 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 420 – Senior Internship*</td>
<td>12-14</td>
</tr>
<tr>
<td>PHSC 416 – Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13-15</strong></td>
</tr>
</tbody>
</table>

**Total credit hours earned** **126.5-128.5**

*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; LANG 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 students complete an independent research project (PHSC 620) to deepen knowledge and skills in a specific area within their track or 2) Multi track path students 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.

### Core Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 508 – Drug Development &amp; Pharm. Regulations</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 512 – Fundamentals of Cellular Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 523 – Graduate Expt’l Design &amp; Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 536 – M.S. Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 547 – Analytical Techniques Survey</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 574 – Biopharmaceutics &amp; Pharmacokinetics</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 595 – Scientific Writing and Communication</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 610 – Research Proposal</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 620 – Research Project OR two Group 1 Electives</td>
<td>4-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23-27</strong></td>
</tr>
</tbody>
</table>

### Track Curricula

**Bioprocessing & Biotechnology**
Prerequisites: Microbiology, Molecular Biology

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 526/526L – Protein Analysis &amp; Bioassays/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 538/538L – Bioprocessing I: Upstream Technologies/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 539/539L – Bioprocessing II: Downstream Operations/ Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX – Group 2 Elective(s)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Pharmaceutics**
Prerequisites: Analytical Instrumentation

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 514/515/515L – Industrial Pharmacy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 540 – Adv. Physical Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 542 – Adv. Topics in Industrial Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 543L – Adv. Industrial Pharmacy Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 565 – Adv Exptl Design</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 573 – Intro to Multivariate Analysis</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Pharmaceutical Analysis**
Prerequisites: Analytical Instrumentation

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 514/515/515L – Industrial Pharmacy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 528/529L – Adv. Pharm Analysis-Separation/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 530/531L – Adv. Pharm. Analysis-Spectroscopy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 5XX – Group 2 Elective(s)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Pharmacology**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 526/526L – Protein Analysis &amp; Bioassays/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 590/590L – Adv. Pharm. Toxicology/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 592 – Adv. Cellular &amp; Molecular Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 5XX – Group 2 Elective(s)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### 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):

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

### Group 2 Electives
All students, except those in the Pharmaceutics track, complete 3 credits of Group 2 electives. Electives must be PHSC courses 500 or above. Group 1 electives can also be used to fulfill the elective requirement.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 501 – Herbal Medicine</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 502 – Alternative Medicine</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 504 – Adv. Research in Pharm. Sciences</td>
<td>1-3</td>
</tr>
<tr>
<td>PHSC 522 – Molecular Modeling</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 564 – Pharmacogenetics</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 565 – Advanced Experimental Design</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 575 – Applied Pharmacokinetics</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 582 – Botanical Medicine Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 573 – Intro to Multivariate Analysis</td>
<td>1</td>
</tr>
</tbody>
</table>

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

Please visit www.cphs.campbell.edu for the most up-to-date curriculum and tuition information.
The Department of Pharmaceutical Sciences provides an option for students to earn both their Bachelor of Science and Master of Science in Pharmaceutical Sciences degrees. Traditionally, earning both degrees would take a total of six years. With the 3+2 degree option, students are on a fast track toward completing both degrees in five years. This program provides students with a competitive edge in the job market and rapid career advancement.

Admissions Requirements
Students working toward a BSPS degree may apply for the 3+2 program 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 3+2 program should apply by March of their junior year to assure a place in the MSPS program.

Curriculum Examples
Below are curriculum examples for the 3+2 program. 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.

### Summer Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 416 – Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 420 – Senior Internship</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Graduate Program
All students will take the following core courses.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 514/515/515L – Industrial Pharmacy/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 523 – Graduate Experimental Design &amp; Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 526/526L – Protein Analysis/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 595 – Scientific Writing and Communication</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 547 – Analytical Survey</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 536 – MS Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 538/538L – Bioprocessing I</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 574 – Biopharmaceutics/PK</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 512 – Fund of Cell Pharm</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 508 – Drug Devel. &amp; Pharm Reg</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 610 – Research Proposal</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
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</tbody>
</table>

### Track Courses

#### Bioprocessing & Biotechnology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 539/539L – Bioprocessing II</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Pharmaceutics

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 540 – Adv. Phys. Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 565 – Advanced Exp. Design</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 543L – Adv. Ind. Pharmacy Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 573 – Intro. to Multi Var Analysis</td>
<td>1</td>
</tr>
<tr>
<td>PHSC 542 – Adv. Topics in Ind. Pharm</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Pharmaceutical

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC530/531L – Adv. Pharm Analysis-Spec</td>
<td>4</td>
</tr>
<tr>
<td>PHSC528/529L – Adv. Pharm Analysis-Sep</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Pharmacology

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 590/590L – Adv. Pharm &amp; Tox/Lab</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 592 – Adv. Cell &amp; Mol Pharm</td>
<td>3</td>
</tr>
</tbody>
</table>
Course Descriptions

PHSC 210 – Laboratory Safety
Credit: 1 hour
This course provides an overview of chemical, biological, and radiation hazards, and the equipment, procedures, and regulations designed to protect the laboratory worker from harm.
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 – General Biochemistry
Credit: 3 hours
A comprehensive course in biochemistry which presents protein, lipid and nucleic acid biosynthesis and catabolism. Principles of enzyme kinetics, regulation, energy metabolism, signal transduction and macromolecular structure-function relationships are presented. Students must attend a weekly pre-lab session. Prerequisite: CHEM 227/227L, CHEM 228/228L Co-requisite: PHSC 220/220L

PHSC 325/325L – General Biochemistry Pre-Lab/Lab
Credit: 1 hour
This course is intended to provide the student with the experience working with basic techniques used in the study of bio-molecules, particularly proteins. Students will gain knowledge of protein characterization techniques, such as: gel filtration, enzyme kinetics, PAGE, ELISA. A detailed laboratory notebook will be used to document all lab work and its contents will assist with the written reports. A end of the semester lab practical is given as well. Students must attend a weekly pre-lab session. Co-requisite: PHSC 323

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. 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, CHEM 227/227L and CHEM 228/228L

PHSC 336 – Scientific Literature Seminar
Credit: 1 hour
This interactive class introduces students to the use of scientific literature with a further focus on scientific communication. The skills acquired in this course are applied in the form of written and oral presentations of projects developed through the search of relevant scientific literature. A three-part assessment of the acquired skills will be employed in this course. First is the journal club-style group discussion of pre-selected scientific papers. Secondly, students will prepare a brief presentation on an approved scientific research paper of their own choosing using appropriate applications to make visual aids to supplement their presentations. The third assessment will be a poster presentation of a selected paper, using a poster template provided by the course instructor.

PHSC 338 – Product & Process Validation
Credit: 2 hours
This course introduces students to the principles of current 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, test methods 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, and development of technical skills, data acquisition and analysis, and formal presentation of results. Requires permission of instructor.

PHSC 410 – Analytical Instrumentation
Credit: 3 hours
This is 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. The following analytical techniques will be covered: ultraviolet/visible, atomic absorption/emission, infrared, and fluorescence spectrophotometry; gas chromatography, high performance liquid chromatography, and capillary electrophoresis. The students will learn how to follow guidelines for analysis of various chemicals and dosage forms in the US Pharmacopeia.

Pre-requisite: PHSC 220/220L PHYS 222/222L Co-requisite: PHSC 411/411L

PHSC 411/411L – Analytical Instrumentation Pre-Lab/Lab
Credit: 1 hour
This course is intended to provide the student with the experience working with basic techniques used in pharmaceutical, chemical, and biotechnical research and analytical facilities. Students will gain knowledge of spectroscopic and chromatographic instrumentation, plus working with the US Pharmacopeia. A detailed laboratory notebook will be used to document all lab work and its contents will assist with the written reports. Students must attend a weekly pre-lab session. Co-requisite: PHSC 410

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.
Prerequisites: Completion of all BSPS courses and at least a 2.0 cumulative and major GPA.

PHSC 418 – Industrial Pharmacy
Credit: 3 hours
This survey course introduces students to common pharmaceutical dosage forms, pre-formulation and formulation design, and selected concepts in pharmaceuticals and biopharmaceutics. The laboratory course is designed to prepare and analyze several pharmaceutical dosage forms in Current Good Manufacturing Practices (CGMP-like) environment and conduct pre-formulation relevant experiments to determine pKa, pH-solubility, and stability kinetics.

PHSC 419/419L – Industrial Pharmacy Pre-Lab/Lab
Credit: 1 hour
This laboratory course is designed to prepare and analyze several pharmaceutical dosage forms in Current Good Manufacturing Practices (CGMP-like) environment and conduct pre-formulation relevant experiments to determine pKa, pH-solubility, and stability kinetics.

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 – Pharmaceutical Methodology & Bioprocessing
Credit: 3 hours
The course will emphasize analysis of active pharmaceutical ingredients, excipients, and products; process design, analysis and purification of bio-macromolecules by means of modern techniques. Pharmaceutical Methodologies includes but not limited to validation of analytical methods, theory and Interpretation of Mass Spectrometry spectra. Bioprocessing covers the proper treatments (isolation, purification, and modification) of compounds or bio-products for analysis, use of large-scale cell culture for pharmaceutical production, and theoretical considerations for purification of cell-produced pharmaceuticals. Students will learn basic troubleshooting techniques that can be applied as they proceed into the workplace.
Co-requisite: PHSC 439L

PHSC 439L – Pharmaceutical Methodology & Bioprocessing Lab
Credit: 1 hour
This course is intended to provide the student with the experience working with basic techniques used in the analysis of active pharmaceutical ingredients, excipients, and products; process design, analysis and purification of bio-macromolecules by means of modern techniques. Student will experience HPLC method optimization, Mass Spectrometry, determining optimized cell growth curves, theoretically modeled purification of cell-produced pharmaceuticals. A detailed laboratory notebook will be used to document all lab work and its contents will assist with the written reports. Students will put into practice basic troubleshooting techniques.
Co-requisite: PHSC 438

PHSC 442 – Interpersonal Skills
Credit: 1.5 hours
Interpersonal skills are soft skills that one uses every day to interact with and relate to other people. Those with strong interpersonal skills are usually more successful in both their professional and personal lives. This course will teach the students how to develop interpersonal skills and become effective at listening, communicating, and working within a team. Additionally, students will learn how to write a professional resume and cover letter, as well as how to prepare for future interviews.

