2020-2021 Academic Bulletin
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Introduction

Administration

Campbell University
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President
Omar Banks, MEd
Director of Athletics
Dennis Bazemore, MDiv, DMin
President, Student Life
Faiithe Beam, MDiv
Associate Vice President for Spiritual Life and Campus Minister
Sandra Connolly, MS, CPA
Vice President for Business
Britt Davis, DPA
Vice President for Institutional Advancement
Mark L. Hammond, PhD
Provost and Vice President, Academic Affairs
David Mee, EdD
Vice President, Enrollment Management
John Roberson, EdD, MDiv
Executive Vice President
Jerry M. Wallace, EdD
Chancellor
Sherri Yerk-Zwickl, MS
Associate Vice President for Information Technology and CIO

College of Pharmacy & Health Sciences Administration

Michael L. Adams, PharmD, PhD
Dean
C. Scott Asbill, PhD
Associate Dean, Academic Affairs
James A. Boyd, PharmD, MBA
Associate Dean, Administration
W. Mark Moore, PharmD, MBA, MS
Associate Dean, Admissions & Student Affairs
Wesley Rich, PhD, MEd, MA
Associate Dean, Health Sciences
K. Paige Dickens Brown, PharmD
Assistant Dean, Interprofessional Education
Nancy Duffy, DNP
Director/Chair, Catherine W. Wood School of Nursing
Betty Lynne W. Johnson, MEd, PA-C
Director/Chair, Department of Physician Assistant Practice

Scot Sawyer, DPT
Interim Director/Chair, Department of Physical Therapy
David Coniglio, EdD
Director, Department of Health Sciences
David Eagerton, PhD
Chair, Department of Pharmaceutical Sciences
D. Byron May, PharmD
Chair, Department of Pharmacy Practice
David Tillman, PhD, MEd, MA
Chair, Department of Public Health
Charles Carter, PharmD, MBA
Interim Chair, Department of Clinical Research

Mission Statement

Campbell University
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.

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 opportunities for servant leadership and community engagement, with an emphasis on underserved communities;
• 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-Fettersman School of
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
3. Statement on academic integrity in accreditation.

Copies of these documents can be obtained by contacting CAPTE at accreditation@apta.org, www.capteonline.org, or phone at 703-706-3245.

Accreditation Review Commission on Education for the Physician Assistant
The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Physician Assistant Program sponsored by Campbell University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2024. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

Accreditation Review Commission on Education for the Physician Assistant
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:
- Bachelor of Science in Pharmaceutical Sciences
- Bachelor of Science in Clinical Research
- Bachelor of Science in Nursing
- Bachelor of Science in General Sciences
- Bachelor of Science in Clinical Research
- Master of Science in Clinical Research
- Master of Science in Public Health
- Master of Science in Pharmaceutical Sciences
- Master of Science in Pharmacy
- Master of Science in Physician Assistant Practice
- Master of Science in Physical Therapy
- Doctor of Pharmacy
- Doctor of Health Sciences
- Doctor of Physical Therapy
- Master of Physician Assistant Practice

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 Health Sciences
- 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
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- 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/504 Compliance Officer
227 Main Street
Buies Creek, NC 27506
910-814-4364
910-814-5710 (fax)

Anti-Hazing
The potential for hazing typically arises as part of a student’s introduction to or initiation in a student organization in which there is often a perceived or real power differential between members of the organization and those newly joining it. No student organization, student or alumnus shall conduct nor condone hazing activities. Permission or approval by a person being hazed is not a defense. Hazing is defined as any action taken or situation created, intentionally, whether on or off fraternity/club premises, to produce mental or physical discomfort, embarrassment, harassment, or ridicule. Such activities may include morally degrading or humiliating games and activities, and any other activities which are not consistent with academic achievement, this Statement, the Campbell University College of Pharmacy & Health Sciences Academic Bulletin, the Campbell University College of Pharmacy & Health Sciences Student Handbook, the University Bulletin of Campbell University, the Student Handbook of Campbell University, or applicable state law. Such activities and situations include, but are not limited to:
- Marching in line
- Wearing apparel which is conspicuous and not normally in good taste, and/or inappropriate for the time of year
- Forced or extreme physical activity
- Line-ups
- Forced periods of silence
- Forced or involuntary spending
- Standing for a length of time
- Personal servitude
- Activities that would not normally construe hazing but because of time, place, or manner make them inappropriate
- Deprivation or interruption of consecutive sleep hours
- Expected or forced consumption of food, drink (including alcohol), or other substance
- Acts of humiliation or degradation (including streaking or wearing degrading or humiliating apparel)
- Restrictions on eating or bathing
- Acts that disrupt academic instruction or learning of others
- Interruption or interference of academic commitments
- Branding
- Paddling in any form
- Compromising sexual situations
- Bullying
- Abandonment

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


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 Appeal**

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 sent 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.