PHSC 451 – Scientific & Technical Writing
Credit: 2 hours
Scientific and Technical Writing is a required course for Pharmaceutical Sciences majors and is 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 504 – Advanced Research in Pharmaceutical Sciences
Credit: Variable (Maximum 3 hours)
This advanced research elective course is intended to provide students with a practical, hands-on, application of previously obtained knowledge from the didactic setting in an area different from their Research Project (PHSC 610 / 620). This course may also be used for other scholarly pursuits such as a review of the primary literature in a specific area of scientific inquiry that is timely and rigorous. This course will involve a minimum of 3 hours per week per credit hour. The research project will be conducted under the guidance of a faculty member, the Faculty Research Advisor (FRA), in consultation with the Course Director. The student will utilize prior didactic experience in the MSPS Program to propose, design, and/or conduct the research assignment. The project can be also performed off-campus in a sponsoring industrial, academic, or government setting.
PHSC 508 – Drug Development and Pharmaceutical Regulations
Credit: 2 hours
This course provides basics in worldwide drug regulations, qualification of analytical instruments, test methods, manufacturing equipment, facilities, and processes, and steps 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 current 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 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 – Industrial Pharmacy
Credit: 3 hours
This survey course introduces students to common pharmaceutical dosage forms, preformulation and formulation design, process design, and selected concepts in pharmaceutics and biopharmaceutics. Students will be given special assignments to get more in-depth understanding of these concepts.
Co-requisite: PHSC 515 and 515L

PHSC 515/515L – Industrial Pharmacy Pre-Lab/Lab
Credit: 1 hour
This laboratory course is designed to prepare and analyze several pharmaceutical dosage forms in Current Good Manufacturing Practices (CGMP-like) environment and conduct pre-formulation relevant experiments to determine pKa, pH-solubility, and stability kinetics.
Co-requisite: PHSC 514

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 – Advanced Pharmaceutical Analysis-Separation
Credit: 3 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.
Prerequisite: PHSC 547

PHSC 529L – Advanced Pharmaceutical Analysis-Separation Lab
Credit: 1 hour
This course is intended to provide the student with the experience working with advanced separation techniques. Students will experience liquid-liquid extraction, solid phase extraction, gas chromatography use and method development, and HPLC use and method development. A detailed laboratory notebook will be used to document all lab work and its contents will assist with the written reports. The students will learn how to follow guidelines for analysis of various chemicals and dosage forms in the US Pharmacopeia.
Prerequisite: PHSC 410/411L or equivalent
Co-requisite: PHSC 528

PHSC 530 – Advanced Pharmaceutical Analysis – Spectroscopy/ Laboratory
Credit: 3 hours
The course emphasizes analysis of pharmaceutical compounds and excipients by means of mass spectrometry and spectrophotometric analysis through the basic principles of interaction of light and matter. It covers principles, theories, instrumentation, and interpretations of data for mass spectrometry and various types of spectrophotometry – UV/Vis, AA/AE, Thermal analysis, IR/NIR, Raman, Fluorescence, Powder X-ray diffraction, Polarimetry, Dynamic Light Scattering, Mass spec, NMR, etc.
Prerequisite: PHSC 410/411L or equivalent; Co-requisite: PHSC 531L

PHSC 531L – Advanced Pharmaceutical Analysis-Spectroscopy Lab
Credit: 1 hour
The course will emphasize the use and application of basic analytical techniques used in the pharmaceutical industry - spectroscopy.
Co-requisite: PHSC 530

PHSC 536 – Masters of Science Seminar
Credit: 1 hour
Each student in the class will be responsible for selecting one research article, making an electronic poster based on the article and presenting the poster during the course of the semester. Each presentation will be a total of 15-20 min in length including 5 min for questions. The article should be a peer-reviewed research paper of sufficient length (not e.g. short papers of 1-2 pages) relevant to pharmaceutical sciences and should be selected from a list of journals supplied by
the course directors. The article may also be a research project report/manuscript/paper provided by a CU faculty.

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 product purification (with an emphasis on proteins), formulation, storage, and administration of biopharmaceutical products. 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 547 and PHSC 418/419L or PHSC 514/515/515L or permission of the course director.

PHSC 542 – Advanced Topics in Industrial Pharmacy Credit: 3 hours
This graduate-level course discusses topics in enabling technologies such controlled release, targeted drug delivery, nanotechnology, lyophilization, and protein/peptide formulation development. Advanced Topics in Industrial Pharmacy emphasizes drug delivery, dosage form design, and manufacture of pharmaceutical dosage forms. Prerequisites: PHSC 514 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 and documentation principles gained from previous courses. Prerequisite: PHSC 418/419/419L or PHSC 514/515/515L.

PHSC 547 – Analytical Survey Credit: 1 hour
The course will emphasize the use and application of basic analytical techniques used in the pharmaceutical industry, such as, spectroscopy and chromatography.

PHSC 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

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. Prerequisites: PHSC 523 and PHSC 565

PHSC 574 – Biopharmaceutics & Pharmacokinetics Credit: 4 hours
Biopharmaceutics is the study of the biological and physicochemical factors of the body, drug, and its dosage forms that influence pharmacokinetic processes, including drug availability, absorption, distribution, and elimination. Prerequisites: Basic courses in Anatomy and Physiology, Biochemistry, and Mathematics (Algebra and Calculus) are highly recommended

PHSC 575 – Applied Pharmacokinetics Using PK Software Credit: 1 hour
Phoenix WinNonLin is one of the major Pharmacokinetic-Pharmacodynamic (PKPD) computer programs/software approved by the US-FDA and used in the industrial and clinical settings for pharmacokinetic analysis and PKPD modeling. This course trains students in hands-on use of Phoenix WinNonLin software and provides necessary familiarity and competencies that prepare students for industrial and clinical pharmacokinetics. Material is presented in both lectures and supervised hands-on sessions, during which students will do interactive programming. Pre- or co-requisite: PHSC 574

PHSC 582 – Botanical Medicine Seminar Credit: 1 hour
This course offers the student the opportunity to expand his/her knowledge in dietary supplements, in particular, those of botanical origin. The course is taught in an environment where students are encouraged to express their opinion on the use of these supplements in therapy. Rules governing dietary supplements and agencies responsible for monitoring their use are also discussed.

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 595 – Scientific Writing & Communication  
*Credit: 1 hour*
Scientific Writing and Communication is a required course for Pharmaceutical Sciences majors and is designed to enable students to effectively and accurately communicate through writing and develop their interpersonal skills to become effective communicators, listeners and team players. Students will also learn how to write a professional resume and cover letter and be better prepared for interviews.

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

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 and can be found in the General Policies section of the CPHS academic bulletin:
- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

Admissions 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’s 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)
  Human Anatomy & Physiology with lab (4 credit hours)
  One course covering the whole body (i.e., Essentials of Human Anatomy and Physiology) or a two-course progression (i.e., Human Anatomy and Physiology parts I and II).
- Microbiology (4 credit hours)

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

Non-Science Requirements
- English Composition** (6 credit hours)
  English courses must be writing intensive. Basic literature courses will not be accepted.
- 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 June 1; all information must be received by this date.

Application Process
- All material must be received by June 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.cphs.campbell.edu. 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 the first Tuesday after the U.S. Labor Day holiday.

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).

Technical Standards for Admission & Matriculation
The Accreditation 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
compound 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 & 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 Disability Services 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 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 Disability Services immediately upon accepting the offer of admission. The Director of Disability Services 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 Disability Services 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 Disability Services 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.
Academic Standards

Retention and Promotion Criteria
Students enrolled in the doctor of pharmacy program at the College of Pharmacy & Health Sciences 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. A letter from the Academic Performance & Standards Committee will be sent to students placed on academic probation containing specific guidance. These letters are individualized and may contain specific actions that must be taken as well as helpful suggestions to assist each student. Students may be required to meet with an assigned contact to develop an academic contract, to participate in academic counseling, or to be enrolled in a remedial program of study. Demonstration of continued poor academic performance by students on probation could result in suspension or dismissal as indicated by 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. Students on academic probation or suspension are required to meet with the Support Services Senior Coordinator to complete a CPHS success plan.

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. Students placed on academic probation have two weeks from the notification from APSC to meet with the Support Services Senior Coordinator to develop a CPHS success plan. Failure to do so may result in suspension or dismissal from the program.

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. Students
placed on academic suspension have two weeks from the notification from APSC to meet with the Support Services Senior Coordinator to develop a CPHS success plan. Failure to do so may result in dismissal from the program.

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 two or more 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.

*PGPA and the grade D are used only for the Class of 2020

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.

Remediation 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 &

Remediation Policy for Class of 2021 & Beyond
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 within three days of notification to the Academic Performance and Standards Committee (APSC) and then to the associate dean for academic affairs within three days of notification.

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 Course Repeat 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.

6. Multiple course failures in a block/semester will prevent student progression and require repeating the unsuccessful block/semester after review and recommendation by the APSC.

**Course Repeat 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 within three days of notification 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 course by authorization of the APSC and approval by the CPHS associate dean for academic affairs. The repeated 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 repeated course should be similar in scope and content to the original course. The 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 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 repeated 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 course director 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 repeated 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 course per summer. If greater than 1 course is required for matriculation, the student should repeat any additional courses during the regularly scheduled Fall/Spring semester. Students may only take a summer course when recommended by the APSC.

**Academic Progression for Class of 2020**

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.

**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 a 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 a 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 student pharmacist is required to re-take a class as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling their introductory pharmacy practice experiences (IPPE) or advanced pharmacy practice experiences (APPE) will occur and the student’s graduation may be delayed.

Voluntary course withdrawals or a temporary leave of absence will also cause a delay in scheduling the IPPE or 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 with P-3 coursework. In such cases, 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.
- Student pharmacists are not allowed to start 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). 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 (PHAR 508). Assuming that all courses are passed successfully in the P-3 spring semester, a student would be able to begin APPEs after repeating necessary fall courses. This would allow the student to begin APPEs 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 rotations 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.

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 equivalency.

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 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 Class of 2020
The following is the grading scales for the doctor of pharmacy program at CPHS with the assigned quality points:

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

*Not eligible for Class of 2021 or beyond

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 three days in which the grade was officially posted. Changes can be made to the transcript within a 12-month period if a professor acknowledges in writing that an error in grade reporting occurred.

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 B series, varicella immunity, Tdap, IPV (polio), MMR, influenza, and a TB test.

- Students must maintain an up-to-date record of all required documentation including, but not limited to: attestation of health insurance coverage, proof of no tuberculosis infection, immunizations, HIPAA certification training, emergency contact information, drug allergies, urine drug screen, and immunization certification. In the compliance and immunization management system.
- 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 nondisclosure 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).
- Students have a maximum of six years from initial professional curriculum matriculation to complete all requirements for the doctor of pharmacy degree.

Graduation Requirements

- Complete all required courses with a passing grade in each course and a 2.20 cumulative GPA.
- Students have a maximum of six years from initial professional curriculum matriculation to complete all requirements for the doctor of pharmacy degree.
- Ensure appropriate graduation paperwork is properly completed and submitted in the timeframe specified by the University.
- Receive an approving recommendation by the CPHS faculty.
- Fulfill all financial obligations to the institution.
- Complete all required documentation for graduation including post rotation responsibilities (i.e. competencies).
- Attend in person each session of the CPHS Board Review.
- Attend the applicable commencement ceremony.

Experiential Training

Introductory Pharmacy Practice Experiences
Following successful completion of all required coursework in the preceding academic year, 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.

Advanced Pharmacy Practice Experiences
In the final year of the curriculum, P-4 students are divided into four geographic areas to complete nine advanced pharmacy practice experiences (APPEs). These regions include:
- Buies Creek/Fayetteville
- Greenville
- Raleigh/Durham
- Winston-Salem/Greensboro

During experiential training, students are responsible for all travel expenses, housing arrangements, and incidental expenses such as parking fees. Information regarding expenses associated with each training site may be obtained from the Office of Professional & Experiential Education (OPEE).

The OPEE makes every effort to secure availability based on the student’s in-region preference; however, student pharmacists must be prepared to fulfill training requirements wherever they are assigned. The OPEE does not guarantee placement at a site.

Registration of Rotations and Billing
The OPEE will register students and submit grades for all IPPEs and APPEs.

Introductory Pharmacy Practice Experiences & Advanced Pharmacy Practice Experiences
Student pharmacists with any CU Business Office hold 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.

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 I
February. Internal Medicine II
March. Off
April. Elective 3

Students registering for less than three (3) APPEs in either the fall or spring term will be classified as a half-time student. If a student pharmacist receives a grade of F (fail) 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 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.

International Travel after Onboarding for IPPEs and APPEs
It is recommended that once clearance and onboarding procedures are completed for introductory and/or Advanced Pharmacy Practice Experiences (IPPEs/ APPEs), student pharmacists should not travel abroad except for Campbell University-sponsored international travel (i.e.: mission trips, international electives, etc.) which is cleared through CU Global Engagement.

Whether travelling internationally on Campbell University’s (CU) behalf or for personal reasons, the Office of Professional and Experiential Education recommends students familiarize themselves with the political, health, crime, and other safety-related conditions of their travel destination and follow the Center for Disease Control’s recommendations.

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 global areas of practice (please note, this is not an all-inclusive list and sites are subject to change):
- Academic Pharmacy
- Advanced Community Pharmacy*
- Advanced Hospital*
- Ambulatory Care*
- Cardiology
- Clinical Research
- Community Management
- Drug Information
- Emergency Medicine
- Geriatrics*
- Hospital Management
- Infectious Disease
- Intensive Care
- Internal Medicine I* & II*
- Nuclear Pharmacy
- Oncology
- Pediatrics
- Pharmacy Administration
- Professional Association Management
- Psychiatry
- Surgery
- Veterinary Pharmacy
*Required rotation

Requirements for Pharmacy Internship
Regulations regarding internship licensure 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 the board of pharmacy pages for each respective state. Successful completion of the CPHS experiential clerkship program will suffice for the internship requirement in the state of North Carolina. Students seeking internships or planning to take the state pharmacy board exam outside of North Carolina are responsible for reviewing the respective state’s requirements for information regarding out of state intern licensure and pharmacy licensure post-graduation.

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 wishing to complete an elective APPE in drug information. During the rotation, student pharmacists become competent in data retrieval, literature evaluation, and both written and verbal 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)
Fax: (910) 893-1476

Online requests: https://cphs.campbell.edu/centers-programs/drug-information-center

**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 includes pharmacy-managed anticoagulation, diabetes, transitions of care, 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, Diabetes Care, Geriatrics, and Pharmacotherapy clinics in private practice environments.

The residency consists of a 12-month training program designed to comply with the ASHP standards for 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.

**Ambulatory Care**

**Benson Area Medical Center**
The Campbell University College of Pharmacy & Health Sciences PGY2 Ambulatory Care residency conducted at Benson Area Medical Center is designed to develop the knowledge, attitude, and skills required to provide exemplary patient care in the ambulatory care setting. This program 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 program 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.

The residency consists of a 12-month training program designed to comply with the most current ASHP standards for PGY2 residency. A minimum of 7 months will be spent at Benson Area Medical Center and up to 2 months at Duke Family Medicine. In addition, up to two 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).

**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 educator-practitioners for entry into academic and clinical pharmacy practice positions. The program prepares the resident to function effectively as a clinical faculty member by emphasizing patient care, service, teaching, scholarly activity and research. With its concentration in infectious diseases, the resident will obtain the training needed to function as an antimicrobial stewardship pharmacist.

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, Duke Antimicrobial Stewardship Outreach Network, 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 integrated pharmacotherapy course series, applied drug management course series, and pharmacy practice skills courses at CPHS. The resident participates on various committees, attends faculty
Teaching activities include participation 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 Duke Regional Hospital (DRH) and affiliated with Campbell University College of Pharmacy & Health Sciences (CPHS) 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. 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. 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, providing comprehensive patient-centered care with a multi-disciplinary clinical team on the Internal Medicine teaching services at DRH for at least six months. The remaining time is spent in required longitudinal learning experiences in research/scholarship, teaching/academia and practice management. Additional elective learning experiences are available. The resident will 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 and academic settings. The resident will have the opportunity to develop preceptor skills by serving as a primary preceptor for student pharmacists. Academic experiences will involve development and presentation of educational activities for multi-disciplinary practitioners at DRH and CPHS, as well as opportunities for teaching in small group and large lecture settings.

The resident will undertake at least one research project and one economic focused project that is initiated and completed during the residency year. The results of these projects are 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 the research project results and at least one other work identified by resident, residency program directors and/or preceptors. There are opportunities available to the resident to prepare and deliver seminars to local, state and national organizations.

PGY1 Residencies

PGY1 Community-Based Pharmacy
CPHS offers two community-based pharmacy residencies. The residencies are offered in conjunction with Walgreens, located in Angier, NC and Josefs Pharmacy in Raleigh, NC.

Residents develop leading-edge community pharmacy practice skills and gain valuable experience in immunizations, medication therapy management, disease state management, and specialty pharmacy. They work with their preceptors to enhance or develop new clinical skills beneficial to patients of the community they serve.

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. Residents complete an original research project and present their results at the Southeastern Residency Conference.

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, and one month in each of the following: cardiology, critical care, ambulatory care, as well as two weeks in pharmacy administration, drug information, and infectious disease. Elective rotations include pediatrics, emergency medicine, information systems, and oncology.

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, in-service presentations, and continuing education seminars.
## Curriculum for Class of 2020

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

### First Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHAR 302 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 304 – Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 312 – Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 301 – Pharmaceutical Calculations</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 305 – Pharmacy in the US Healthcare System</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 309 – Drug Information</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 331 – Pharmaceutical Care Skills</td>
<td>1</td>
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<tr>
<td>PHAR 315 – Intro. to Pharmacy Practice I</td>
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<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHAR 306 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 303 – Patient Counseling &amp; Prof. Communications</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 310 – Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 308 – Clinical Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 314 – Biopharmaceutics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 307 – Pharmacy Marketing &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 332 – Pharmaceutical Care Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 316 – Intro. to Pharmacy Practice II</td>
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<td>PHAR 335 – Community Service I</td>
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<thead>
<tr>
<th>Summer (one month) Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>PHAR 505 – Introductory Pharmacy Practice Experience I</td>
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### Second Year

<table>
<thead>
<tr>
<th>Semester 3 Courses</th>
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<tbody>
<tr>
<td>PHAR 412 – Principles of Pharmacology &amp; Medicinal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 417 – Pharmacology &amp; Medicinal Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 408 – Biology of Disease</td>
<td>5</td>
</tr>
<tr>
<td>PHAR 404 – Pharmaceutics I</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 410 – Pharmacokinetics</td>
<td>2</td>
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<tr>
<td>PHAR 409 – Intro. to Pharmacy Practice III</td>
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<td>PHAR 435 – Community Service II</td>
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<tr>
<th>Semester 4 Courses</th>
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<tr>
<td>PHAR 421 – Pharmacology &amp; Medicinal Chemistry III</td>
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<tr>
<td>PHAR 423 – Pharmacology &amp; Medicinal Chemistry IV</td>
<td>3</td>
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<tr>
<td>PHAR 403 – Financial Mgmt. &amp; Pharmacoconomics</td>
<td>2</td>
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<tr>
<td>PHAR 405 – Nonprescription Drug Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 406 – Pharmaceutics II with Lab</td>
<td>4</td>
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<tr>
<td>PHAR 419 – Intro. to Pharmacy Practice IV</td>
<td>.5</td>
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<table>
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<tr>
<th>Summer (one month) Courses</th>
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### Third Year

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<th>Semester 5 Courses</th>
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<tbody>
<tr>
<td>PHAR 501/503 – Therapeutics I &amp; II</td>
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<tr>
<td>PHAR 528 – Experimental Design &amp; Biostatistics</td>
<td>4</td>
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<tr>
<td>PHAR 511 – Jurisprudence</td>
<td>3</td>
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<tr>
<td>PHAR 508 – Top 300 Drug Review</td>
<td>1</td>
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<tr>
<td>PHAR 5XX – Electives</td>
<td>3</td>
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<tr>
<td>PHAR 515P – Intro. to Pharmacy Practice V</td>
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<th>Semester 6 Courses</th>
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<td>PHAR 545/547 – Therapeutics III &amp; IV</td>
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<tr>
<td>PHAR 509 – Therapeutic Drug Monitoring</td>
<td>4</td>
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<tr>
<td>PHAR 544 – Intro. to Clinical Research Design &amp; Lit. Evaluation</td>
<td>2</td>
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<tr>
<td>PHAR 519 – Physical Assessment</td>
<td>2</td>
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<tr>
<td>PHAR 5XX – Electives</td>
<td>3</td>
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<td>PHAR 516P – Intro. to Pharmacy Practice VI</td>
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<td>PHAR 564 – Community Service III</td>
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### Fourth Year

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<thead>
<tr>
<th>Nine Month Rotations Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHAR 6XX – Advanced Pharmacy Practice Experiences (nine one – month)</td>
<td>36</td>
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<tr>
<td>PHAR 699 – Prof. Presentation Seminar</td>
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<td>PHAR 690 – Community Service IV</td>
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### 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 Class of 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 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 315 – Introduction to Pharmacy Practice I
Credit: 0.5 hours
This series of courses is intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the doctor of pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition, the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).

PHAR 316 – Introduction to Pharmacy Practice II
Credit: 0.5 hours
This series of courses is intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the doctor of pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition, the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).

PHAR 317 – 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 prophylaxis.

PHAR 407 – 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 408 – Introduction to Pharmacy Practice III
Credit: 0.5 hours
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the doctor of pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition, the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).

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

PHAR 411 – 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 412 – 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 paracrine/ inflammatory, gastrointestinal, 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 413 – 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 therapeutic 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 414 – 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 course*  
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 online 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*  
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the doctor of pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).

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

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

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

PHAR 556 – 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 557 – 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 toxins 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 558 – 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 559 – 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
A minimum of 10 hours must be provided.

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 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 that 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.

**PHRD 683/684 – Lipid Management I/II**  
*Credit: 1 hour*  
The Lipid Management Elective and Certificate Program will prepare pharmacy students to diagnosis, treat, and monitor the therapy of patients with lipid disorders. Lipid Management I is a prerequisite for Lipid Management II

**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 prepare participants 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 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 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 a calendar month (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 settings that have 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 interprofessional 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 interprofessional 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, interprofessional 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.
### P1 Year

#### P1 Year, Block 1 Courses

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<th>Course</th>
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<td>PHRD 511 – Biomedical Foundations</td>
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<td>PHRD 512 – US Health Care</td>
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<td>PHRD 513 – Pharmacy Practice Skills I</td>
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<td>PHRD 515 – Pharmaceutics, Pharmacokinetics &amp; Calculations</td>
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<td>PHRD 516 – Principles of Drug Information I</td>
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**Total** 9

#### P1 Year, Block 2 Courses

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<td>PHRD 521 – Pharmaceutical Sciences Foundations</td>
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<td>PHRD 522 – Nonprescription Therapeutics</td>
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<td>PHRD 523 – Pharmacy Practice Skills II</td>
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<td>PHRD 525 – Pharmaceutics, Pharmacokinetics, &amp; Calculations II</td>
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<td>PHRD 526 – Introduction to Evidence Based Medicine</td>
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#### P1 Year, Block 3 Courses

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<td>PHRD 531 – Integrated Pharmacotherapy I Infection &amp; Immunity</td>
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<td>PHRD 532 – Medical Literature Evaluation I</td>
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**Total** 9.5

#### P1 Year, Block 4 Courses

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<td>PHRD 545 – Pharmaceutics, Pharmacokinetics, &amp; Calculations IV</td>
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**Total** 10

### P2 Year

#### P2 Summer 1 Courses

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<td>PHRD 705 – Community: IPPE</td>
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#### P2 Year, Block 5 Courses

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<tr>
<td>PHRD 610 – Personal and Professional Development III</td>
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<tr>
<td>PHRD 611 – Integrated Pharmacotherapy III Cardiovascular I</td>
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<tr>
<td>PHRD 612 – Health Outcomes and Informatics I*</td>
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<td>PHRD 613 – Pharmacy Practice Skills V</td>
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<tr>
<td>PHRD 615 – Public Health &amp; Wellness I*</td>
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**Total** 9

#### P2 Year, Block 6 Courses

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<tr>
<td>PHRD 610 – Personal and Professional Development III</td>
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<tr>
<td>PHRD 621 – Integrated Pharmacotherapy IV Cardiovascular II/Renal</td>
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<tr>
<td>PHRD 622 – Health Outcomes and Informatics II</td>
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**Total** 8.5