**Citizenship Status and Experiential Education**

CPHS may accept applications from individuals who are US-born citizens, naturalized citizens, US permanent residents (a.k.a. green card holders), F1 visa holders or other study-authorized nonimmigrant status, or recipients of Deferred Action for Childhood Arrival (DACA) status.

Applicants, for CPHS degrees requiring experiential education components (i.e. internships, clinical training clerkships, residencies, etc.), need to understand that clearance for the permission to participate in such experiential training is determined by the training site, not CPHS. Certain training sites have more time-consuming clearance processes, such as the Veterans Administration hospitals and other federal facilities.

CPHS cannot guarantee clearance for the permission to participate in experiential training at a specific site but will work to place students at the necessary sites to complete their educational requirements. Graduation and the associated timeframes may be affected due to any delays that arise in the clearance process for the completion of training requirements.

**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 formal written response to a student complaint will be provided following review by the dean and submitted to the College’s Executive Committee. The student’s original complaint and dean’s response will be kept on file for a period of six years from the date of the dean’s response 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

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**Attendance**

Students are required to attend at least 80% of the hours prescribed for every enrolled course in order to receive credit for the course. Individual professors have the prerogative of imposing a more restrictive policy consistent with the following exceptions:

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

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

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**Appropriate Information**

Appropriate information addressed in such grievances will be utilized in the College of Pharmacy & Health Sciences’ assessment, planning, and self-study processes.
Additionally, CBCs and SASTs may be required for currently licensed 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 may be required for currently licensed health care professionals as defined by the associated regulatory boards. CPHS is being required to attest that CBCs and SASTs, plus other requirements (e.g. CPR, HIPAA compliance, health insurance, immunizations, etc.) have been completed prior to health professions students (nursing, pharmacy, physical therapy and physician assistant) being allowed to engage in experiential training at the clinical education sites. Also, many sites for the BSCR and BSPS internships have such requirements. As a result of these risk management movements in the healthcare industry, these required screens have become an important part of the process for matriculation of candidates seeking degrees in the CPHS undergraduate and professional degree programs. If accepted applicants or current students in CPHS programs are not eligible for entry to the appropriate training sites in order to perform the mandatory experiential component(s) as required to complete their degree, then they are not eligible for matriculation at entry and/or progression through their designated program. Individuals in the graduate clinical research, pharmaceutical sciences or public health programs may be subject to CBCs, SASTs or similar aforementioned requirement as a component of any current or future required or elective experiential trainings.

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

- do not consent to the required screening (CBC, SAST, etc.)
- refuse to provide information necessary to conduct these screens in required time frame
- provide false or misleading information in regard to the CBC and SAST
- attempt to manipulate body fluid samples in the screening process
- complete the screening obligation in a timely manner and by the required deadlines may lose their status of good standing and will be referred to the appropriate CPHS committee for actions as related to professional behaviors.

Sanctions may include loss of eligibility:

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

Additional Considerations

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

Criminal Background Check Policy for Campbell University Health Programs

CPHS requires criminal background checks (CBCs) of all nursing, pharmacy, physical therapy and physician assistant program applicants who earn acceptance into their respective health programs prior to matriculation. Current and BS in Pharmaceutical Sciences programs may be required to have a CBC, prior to matriculating into the mandatory senior internship. Currently, applicants and students enrolled in the MS in Clinical Research, MS in Pharmaceutical Sciences...
and MS in Public Health degree programs are not required to complete CBCs; however, CPHS graduate students who participate in any experiential training experience, required or elective, may be subject to a CBC as part of the process for entrance to the training site.

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

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

Charges and convictions do not automatically prevent an applicant or current student from matriculating into or continuing in a CPHS degree program at Campbell University. Any charges or convictions as described above must be reviewed for potential impact on the individual’s eligibility for placement at experiential training sites to perform the necessary clinical activities or internship requirements for the successful 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 self-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 SASTs as part of the process for entrance to the training site. Accepted applicants to any of the aforementioned CPHS degree programs will be notified of the background check and substance abuse screening protocol requirement as part of the matriculation process. Additional screening tests may be required as determined by CPHS or the experiential training sites. SAST results may be reviewed the CPHS admissions office, the CPHS Experiential Education Committee, the Student Conduct and Professionalism Committee (if necessary), 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”,

GENERAL INFORMATION | 7
The short-length white lab coat is required. The following dress and accessories are unacceptable in the clinic and classroom: flops, and visible tattoos or any body 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).

For experiential training, students are expected to abide by the dress code set forth by the clinical practice site or site hosting the experience. Questions about a site’s dress code policy should be discussed with the program’s experiential director/Coordinator and/or the preceptor/mentor.