#### P2 Year, Block 7 Courses

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<tr>
<td>PHRD 630 – Personal and Professional Development IV</td>
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<td>PHRD 631 – Integrated Pharmacotherapy V Gastrointestinal</td>
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<tr>
<td>PHRD 632 – Pharmacogenomics I</td>
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<tr>
<td>PHRD 633 – Pharmacy Practice Skills VII</td>
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**Total** 9.5

#### P2 Year, Block 8 Courses

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<tr>
<td>PHRD 630 – Personal and Professional Development IV</td>
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<td>PHRD 641 – Integrated Pharmacotherapy VI Neurology/Psychiatry</td>
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**Total** 10.5

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### P3 Year

#### P3 Summer 1 Courses

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#### P3 Year, Block 9 Courses

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<tr>
<td>PHRD 710 – Personal and Professional Development V</td>
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<td>PHRD 711 – Integrated Pharmacotherapy VII Musculoskeletal</td>
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<td>PHRD 712 – Research Topics in Pharmacy I</td>
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<td>PHRD 713 – Pharmacy Practice Skills IX</td>
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#### P3 Year, Block 10 Courses

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<tr>
<td>PHRD 710 – Personal and Professional Development V</td>
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<tr>
<td>PHRD 721 – Integrated Pharmacotherapy VIII Pulmonary, Otic, Ophthalmic</td>
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<tr>
<td>PHRD 722 – Research Topics in Pharmacy II</td>
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<td>PHRD 723 – Pharmacy Practice Skills X</td>
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#### P3 Year, Block 11 Courses

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<tr>
<td>PHRD 730 – Personal and Professional Development VI</td>
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<td>PHRD 731 – Integrated Pharmacotherapy IX Dermatology &amp; Nutrition</td>
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<tr>
<td>PHRD 732 – Applied Drug Management I</td>
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<tr>
<td>PHRD 733 – Pharmacy Practice Skills XI</td>
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<td>PHRD 736 – Integrated Pharmacotherapy X Hematology/Oncology</td>
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#### P3 Year, Block 12 Courses

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<tr>
<td>PHRD 730 – Personal and Professional Development VI</td>
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<td>PHRD 741 – Integrated Pharmacotherapy XI Special Populations</td>
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<td>PHRD 742 – Applied Drug Management II</td>
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<td>PHRD 743 – Pharmacy Practice Skills XII</td>
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<td>PHRD 745 – Integrated Pharmacotherapy XII Clinical Updates</td>
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### P4 Year – Nine Rotations Required to Graduate

#### Required Rotations Courses

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<th>Course</th>
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<tr>
<td>PHRD 8XX – Advanced Pharmacy Practice Experiences (nine one – month)</td>
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#### Required Rotations Courses

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<tr>
<td>PHRD 804 – Advanced Community Pharmacy</td>
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<td>PHRD 805 – Ambulatory Care</td>
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<td>PHRD 806 – Geriatrics</td>
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<td>PHRD 807 – Internal Medicine I</td>
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<tr>
<td>PHRD 810 – Advanced Hospital</td>
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<tr>
<td>Three (3) PHRD 8XX Electives</td>
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*PHRD 615: Public Health & Wellness I - Class of 2022 (AY 2019-20 P-2 students) - 1 credit hour. PHRD 615 will be deleted for the class of 2023 (AY 2019-20 P-1 students) and beyond. Topic will be transferred to PHRD 612 - Health Outcomes & Informatics, which will increase 0.5 to 1.5 credit hours (class of 2023 and beyond)
Course Descriptions for Class of 2021 & Beyond

PHRD 510 – Personal/Professional Development I
Credit: 0.0 hours
This course is designed to provide 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 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: 1.0 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 515 – Pharmaceutics, Pharmacokinetics & Calculations I (PPC I)
Credit: 1.5 hours
This course exposes the student pharmacist to fundamental pharmaceutic calculations encountered in pharmacy practice and serves as a foundation for the future concepts in pharmaceutics and pharmacokinetics.

PHRD 516 – Principles of Drug Information
Credit: 1.0 hour
This course is designed to introduce the student pharmacist to sources of drug information and how they are 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: 3.5 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 Therapeutics
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: 1.0 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 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 – 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 pharmacists’ ability to communicate complex biomedical information.

PHRD 530 – Personal/Professional Development II
Credit: 0.0 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 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.
This course is designed 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 535 – Pharmacokinetics, Pharmacodynamics & 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 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 540 – Professional Career Development I & II**
*Credit: 1.0 hour*
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 medications and their effects, the student will be able to determine optimal therapy with monitoring parameters for both acute and chronic disease processes.

**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 knowledge to patient care.

**PHRD 543 – Pharmacy Practice Skills IV**
*Credit: 1.0 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 545 – Pharmacokinetics, Pharmacodynamics & 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 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 – Personal and Professional Development III**
*Credit: 0.0 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 611 – Integrated Pharmacotherapy III: Cardiovascular-Renal Integrated Pharmacotherapy (IP) Module I & II**
*Credit: 5.5 hours Module I & 5.0 hours Module II*
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*
This course is designed to provide students-pharmacists with a basic understanding of pharmacoepidemiology, which is the study of the use and effects of medications in large patient populations. Students will build a foundational knowledge of the process of pharmacoepidemiological research (such as methodology and statistical analysis) and its application to the measurement of treatment outcomes in large populations.

**PHRD 613 – Pharmacy Practice Skills V**
*Credit: 1.0 hour*
This course is designed 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 615 – Public Health & Wellness I**
*Credit: 1.0 hour*
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 65X – Elective**
*Credit: 1.0 hour*

**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: 1.5 hours*
This course is designed to provide the student pharmacist with foundational knowledge and application in health informatics. In learning about health informatics, the student pharmacist will be able to effectively communicate key principles that can be used to facilitate improvements in healthcare technology design and deployment to improve usability and mitigate potential risks of patient harm.
PHRD 623 – Pharmacy Practice Skills VI  
Credit: 1.0 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 630 – Personal/Professional Development IV  
Credit: 0.0 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 631 – Integrated Pharmacotherapy V: Gastrointestinal  
Credit: 4.5 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
This course will provide the student pharmacist with an understanding of the basic principles of genetics and pharmacogenomics as they relate to the variability in drug response. Additionally, it will provide an understanding of the basic principles of the molecular techniques and genetic tests that are currently utilized in clinical practice.

PHRD 633 – Pharmacy Practice Skills VII  
Credit: 1.0 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: 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: 5.0 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
This course will build upon the knowledge obtained during Pharmacogenomics I. Student pharmacists will practice the application of this knowledge in case-based scenarios involving the different pharmacy practice settings.

PHRD 643 – Pharmacy Practice Skills VIII  
Credit 1.5 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 for the experiential component of the doctor of pharmacy curriculum.

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 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 – Personal/Professional Development V  
Credit: 0.0 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 711 – Integrated Pharmacotherapy (IP) VII: Musculoskeletal  
Credit: 4.5 hours
This course focuses on the pharmacotherapy of problems associated with the musculoskeletal system.

PHRD 712 – Research Topics in Pharmacy I  
Credit: 1.0 hour
This course series is designed to equip student pharmacists with the skills necessary to research a pharmacy topic and present their findings and interpretation of the literature in a formal setting. The student pharmacist will learn about writing effective learning objectives, interpreting results from the literature, organizing a presentation...
This course will present principles of pharmacology, pharmacokinetics, and pharmacodynamics, 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 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 – Research Topics in Pharmacy II
Credit: 1.0 hour
This course series is designed to equip student pharmacists with the skills necessary to research a pharmacy topic and present their findings and interpretation of the literature in a formal setting. The student pharmacist will learn about writing effective learning objectives, interpreting results from the literature, organizing a presentation and defending his or her critique in a formal presentation. The material learned in this course series will further develop the research knowledge of pharmacy topics for the student pharmacist.

PHRD 723 – Pharmacy Practice Skills X
Credit: 1.0 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 – Pharmacy Operations II (Financial Management)
Credit: 2.0 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. This course also introduces student pharmacists to 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 730 – Personal/Professional Development VI
Credit: 0.0 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 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 – Applied Drug Management I
Credit: 1.0 hour
This course is designed to provide the problem-solving skills necessary to apply pharmacokinetic principles in the clinical setting while reviewing targeted domain-knowledge. Emphasis is placed upon the application of therapeutic drug monitoring, drug dosing, and the individualization of drug therapy.

PHRD 733 – Pharmacy Practice Skills XI
Credit: 1.0 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 736 – Integrated Pharmacotherapy X: Hematology Oncology
Credit: 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 – Applied Drug Management II
Credit: 1.0 hour
This course is designed to provide the problem-solving skills necessary to apply pharmacokinetic principles in the clinical setting while reviewing targeted domain-knowledge. Emphasis is placed upon the
The purpose of this experience is 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 743 – Pharmacy Practice Skills XII  
*Credit: 1.0 hour*  
This course is intended to provide student pharmacists the opportunity to learn skills provided by pharmacists in clinical practice and to further develop their professional attitudes, judgment, and skills needed to function in 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 settings that have 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 interprofessional 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 PHRD 807 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 interprofessional 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 (PHRD707) 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, interprofessional patient care within the wider hospital/health system setting.

**Current Electives for Class of 2021 & beyond**

**PHRD 651 – Special Research Pharm. Science**  
*Credit: 1-3 hours*  
The purpose of this elective course is to introduce the student pharmacist to methods of basic science and/or clinical research.

**PHRD 652 – Special Research Projects in Pharmacy Practice**  
*Credit: 1-3 hours*  
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.

**PHRD 653 – 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.

**PHRD 654 – Sterile Practical Compounding**  
*Credit: 1 hour*  
This course offers instruction on additional compounding and processing techniques and exercises that include practical
The purpose of this course is to identify data collection, prescription dispensing development. This course enables students to address the human element of enterprise 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.

PHRD 657 – Spanish for Pharmacists
Credit: 1.0 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.

PHRD 658 – APhA Diabetes Certificate
Credit: 1 hour
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.

PHRD 659 – Geriatric Pharmacotherapy I
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.

PHRD 660 – 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.

PHRD 661 – My Healthy Life
Credit: 1 hour
This course is an in-depth personal journey towards improved health. Each student pharmacist will assess current health status through biometric screening and create weekly personal goals for weight control, nutrition and physical activity that meet current evidence-based guidelines. An emphasis will be placed on motivational interviewing for behavior change, goal setting, and identifying and overcoming barriers to living a healthy lifestyle.

PHRD 662 – 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.

PHRD 663 – Geriatric Pharmacotherapy II
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.

PHRD 664 – Drugs of Abuse
Credit: 2 hours
This course will focus on the chemistry, pharmacology, and toxicology of drug abuse and addiction. The student pharmacist will learn about currently abused substances and their impact on health and society in general. The student pharmacist will utilize this knowledge in the general education of their patients and other health care providers.

PHRD 665 – Botanical Medicine Seminar
Credit: 1 hour
Surveying botanical medicine literature with emphasis on applications in pharmacy. This course cross list with PHSC 582.

PHRD 667 – Pharmacy Christian Missions
Credit: 1 hour
This course explores the various issues related to pharmacy/medical missions including how the provision of medical and patient-centered 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.

PHRD 668 – 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
This course will provide the student with a foundational clinical knowledge within pharmacy practice. Students participating in this class will be better prepared for veterinary prescription processing, customer questions, and OTC recommendation and precautions in the retail setting.

PHRD 669 – Community Pharmacy Management  
*Credit: 1 hour*  
This course provides specific instructions in policies and procedures required to own and manage a community retail pharmacy.

PHRD 670 – Care of the Diabetic Patient  
*Credit: 1 hour*  
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.

PHRD 671 – Herbal & Alternative Medicine  
*Credit: 1 hour*  
This course discusses herbal remedies recently being used as alternative solutions to treat and prevent different diseases.

PHRD 672 – 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 plans that provide payment to pharmacists for medication therapy management.

PHRD 674 – 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.

PHRD 675 – Geriatric Pharmacotherapy III  
*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 and neurologic disease in older adults, musculoskeletal disease and pain management in older adults, end of life care and decision making, geriatric assessment tools (cognitive, mood, falls, adherence, etc.) and participation as a member of the healthcare team.

PHRD 676 – Anticoagulation I  
*Credit: 1 hour*  
This elective 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 student pharmacists and future pharmacists to position themselves appropriately into the therapeutic management of anticoagulants and antithrombotics in both the hospital and community pharmacy settings.

PHRD 677 – Making Medicines: Process of Drug Development  
*Credit: 1.5 hours*  
In this course, the student pharmacist will explore how a new drug is developed from the initial concept, discovery, pre-clinical and clinical development, regulatory considerations, to the availability to the patient. The goal of the course is to provide an opportunity for student pharmacists to learn the processes required to discover and develop drugs, which will ultimately provide a benefit to meet unmet medical needs, with minimal risk.

PHRD 678 – Specialty Pharmacy Elective  
*Credit: 1 hour*  
Specialty medications are a rapidly growing segment of the pharmaceutical industry, and will be close to 50% of total pharmacy revenues by 2020. There is a lack of knowledge and awareness to this space within the industry. This course would allow students to engage within this topic earlier, and thus could make didactic and experiential choices to evaluate as a potential professional career option. This may impact other courses where disease states, which include specialty medications, are discussed e.g., oncology, infectious diseases. The information within this Specialty Pharmacy course would build upon the foundational clinical knowledge within therapeutic coursework, but also include focus upon critical factors within Specialty Pharmacy e.g., payer, previous treatment choices, limited drug distribution. Time would need to be dedicated to connecting with other courses to ensure consistency of approach around disease states and medications, and avoid unnecessary repetition.

PHRD 679 – Introduction to Internal Medicine  
*Credit: 1 hour*  
This elective is designed for student pharmacists with an interest in expanding their ability to apply the principles of pharmacotherapy in a simulated pharmacy workflow environment similar to the Internal Medicine APPE rotation. The purpose of the course is to prepare student pharmacists for the challenges encountered in inpatient pharmacy practice and equip them to identify, critically analyze, and resolve medication issues. Advanced concepts related to pharmacotherapy, critical thinking, and patient evaluation will be emphasized.

PHRD 680 – Applied Pharmacokinetics  
*Credit: 1 hour*  
Phoenix WinNonLin and NONMEM are two Pharmacokinetic-Pharmacodynamic (PKPD) computer programs/software approved by the US-FDA and used in the industrial and clinical settings for pharmacokinetic analysis and PKPD modeling. This course trains students in hands-on use of Phoenix WinNonLin software and provides necessary familiarity and competencies that prepare students for industrial and clinical pharmacokinetics. Material is presented in both lectures and supervised hands-on sessions, during which students will do interactive programming.

PHRD 681 – Obstetrics, Gynecology, and Women’s Health (OB-GYN and WH)  
*Credit: 2 hour*  
The student-facilitated obstetrics, gynecology, and women’s health elective course will help prepare student pharmacists enrolled in the Campbell University 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.

PHRD 682 – 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 will be emphasized.

**PHRD 683 – Lipid Management Elective 1**  
*Credit: 1 hour*  
This course is designed to integrate pharmaceutical sciences and clinical therapeutics with an emphasis on the medication management of dyslipidemia. The students will learn about the pathophysiology of lipid disorders, the pharmacology of medications used to treat dyslipidemia and the adverse effects of these medications. The students will learn how to diagnosis lipid disorders, determine treatment goals and will apply this knowledge to develop appropriate, evidence-based pharmacologic and non-pharmacologic therapeutic plans that include monitoring parameters for patients on medications for dyslipidemia.

**PHRD 684 – FDA and EU Regulatory Approval Pathways for Biosimilar and Generic drugs**  
*Credit: 1 hour*  
This elective course provides a basic understanding of the FDA and other major international regulatory approval pathways for the biosimilar (large molecules) and generic (small molecules) drug products.

**PHRD 685 – Principles and Applications in Infectious Diseases**  
*Credit: 2 hour*  
This course is designed to enhance student pharmacists’ ability to appropriately apply pharmacology, pharmacodynamics, pathophysiology and pharmacokinetics of various infectious diseases topics. Advanced concepts related to antimicrobial therapy will be emphasized.
Physical Therapy

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Campbell University
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Mailing Address
P.O. Box 1090
Buies Creek, NC 27506
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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:

1. Deliver:
   - 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

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 and 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
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 early July 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 visit the website: https://www.campbell.edu/financial-aid/.
Policies & Procedures

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

- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- 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. 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 who 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 University’s 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 Abilities3 in our expected student professional behaviors. Faculty assess progression of professional behaviors from beginning level to entry level using identified criteria as a guide4. 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 Responsibility5.

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

**Intelectual/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 to 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/affection, 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. Students 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, 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 cumulative of grade point average.

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 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 experience(s), cannot participate in the full-time experience(s) portion of a semester. The student would need to undergo a remedial course of study, with successful completion, prior to engaging in the experience(s) (DPT 800, 802, 804). In the event remediation is not successful, students cannot progress to the clinical experience(s). 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 during clinical experience(s), 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 requirement
  - Cumulative GPA of ≥2.8
- Passing grades for all clinical/experiential training
- No violations of student honor code or code of conduct have occurred
- Successful completion of required remediation

2. Remediation

Students who fail to meet academic standards within a given course or clinical/experiential rotation will 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 within 24 hours of receiving a grade of < 70% on any examination or failing grade on any OSCE within a given course. Failure to initiate remediation will be considered a professional behavior violation. 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. In the event that remediation cannot be scheduled and completed within the current semester, the earned grade will be assigned and student will be placed on provisional status. Remediation must be completed by the end of the following semester or the student will be placed on probation. If the student is not successful in the allowed single remediation attempt, he/ she will be placed on academic probation. 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, this must be remediated prior to progression in the program.

Should a student fail a clinical experience, this experience must be remediated prior to progression in the program. Clinical experiences cannot be completed out of sequence.

Clinical internships may be repeated providing student has adhered to all stipulations in the letter 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 a per semester GPA requirements
- A grade of D in any single course
- Failure to complete any degree requirement at the prescribed time without prior approval
- Failure to successfully complete required remediation in allowed single attempt or complete attempt within the following semester
- Provisional probation is assigned for students not completing required remediation prior to conclusion of semester
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 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 semester GPA returns to ≥2.8.
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 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 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.
- Fails to maintain program minimum GPA requirements for > 2 semesters.
- Fails to make satisfactory progress during a period of academic probation.
- 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 probation 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 or to dismiss the student from the College. The program director reviews all records for student and committee and makes decision to retain or dismiss a student. Should recommendation for dismissal occur, information is shared with the associate dean of admissions & student affairs.

Students have the opportunity to appeal any decision made by the DPT Academic Performance and Standards Committee and program director 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.

A student may appeal a grade per the policy in the general section of this document. 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 experiences. 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 terminal clinical experience 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 experiences. 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 experiences occur throughout the curriculum with a six-week introductory clinical experience in the spring of the second year. The remaining terminal experiences 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 experiences 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 https://cphs.campbell.edu/academic-programs/physical-therapy/ for the most up-to-date curriculum information.
## Year 1

### Spring 1 Courses

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DPT 700 – Clinical Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>DPT 702 – Principles of Inquiry</td>
<td>2</td>
</tr>
<tr>
<td>DPT 722 – Professional Development</td>
<td>2</td>
</tr>
<tr>
<td>DPT 724 – Service Learning I</td>
<td>1</td>
</tr>
<tr>
<td>DPT 750 – Life Span Continuum I</td>
<td>3</td>
</tr>
<tr>
<td>DPT 752 – Tests, Measures &amp; Mobility</td>
<td>4</td>
</tr>
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<td><strong>Total</strong></td>
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### Summer 1 Courses

<table>
<thead>
<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>DPT 704 – Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>DPT 706 – Exercise Physiology</td>
<td>2</td>
</tr>
<tr>
<td>DPT 708 – Human Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>DPT 726 – Part-Time Clinical Experience 1</td>
<td>1</td>
</tr>
<tr>
<td>DPT 754 – Burn and Wound Management</td>
<td>2</td>
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### Fall 1 Courses

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<tr>
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<tbody>
<tr>
<td>DPT 710 – Pharmacology</td>
<td>2</td>
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<tr>
<td>DPT 712 – Neuroscience</td>
<td>3</td>
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<tr>
<td>DPT 728 – Clinical Education</td>
<td>2</td>
</tr>
<tr>
<td>DPT 730 – Service Learning 2</td>
<td>1</td>
</tr>
<tr>
<td>DPT 756 – Therapeutic Exercise 1</td>
<td>3</td>
</tr>
<tr>
<td>DPT 760 – Hospital Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 762 – Musculoskeletal Practice</td>
<td>3</td>
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<tr>
<td>DPT 764 – Clinical Reasoning 1</td>
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## Year 2

### Spring 2 Courses

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<th>Course Description</th>
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<tr>
<td>DPT 714 – Motor Control</td>
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<tr>
<td>DPT 758 – Neurology Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 766 – Therapeutic Exercise 2</td>
<td>3</td>
</tr>
<tr>
<td>DPT 768 – Cardiopulmonary Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 770 – Orthotics/Prosthetics</td>
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<tr>
<td>DPT 800 – Full-Time Clinical Experience 1</td>
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### Summer 2 Courses

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<th>Credit Hours</th>
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<tbody>
<tr>
<td>DPT 732 – Part-Time Clinical Experience 2</td>
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<tr>
<td>DPT 772 – Life Span Continuum 2 (pediatric)</td>
<td>3</td>
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<tr>
<td>DPT 776 – Life Span Continuum 3 (musculoskeletal)</td>
<td>3</td>
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<tr>
<td>DPT 780 – Life Span Continuum 4 (neurological)</td>
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## Year 3

### Spring 3 Courses

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<tr>
<td>DPT 736 – Administration &amp; Management</td>
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<tr>
<td>DPT 786 – Special Populations</td>
<td>4</td>
</tr>
<tr>
<td>DPT 788: Clinical Reasoning 3</td>
<td>1</td>
</tr>
<tr>
<td>DPT 792 – Assistive &amp; Adaptive Technology</td>
<td>1</td>
</tr>
<tr>
<td>DPT 797: Independent Study Elective ***</td>
<td>2</td>
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<tr>
<td>DPT 805 – 808 Elective***</td>
<td>2</td>
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<td><strong>Total</strong></td>
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### Summer 3 Courses

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<tr>
<th>Course Description</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
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<td>8</td>
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<tr>
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</tr>
</tbody>
</table>
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 discussed. 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 1 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 1 will teach the foundational principles of documentation of the patient/client episode of care. Lifespan 1 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 1 will define and emphasize the ‘single clinical discipline’ approach to patient/client care. Finally, Lifespan 1 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, 2) patient mobility, and 3) physical agents and electrotherapeutic interventions. Standard precautions and aseptic technique will be addressed. Assessments to be delineated and practiced include those focused on cognition/sensation, physiological status (eg, vital signs) range of motion and muscle length, anthropometry and posture, muscle performance, and mobility. Interventions for patient mobility will be introduced and practiced. Patient positioning and mobility (including maintaining and changing position) will be discussed and practiced. 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: Part-Time Clinical Experience 1 (1:0:1)**  
*Credit: 1 hour*  
This is the first in a series of two integrated part-time clinical learning experiences that occurs prior to their initial full-time
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.

Fall, Year 1

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. Interprofessional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

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.

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 the practice, evidence for and performance of examination/evaluation of spinal and peripheral joints, screening systems for disease outside the scope of physical therapy, and an introduction to patient management that includes mobilization/manipulation. Students will be introduced to psychosocial and psychomotor aspects of interacting with patients and their families. Patient data collection from the subjective interview to clinical tests and measures will be presented. Conceptual models for clinical decision-making and an evidence informed structure will be utilized and combined with ICF language and examples to appropriate 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 musculoskeletal conditions. An introduction to manual therapy is provided using regional techniques with a focus on safety and decision making. A variety of learning activities will be 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: First Full-Time Clinical Experience 1 (3:0:9)
Credit: 3 hours
First full-time clinical experience consisting of six weeks of experiential training (approximately 240 hours) in a physical therapy practice setting. 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: Part-Time Clinical Experience 2 (1:0:1) Credit: 1 hour
This is the second in a series of two integrated part-time clinical learning experiences 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 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 7 (neurological) (4:2:3)
Credit: 4 hours
This course will develop intermediate to entry-level skills in the evaluation and management of adults over the age of 18. Students will recognize key neurological 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 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.
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.

DPT 784: Clinical Reasoning 2 (1:0:3)
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 across the lifespan. 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. A variety of learning activities will be incorporated into the presentation of course material, including active learning, demonstration, lab practicums, case studies, independent problem assignments, and role-playing.

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 using a blended learning format of independent study online and onsite laboratory sessions. 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. Additionally, this course addresses unique anatomy, physiology, psychosocial, assessment, management, and documentation/reimbursement needs of women’s and men’s health.

DPT 788: Clinical Reasoning 3 (1:0:3)
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 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 805: Manual Therapy in Musculoskeletal Practice
Credit: 1 hour
DPT 805 focuses on the role of manual therapy in orthopedic physical therapy. While some basic manual therapy skills are taught during the DPT curriculum, the students in this course will gain a deeper understanding of kinesiology taping, instrument assisted soft tissue mobilization (IASTM), and advanced manipulation. Topics will include safety screening, analysis of supporting and conflicting evidence regarding manual therapy, as well as how to incorporate these interventions into a comprehensive and multi-modal physical therapy treatment. The participants will utilize standard evaluation techniques and movement screening combined with knowledge of risk factors, indications, and contraindications to select the best intervention techniques on a case by case basis.

DPT 806: Special Topics in Acute Care Physical Therapy Practice
Credit: 1 hour
This course is designed for students who have a strong desire to increase their proficiency in the practice of physical therapy in the acute care setting. The course will cover a range of health conditions and ages, considering treatment strategies employed in pediatric ICU and acute care settings and those employed in the treatment of adults with cardiopulmonary conditions in the acute setting.

DPT 807: Teaching and Learning
Credit: 1 hour
This course is designed for students who have a strong desire to pursue professional opportunities that involve serving as an educator in a formalized setting. Current theory in teaching and learning will be introduced along with practical application within courses housed in the DPT curriculum. Students will be guided through a progression of teaching experiences by DPT core faculty culminating in the student serving as the primary instructor for course content in one lecture or lab.

DPT 808: Musculoskeletal Sonography in Physical Therapy Practice
Credit: 1 hour
This course will discuss and prepare students for clinical application of ultrasound imaging in physical therapy practice. Concepts in image creation, common artifacts, and pathological changes in musculoskeletal tissues are provided in an interactive format for independent learning (e.g. watching MedBridge or CME activity) with quiz. Lab hours will consist of imaging specific structures on simulated or real patients.

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: Terminal Clinical Experience 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 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 student.

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/mobilization 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 Practice**

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**Academic Program**
The Physician Assistant Program at Campbell University focuses on a patient-centered, clinically practical, evidence-based 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**
Built on the tenets of faith, learning and service, Campbell University’s Physician Assistant (PA) program prepares students to serve their communities as compassionate, competent, team-based health care providers.

**Values**
Campbell’s PA program believes in and supports:
1. An inclusive, Christian environment
2. Patient-centered care
3. Holistic care of patients – body, mind and spirit
4. Interprofessional education and team-based practice
5. Primary care focus with emphasis on the needs of rural and underserved populations
6. Service oriented mindset
7. Evidence-based practice

**Aims**
The Campbell Physician Assistant Program strives to:
1. Provide a dynamic, vertically and horizontally integrated 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: https://cphs.campbell.edu/academic-programs/physician-assistant/.

**Admissions Requirements**
- Bachelor’s degree from a regionally accredited institution in the U.S.
- Bachelor’s degree completed by the end of the spring semester prior to matriculation.
- Required minimum overall and/or last 60 credit hours GPA > 3.2.
- Recommended prerequisite GPA > 3.4
- Completion of all prerequisite work (see list below) no later than December 31 of the year prior to matriculation.
- Recommended GRE scores > 300 within 5 years of application:
  - Verbal > 150
  - Quantitative > 150
  - Analytical > 4.0
- Minimum of 1,000 hours of direct hands-on patient care experience must be obtained 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 20 hours of shadowing a Physician Assistant.
- Three letters of recommendation:
  - Preference is given to applicants with two of three letters from physicians, PAs or clinical supervisors, and others familiar with the applicant’s clinical experience. One academic recommendation is acceptable. Personal recommendations are not acceptable.

**Admissions Process**
Campbell PA program applicants must use the Central Application Service for Physician Assistants (CASPA) online at www.caspaonline.org. The application cycle opens in late April and closes for the Campbell PA Program on September 1.

Your CASPA application must contain:
- Official GRE scores (code 0406)
- Three letters of recommendation
- A personal statement
- Health care experience hours
- Official transcripts

Upon completion of the CASPA application, a supplemental application must be submitted along with a professional photo and $50 application fee. The supplemental application opens in April and closes on September 1.

Interviews are offered as completed applications are received. Applicants are strongly advised to apply as early as possible. The interview process begins in August and concludes when the class is seated. All applicants will be notified of admissions decisions no later than January 15.

Please note that a background check and substance abuse screening test are required for students who are accepted into the program (prior to matriculation).

**Prerequisites:**
- All prerequisites must be completed no later than December 31 of the year prior to matriculation.
- All prerequisites must be done at a regionally accredited institution in the U.S.
- There is no advanced standing.
- The Program does not accept transfer credit from other Physician Assistant programs.
• All grades “C” or better; when more than one course taken satisfies a prerequisite the highest grade is used in calculation of prerequisite GPA.
• Recommended prerequisite course completion within seven years of application.
• Please note that all prerequisite labs associated with course requirements must be completed in person. Online labs will not be accepted.

Courses:
• One semester of Biology (required for science majors)
• 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 Chemistry with lab (required for Science majors)
• One semester of Organic Chemistry or Biochemistry
• One semester of Statistics or Biostatistics
• One semester of Psychology
• One semester of Genetics is recommended

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

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

Policies & Procedures
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.

CPHS student policies that pertain to the PA Program:
The following list of policies can be found in the General Policies section of the CPHS academic bulletin:
• Accommodation
• Anti-Hazing
• Assignment Grade Appeals
• Complaints/Grievances
• Counseling
• Criminal Background Check & Drug Screen
• Environmental Health and Safety
• FERPA
• 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
• Technology Devices
• Tuition & Fees
• Withdrawal

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 emergent absences. Students who have one unexcused absence will receive a warning. Subsequent unexcused absences will be reported to the APSC for review and may result in point deduction from the missed course. Refer to the Clinical Year Manual for detailed information on clinical year absences.

Students who show a pattern of tardiness for class will receive a warning. After the warning, students will be reported to the APSC and may receive a point deduction from the course grade for each subsequent infraction.

Dress Code
• Business attire is appropriate for classroom and examination sessions.
• Men are required to wear shirts and a tie with slacks or khakis.
• Women’s skirt or dress length should be to the knee.
• Low cut tops or dresses are not permitted.
• Jeans and flip-flops are not permitted.
• Special jeans days must be approved by the director of pre-clinical education, the director of clinical education, or the program director.
• Hats are not permitted in the classroom.
• 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 with a clip.
• Nose, lip, and eyebrow piercings are not permitted in clinical settings.
• Perfumes must be kept to a minimum – some individuals may be allergic.

Technical Standards for Admission & Matriculation
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 Association of American Medical Colleges (AAMC) guidelines.

Before matriculation, accepted students must attest in writing that they have read and are able to meet the program’s technical standards. 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.

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 must also achieve and maintain a minimum cumulative GPA of 2.8 at the end of blocks 2, 4, and 5. Students who fail to maintain satisfactory academic progress will be placed on academic probation. Students on academic probation will be advised to participate in academic counseling and/or in a remedial program of study, as determined by the APSC.

Assignment Completion
All course assignments must be turned in by the date and time posted by the instructor. 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
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; these students must report to the security desk. 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 will not be allowed to take the exam. For extenuating circumstances beyond the student’s control the student must notify his/her 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.

Didactic Year 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.
Advancement to the Clinical Year requires advisors may refer students for tutoring and assessment as part of a remediation plan.

1. Didactic Exam Remediation
In the didactic curriculum, 70% is a passing score. An exam failure with a grade of less than 70% in any course will result in a required remediation exercise. The grade earned on the initial exam will be the grade used to calculate the final course grade. Failure to successfully remediate an exam failure will result in automatic course failure and placement on academic probation.

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 the Academic Success Team (which may include the Faculty Advisor, Course Coordinator, 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 a Learning Contract.

Failure of a third exam in any one block or failure of four exams during the didactic year will result in automatic academic probation.

2. Didactic Course Remediation
Students must successfully remediate any course failure prior to progression to subsequent blocks. Failure to successfully remediate the course in the prescribed manner and time will result in dismissal from the program.

Advancement to the Clinical Year
Advancement to the clinical year requires faculty approval and attainment of the following requirements:
1. Successful completion of all didactic year courses,
2. Maintenance of a 2.8 or greater overall GPA,
3. Successful completion of the didactic year summative evaluations,
4. Completion of hours of required service learning, and
5. Participation in all required Campbell University Interprofessional education (IPE) events.

If a student does not meet all of the above requirements, he/she will not be allowed to progress to clinical year. The APSC will meet to confirm dismissal from the program.

Clinical Year Remediaiion

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 a remediation 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/course and be placed on academic probation. Failure of the course results in deceleration, delayed graduation, and additional tuition and fees.

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 Remediation
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.

Students who receive a failing grade from a second preceptor evaluation will again 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.

Clinical Year 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.

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.

Program Progression
The following policies apply to both the didactic and clinical phases of the PA Program:

First Course Failure: Receiving a final grade of less than 70% will result in failure of the course. A course failure will result in automatic academic probation. The student will be given one opportunity to remediate the course. Remediation time frame and requirements are at the discretion of the course coordinator/APSC. After successful remediation the course grade will be advanced to 70% and the student will be allowed to progress in the program.

Second Course Failure: Failure of any second course during the PA Program is not remediable and will result in a recommendation to the APSC for dismissal from the program.

Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress. A student will be placed on academic probation for:
1. Failure to successfully remediate an exam in which he or she received a grade of less than 70% in the didactic year or 65% in the clinical year
2. Failure of a third exam in any one block or failure of four exams during the didactic year
3. Failure of a third EOR exam in the clinical year
4. Failure of one course with a grade of less than 70%
5. Failure to maintain a cumulative GPA of 2.8 at the conclusion of blocks 2, 4, or 5
6. Failure to demonstrate appropriate professional attitudes and behaviors
7. Observed behaviors/conduct that would preclude professional licensure.

The APSC will make specific recommendations regarding the student’s
academic probation. Students placed on academic probation due to a course failure will remain on academic probation for the remainder of the program. Students on academic probation must comply with all requirements as directed by the APSC. Failure to meet these requirements may result in dismissal from the Program.

**PA Program Dismissal**

Students will be dismissed from the Physician Assistant program for the following:

1. Failure to successfully remediate a course failure, in which the student received a grade of less than 70%, or
2. Failure of a second course within the program
3. Failure to meet satisfactory academic and/or professional progression in the program as determined by the APSC

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.

**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, 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. Students may sit for their NCCPA boards and apply for state 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.

**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 prior to returning to the program.

**Curriculum**

The Campbell PA program is 24 months in length. The graduate degree program consists of 12 months of didactic education and 12 months of supervised clinical experiential education. Upon successful completion of the program, graduates will receive the Master of Physician Assistant Practice (MPAP) degree.

The program starts in July, with graduation after six concurrent semesters of training.

All didactic courses are held on the health sciences campus in Lillington, NC.

The Campbell PA program is a competency-based graduate medical education curriculum based on the medical model. The sequence of courses is designed to be fully integrated, vertically and horizontally. Basic foundational concepts are aligned with systems-based courses including clinical medicine, clinical skills, and pharmacotherapeutics, as well as more specialized courses such as emergency medicine and surgery. The development of critical thinking skills and hands-on competencies are integral to the curriculum. Clinical simulations and early experiential opportunities complement the curriculum throughout the didactic and clinical years. Assessment of students in the first year is by written examinations, performance on practical examinations and simulation exercises, 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

<table>
<thead>
<tr>
<th>Block 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 531 – Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>MPAP 535 – Foundations of Health &amp; Disease</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 504 – Clinical Medicine I</td>
<td>3</td>
</tr>
<tr>
<td>MPAP 522 – Clinical Skills I (History &amp; Physical)</td>
<td>3</td>
</tr>
<tr>
<td>MPAP 515 – Pharmacotherapeutics I</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
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<table>
<thead>
<tr>
<th>Block 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 505 – Clinical Medicine II</td>
<td>3</td>
</tr>
<tr>
<td>MPAP 523 – Clinical Skills II</td>
<td>4</td>
</tr>
<tr>
<td>MPAP 516 – Pharmacotherapeutics II</td>
<td>2</td>
</tr>
<tr>
<td>MPAP 503 – Behavioral Medicine</td>
<td>2</td>
</tr>
<tr>
<td>MPAP 536 – Foundations of Health &amp; Disease</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 506 – Clinical Medicine III</td>
<td>3</td>
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<tr>
<td>MPAP 537 – Foundations of Health &amp; Disease</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 519 – Health Policy</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 517 – Pharmacotherapeutics II</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 521 – Surgery</td>
<td>3</td>
</tr>
<tr>
<td>MPAP 524 – Clinical Skills III</td>
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<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Block 4 Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MPAP 526 – Clinical Medicine IV</td>
<td>3</td>
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<tr>
<td>MPAP 538 – Foundations of Health &amp; Disease</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 509 – Evidence – Based Medicine I</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 514 – Orthopaedics</td>
<td>2</td>
</tr>
<tr>
<td>MPAP 527 – Pharmacotherapeutics IV</td>
<td>2</td>
</tr>
<tr>
<td>MPAP 525 – Clinical Skills IV</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Block 5 Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MPAP 528 – Clinical Medicine V</td>
<td>4</td>
</tr>
<tr>
<td>MPAP 539 – Foundations of Health &amp; Disease</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 530 – Pharmacotherapeutics V</td>
<td>1</td>
</tr>
<tr>
<td>MPAP 510 – Emergency Medicine</td>
<td>3</td>
</tr>
<tr>
<td>MPAP 529 – Clinical Skills V</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

### Clinical Rotations

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MPAP 601 – Emergency Medicine</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 602 – Family Practice</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 603 – Internal Medicine</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 604 – Surgery</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 605 – Pediatrics</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 606 – Psychiatry</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 607 – OB/GYN</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 608 – Primary Care</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 609 – Evidence-Based Med. II</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 611 – Elective 1</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 612 – Elective 2</td>
<td>5</td>
</tr>
<tr>
<td>MPAP 613 – Senior Seminar</td>
<td>5</td>
</tr>
</tbody>
</table>

### Clinical Affiliation

There are numerous clinical affiliations available 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.

### 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 a 90-minute 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 531 – Human Anatomy & Physiology**  
*Credit: 3 hours*  
This one semester clinical anatomy and physiology course prepares the student for clinical practice with an understanding of functional human anatomy and physiology and its application to clinical practice. The course consists of a series of lectures, labs; the anatomy content is supported by experience in the cadaver lab. The lecture and lab sections are organized in an organ system approach with clinical correlation.

**MPAP 503 – Behavioral Medicine**  
*Credit: 2 hours*  
This course is an introduction to psychosocial disorders and behaviors. 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: 3 hours*  
This is the first of five 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 and dermatology. The course is presented in lecture format taught by physicians and physician assistants.

**MPAP 505 – Clinical Medicine II**  
*Credit: 3 hours*  
This is the second of five 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, pulmonology, and HEENT. The course is presented in lecture format taught by affiliated physicians and physician assistants.

**MPAP 506 – Clinical Medicine III**  
*Credit: 3 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 hematology/oncology, gastroenterology and nephrology. The course is presented in lecture format taught by affiliated physicians and physician assistants.
This course will focus on the management of diagnosis, treatment, and prevention of disease; covering endocrinology, rheumatology and reproductive health. The course is presented in lecture format taught by affiliated physicians and physician assistants.

**MPAP 528 – Clinical Medicine V**  
**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 neurology, psychiatric medicine, pediatrics and geriatrics. The course is presented in lecture format taught by affiliated physicians and physician assistants.

**MPAP 509 – Evidence-Based Medicine I**  
**Credit: 1 hour**  
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: 3 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 512 – Clinical Skills I (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 five 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: 1 hour**  
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 530 – Pharmacotherapeutics V**  
**Credit: 1 hour**  
This is the fifth 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: 3 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 523 – Clinical Skills II**  
*Credit: 4 hours*  
This course is the second in a sequence of five 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 five 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 535, 536, 537, 538, 539: Foundations of Health & Disease I-V**  
*Credit: 1 hour per block (5 total)*  
Foundations of Health and Disease I-V Five Foundation courses presented in the first year. The courses cover important foundational and review content for organ system and disease-specific conditions: anatomy and physiology, approach to the patient, pathophysiological basis of disease, and genetic basis of disease. The content is horizontally and vertically integrated into the curriculum to coincide with content taught in the clinical sciences.

**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 Medicine**  
*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 4-week 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 emergencies 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 self-evaluation, 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).

In 2013, a set of national guidelines of competencies for the PA profession was revised and approved by the four national PA organizations.

These guidelines were described in the document, “Competencies for the Physician Assistant Profession,” which states that “while some competencies will be acquired during formal PA education, others will be developed and mastered as PAs progress through their careers.”

The Campbell PA Program has adopted these competencies, with recognition that a basic level of competency is required of all graduates and that competencies will continue to be developed after graduation. The Program provides specific knowledge, skills, and educational experiences requisite for PAs to acquire and demonstrate these competencies.

### Medical Knowledge

Physician Assistants are expected to:

- Demonstrate knowledge of the structure and function of the human body from conception to end of life
- 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
Physician Assistants are expected to:

- 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 & 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

**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 ongoing 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:

- 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 online medical information, maintain electronic medical records, and support continuing medical education
- Recognize that lifelong learning is critical to modern medical practice
- Have an awareness of 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
- Appreciate the coding systems necessary for practice reimbursement
- 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
Tracey F. Smith Hall
4150 U.S. Hwy 421 South
Lillington, NC 27546
Mailing Address
P.O. Box 1090
Buies Creek, NC 27506
Phone: 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.

Policies & Procedures
The following list of policies can be found in the General Policies section of the CPHS academic bulletin:
- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- 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
- Technology Devices
- Tuition & Fees
- Withdrawal

Admissions Policies
Admission Requirements
- Bachelor’s degree from an accredited institution
- Recommended minimum cumulative GPA of 3.0

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.

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.

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.

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
2. Failure of a third repeated course
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.

**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 practicum requirements
4. Satisfactory performance on the general public health knowledge tests
5. Completion of a portfolio with sufficient artifacts demonstrating mastery for each competency
6. Successful completion of all coursework with a minimum cumulative 3.0 grade average for MSPH courses

**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

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>PUBH 540 – Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 525 – Overview of Rural Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 542 – Community Health Assessment &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 502 – Seminar in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>PUBH 699 – Practicum in Public Health</td>
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<td><strong>Total</strong></td>
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<th>Semester 2 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PUBH 560 – Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 520 – Health Education &amp; Promotion</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 580 – Health Policy &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 502 – Seminar in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>PUBH 699 – Practicum in Public Health</td>
<td>1</td>
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### Second Year

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<th>Semester 3 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PUBH 550 – Environmental Health</td>
<td>3</td>
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<tr>
<td>PUBH 682 – Ethical issues in Public Health</td>
<td>3</td>
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<tr>
<td>PUBH 699 – Practicum in Public Health</td>
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<tr>
<td>Elective</td>
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<tr>
<th>Semester 4 Courses</th>
<th>Credit Hours</th>
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<tr>
<td>PUBH 690 – Research Project</td>
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<td><strong>Total</strong></td>
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</table>

**Course Descriptions**

**PUBH 502 – Public Health Seminar**
*Credit: 1 hour*
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 hours*
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 hours*
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 hours*
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 hours*
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 hours*
This course introduces students to an overview of basic concepts in environmental
information to make good judgment, and mortality and to improve health. We need interventions to reduce morbidity and making and implementation of sustainable Public health practice is all about decision and practices of public health surveillance.

PUBH 650 – Principles in Epidemiology
Credit: 3 hours
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 hours
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 hour(s)
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 hours
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 hours
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 586 – Epidemiology of Chronic Disease
Credit: 2 hours
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 hours
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 ad understanding of the complexity of a pharmacovigilance program.

PUBH 671 – Public Health and Infectious Disease
Credit: 2 hours
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 hours
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 hours
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 hour(s)
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 nine 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-Fettman 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:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MBA 700: Orientation to Innovation, Design Thinking &amp; the CU MBA</td>
<td>1</td>
</tr>
<tr>
<td>MBA 710: Accounting for Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>MBA 720: Applied Economics for Business Leaders</td>
<td>3</td>
</tr>
<tr>
<td>MBA 730: Finance and Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 740: Comm. &amp; Critical Thinking for Ethical Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>MBA 750: Organizational Culture in a Changing Environment</td>
<td>3</td>
</tr>
<tr>
<td>MBA 760: Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MBA 770: Digital and Contemporary Marketing Strategies</td>
<td>3</td>
</tr>
<tr>
<td>MBA 780: Global Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 790: Strategic Management “Live Case” Seminar</td>
<td>(21 hour pre-requisite)</td>
</tr>
</tbody>
</table>

Program Requirements

A minimum of 37 credit hours must be completed to earn an MBA degree.

MBA Electives Courses

<table>
<thead>
<tr>
<th>General Focus Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 741: Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MBA 742: Advanced Negotiation and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MBA 751: Project Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 752: Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 772: Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MBA 755: Study Abroad</td>
<td>3</td>
</tr>
<tr>
<td>MBA 708: Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

Financial Services Focus Area

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 732: Management of Financial Institutions</td>
</tr>
<tr>
<td>TRST 630: Investment Analysis</td>
</tr>
<tr>
<td>TRST 631: Advanced Investment Analysis</td>
</tr>
<tr>
<td>TRST 633: Advanced Income Taxation</td>
</tr>
<tr>
<td>TRST 740: Risk Management Applications</td>
</tr>
</tbody>
</table>

Healthcare Management Focus Area

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 731: Healthcare Finance</td>
</tr>
<tr>
<td>MBA 743: Health Law and Policy</td>
</tr>
<tr>
<td>MBA 751: Project Management</td>
</tr>
<tr>
<td>MBA 754: Healthcare Management</td>
</tr>
<tr>
<td>MBA 771: Healthcare Strategy and Marketing</td>
</tr>
</tbody>
</table>

Transfer of Courses

Students may substitute up to nine hours of CPHS courses as elective courses.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRD 521: US Health Care</td>
<td>1.5</td>
</tr>
<tr>
<td>PHRD 635: Law &amp; Ethics I</td>
<td>2</td>
</tr>
<tr>
<td>PHRD 645: Law &amp; Ethics II</td>
<td>2</td>
</tr>
<tr>
<td>PHRD 715: Operations I</td>
<td>2</td>
</tr>
<tr>
<td>PHRD 725: Operations II</td>
<td>1</td>
</tr>
<tr>
<td>Research Project: TBD</td>
<td>1-3</td>
</tr>
</tbody>
</table>

PharmD/MSR in Clinical Research

The PharmD/MSR dual degree program provides pharmacists with additional qualifications and a broad understanding of clinical research. Students expand their clinical skills with an in-depth understanding of the fundamentals required to produce and interpret medical evidence which may be utilized in a variety of practice settings.

Graduates are well prepared for careers in the pharmaceutical and biotechnology industries, Food and Drug Administration, and Centers for Disease Control and Prevention, as well as academic careers in pharmacy and medical education.
Students pursuing the dual degree are allowed to apply certain courses to both program requirements, including elective hours.

Students interested in pursuing the dual degree must be accepted into both programs. View the Clinical Research section of the academic bulletin for admissions requirements. The MSCR degree will not be conferred until the PharmD requirements are completed.

Program Requirements
The following MSCR courses must be taken prior to the start of the PharmD curriculum for the fulfillment of the dual program:

### Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLNR 505</td>
<td>Principles of Clinical Research</td>
</tr>
<tr>
<td>CLNR 515</td>
<td>New Product Development</td>
</tr>
<tr>
<td>CLNR 517</td>
<td>Biostatistical Inference</td>
</tr>
<tr>
<td>CLNR 518</td>
<td>Intro to Biostatistical Modeling</td>
</tr>
<tr>
<td>CLNR 520</td>
<td>Advanced Data Management</td>
</tr>
<tr>
<td>CLNR 525</td>
<td>Medical Ethics</td>
</tr>
<tr>
<td>CLNR 530</td>
<td>Regulatory Affairs</td>
</tr>
<tr>
<td>CLNR 552</td>
<td>Scientific Communications</td>
</tr>
<tr>
<td>CLNR 559</td>
<td>Managing &amp; Monitoring Clinical Trials</td>
</tr>
<tr>
<td>CLNR 561</td>
<td>Healthcare Economics</td>
</tr>
<tr>
<td>CLNR 566</td>
<td>Advanced Study Design &amp; Analysis</td>
</tr>
<tr>
<td>CLNR 568</td>
<td>Project Management</td>
</tr>
<tr>
<td>CLNR 606</td>
<td>Clinical Research Seminar</td>
</tr>
<tr>
<td>CLNR 690</td>
<td>Research Project I</td>
</tr>
<tr>
<td>CLNR 691</td>
<td>Research Project II</td>
</tr>
<tr>
<td>CLNR 694</td>
<td>Research Project III</td>
</tr>
<tr>
<td>CLNR 695</td>
<td>Research Project IV</td>
</tr>
</tbody>
</table>

### PharmD/MS in Pharmaceutical Sciences

The MPS curriculum is 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.

Students interested in pursuing the dual degree must be accepted into both programs. View the Pharmaceutical Sciences and Doctor of Pharmacy (PharmD) sections of the academic bulletin for admissions requirements and curriculum. Students can complete both degrees in five years. There are at least 3 ways to complete the program.

It is recommended that students who have already earned a bachelor’s degree complete the first year of MPS coursework prior to entering the PharmD program, then integrating the remaining MPS courses into the four professional years of the PharmD program.

Students who have not yet earned a bachelor’s degree would complete a year of MPS coursework between their second and third years in the PharmD program, while students who have already earned a bachelor’s and apply to the MPS program after beginning the PharmD program could complete the year of MPS coursework between the first and second or between the second and third years in the PharmD program. Acceptance into the dual degree program in this manner generally requires a current cumulative GPA of 3.0 in the PharmD program.

Students who have completed the junior year of the BS in Pharmaceutical Sciences program may complete the first year of MPS coursework prior to beginning courses in the PharmD program, then integrating the remaining MPS courses into the four professional years of the PharmD program. These students would be eligible to earn the BS in General Sciences at the end of the 1st year of the PharmD program.

Students complete all courses in both the MPS and PharmD programs as outlined in the respective sections of the bulletin, with the following exceptions. Students in the dual degree program receive credit for various MPS courses for successfully completing PharmD courses, depending on their track in the MPS program. All students receive credit for PHSC 574 (Biopharmaceutics and Pharmacokinetics). Students in Pharmaceutics and Pharmaceutical Analysis tracks also received credit for PHSC 512 (Fundamentals of Cellular Pharmacology), and students in the Bioprocessing & Biotechnology and Pharmacology tracks receive credit for PHSC 523 (Experimental Design and Biostatistics). Students can fulfill the 1-2 credits of elective requirements for the MPS program with courses in the PharmD curriculum, and some of the elective requirements for the PharmD program with MPS courses. The curriculum for the dual degree is worked out on an individual basis due to multiple options for MPS paths.

Typically, students would complete PHSC 610 (Research Proposal) the summer after the year of MPS coursework. PHSC 620 – Research Project, if that path is taken, can be taken during the following summer or can be applied as one of the nine required clinical rotations completed during the fourth year in the PharmD program. This option is not available to students pursuing separate degrees. Each track would typically have one or two MPS courses to complete during their Pharmacy program years, and those courses can be taken in the times for electives during their P2, P3 and/or years.

### PharmD/MS in Public Health

The PharmD/MS in Public Health 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
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 a MPAP clinical rotation in a public health setting (local health departments, Bureau of Prisons, USPHS clinics, Indian Health Services, rural health centers, etc.), completion of a Public Health elective rotation, and for the completion of EBM II around a research question of public health relevance. 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.

Electives

In addition to the above core credits, students are required to complete 10 hours of electives from the pharmacy curriculum. The following six courses (6 credit hours) are required electives toward the MSPH degree:

- PHRD 532 – Medical Literature Evaluation I
- PHRD 542 – Medical Literature Evaluation II
- PHRD 612 – Health Outcomes & Informatics I
- PHRD 622 – Health Outcomes & Informatics II
- PHRD 712 – Research Topics in Pharmacy I
- PHRD 722 – Research Topics in Pharmacy II

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.

- PHRD 674 – Multicultural Health Practices Health Disparities
- PHRD 651 – Special Research in Pharmaceutical Sciences (must be Public Health related research)
- PHRD 652 – Special Research in Pharmacy Practice
- PHRD 657 – Spanish for Pharmacists
- PHRD 687 – Smoking Cessation
- PHRD 542 – Medical Literature Evaluation I
- PHRD 532 – Medical Literature Evaluation II
- PUBH 699 – Practicum in Public Health

Program Requirements

A minimum of 32 credit hours must be completed to earn a MSPH degree.
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 Health 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

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:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

This requirement may be satisfied in a variety of ways:

a. 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;

b. Obtaining the equivalent credit(s) by passing a competency exam such as CLEP, or;

c. 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 732 – Management of Financial Institutions
MBA 752 – Human Resource Management
MBA 772 – Marketing Research
CLNR 504 – Special Projects in Clinical Research
CLNR 560 – Pharmacoeconomics
CLNR 561 – Healthcare Economics
CLNR 568 – Project Management
CLNR 581 – Pharmaceutical Compliance and Quality Assurance
CLNR 593 – Leadership Development

MPAP/MS in Clinical Research

The dual MPAP/MSCR degree will help meet the need for trained healthcare providers proficient in conducting clinical research within the healthcare and clinical research industries. CPHS is the only school in the state offering this dual degree, allowing for a pathway to meet the aforementioned need by completing both programs with fewer total credit hours compared to completion of the degrees separately. The required number of hours for the dual MPAP/MSCR degree will be 147 credit hours: 161 credit hours if done separately (120 MPAP credit hours and 41 MSCR credit hours). Students are required to complete a clinical research project in their final year of the program simultaneously with clinical rotations. The project can be patient-oriented research including epidemiological and behavioral studies, outcomes research, or health services research.

Students interested in pursuing this dual degree must meet the prerequisites and be accepted to each of the respective programs. View the Clinical Research and Master of Physician Assistant Programs’ sections of the Academic Bulletin for Admissions Requirements. Both degrees must be conferred simultaneously.

Program Requirements

Students begin the MSCR (100% online) coursework first. Upon successful completion (3.0* cumulative GPA or greater) of all courses except CLNR693, 695 – Clinical Research Project I-IV, students matriculate into the MPAP program for a fall semester start. Students complete CLNR693, 695 – Clinical Research Project I-IV during the clinical rotation section of the MPAP program.

MSCR (33 hours)

CLNR 505 – Principles of Clinical Research
CLNR 515 – New Product Development
CLNR 517 – Biostatistical Inference
CLNR 518 – Introduction to Biostatistical Modeling
CLNR 520 – Advanced Data Management
CLNR 525 – Medical Ethics
CLNR 530 – Regulatory Affairs
CLNR 552 – Scientific Communications
CLNR 559 – Managing and Monitoring Clinical Trials
CLNR 561 – Healthcare Economics
CLNR 566 – Advanced Study Design & Analysis
CLNR 568 – Project Management
CLNR 606 – Clinical Research Seminar
CLNR 693 – MPAP/MSCR Clinical Research Project I, II, and III
CLNR 695 – Clinical Research Project IV

MPAP (115 hours)

Core Courses (60 hours)
MPAP 531 – Anatomy and Physiology
MPAP 535 – Foundations of Health and Disease I
MPAP 536 – Foundations of Health and Disease II
MPAP 537 – Foundations of Health and Disease III
MPAP 538 – Foundations of Health and Disease IV
MPAP 539 – Foundations of Health and Disease V
MPAP 503 – Behavioral Medicine
MPAP 504 – Clinical Medicine I
MPAP 505 – Clinical Medicine II
MPAP 506 – Clinical Medicine III
MPAP 526 – Clinical Medicine IV
MPAP 528 – Clinical Medicine V
MPAP 510 – Emergency Medicine
MPAP 514 – Orthopedics
MPAP 515 – Pharmacotherapeutics I
MPAP 516 – Pharmacotherapeutics II
MPAP 517 – Pharmacotherapeutics III
MPAP 527 – Pharmacotherapeutics IV
MPAP 530 – Pharmacotherapeutics V
MPAP 519 – Health Policy & Professional Practice I
MPAP 521 – Surgery
MPAP 522 – Clinical Skills I
MPAP 523 – Clinical Skills II
MPAP 524 – Clinical Skills III
MPAP 525 – Clinical Skills IV
MPAP 529 – Clinical Skills V
*A cumulative GPA < 3.0 could result in dismissal from the dual MSCR/MPAP program. Disciplinary actions will be addressed on a student-by-student basis.

Clinical rotations (55 hours)

MPAP 601 – Emergency Medicine
MPAP 602 – Family Practice
MPAP 603 – Internal Medicine
MPAP 604 – Surgery
MPAP 605 – Pediatrics
MPAP 606 – Psychiatry
MPAP 607 – OB/GYN
MPAP 608 – Primary Care
MPAP 611 – Elective Rotation 1
MPAP 612 – Elective Rotation 2
MPAP 613 – Senior Seminar

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:

a. 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;

b. Obtaining the equivalent credit(s) by passing a competency exam such as CLEP, or;

c. 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)