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/.

Financial Aid

Financial aid eligibility and status depends on the program of study and the number of credit hours enrolled. For more information regarding financial aid, full-time and part-time status, please contact the Campbell University Financial Aid Office.

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

All CPHS health professions students are required to be actively covered by a health insurance plan. Health insurance is required by federal mandate and it enumerated as a specific requirement in the contractual agreements with our clinical experiential training sites. 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. International students are required to participate in the Campbell University insurance policy and will be automatically enrolled. Domestic students, with existing health insurance coverage, may opt-out of the University provided plan. To opt out, domestic students must complete a waiver and provide proof of health insurance coverage. Failure to execute the waiver process will result in a non-refundable charge for insurance. No waivers will be accepted beyond the August 31st deadline. More information regarding the waiver process may be found at https://www.campbell.edu/students/student-health-insurance/waive/. 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. 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. PA also requires a positive Hepatitis B quantitative titer AFTER the 3 immunization series
- We also require Hepatitis A 2 immunization 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. These devices are considered personal protective equipment and must be purchased by the student.

Personal Illness
Students presenting signs or symptoms of infectious or communicable diseases have a duty not to spread illness to others. Students should consult 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, as recommended by CDC, 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 her or his student ID card. However, the site may or may not accept direct payment. Students may have to pay out of pocket at the time of service. 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 include dining locations across campus. Visit campbell.campusdish.com for detailed meal plan information.

**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 is 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 undesignated 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 by 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 provided to 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 of conduct 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. While it is often necessary to obtain information from other sources, the willful or inadvertent use of information from another source without acknowledging it (including all types of commercial term paper preparation services; internet or electronic database sources for term papers, journal clubs, or case presentations; and other students’ 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,
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. Pursposefully 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.
7. Intentionally deface, remove without authorization, or conceal any material from CPHS, the Drug Information Center, or any library.
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.
10. Intentionally deface, remove without authorization, or conceal any material from CPHS, the Drug Information Center, or any library.
11. Submit modified or changed tests, answer sheets, or assignments for regrading.
12. 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.

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. Loss or Lowering of the Course Grade: All students who are found guilty of
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 chooses not to attend the proceedings. The associate dean of admissions & student affairs will appoint this member. This committee serves as a hearing board for incidents of misconduct involving violations of the Honor Code. The Honor Code includes standards for academic, non-academic, and clinical behavior. The Student Conduct and Professionalism Committee will make recommendations to the associate dean of admissions & student affairs. The associate dean of admissions & student affairs will then notify the student in writing of actions concerning alleged violations. A record of disciplinary actions is normally maintained by the dean’s office until the student graduates or leaves CPHS. Students may examine the contents of their file by appointment with the director of admissions & student affairs.

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

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

Charges of misconduct may arise from a student (or group of students), professor, adjunct professor or preceptor. Within seven (7) days of the alleged misconduct or discovery of alleged misconduct, the accuser(s) should discuss the situation with either the director of student affairs or the professor in charge of the course. Dated notes should be taken to describe the discussion. Every effort should be made to maintain confidentiality in these discussions.

If the accuser(s) has (have) opted to bring the matter before the director of admissions & student affairs, the director should meet with the professor and the chairperson of the Student Conduct and Professionalism Committee to explore options. This meeting should take place no longer than seven (7) days after the matter was brought to the attention of the director. The options available for resolution of the situation include:

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

2. The case can be referred to the Student Conduct and Professionalism Committee for resolution. Referral to the committee must be by a written memo which names the student, describes the alleged misconduct (including pertinent dates and times), and summarizes the content of earlier meetings regarding this case.

3. The case may be dismissed.
Within five (5) days of referral of the case to the Student Conduct and Professionalism Committee, the chair of the committee will provide a copy of the referral memo to the accused student(s). In addition, the chairperson will schedule an initial hearing for any charged student with the committee. This hearing should be held within ten (10) days of the referral of the case to the committee.

D. Proceedings
The chair will begin preliminary investigation of the allegations.
Whenever possible, this should include a personal interview with the student, witnesses, and professor involved.

Preliminary findings shall be presented at the initial meeting with the Student Conduct and Professionalism Committee. The chair shall objectively present his or her findings to the committee. The accused student(s) shall meet with the committee and be informed of the allegations and afforded an opportunity to defend him or herself. Although the purpose of this hearing is exploratory and fact finding in nature, the accused student does have the right to solicit advice and to offer witnesses to support his or her position.

The committee shall vote on whether or not preliminary findings warrant a full hearing by a simple majority vote. If a hearing is deemed necessary, the chair will notify the student and witnesses of the hearing date in writing at least three (3) days prior to the hearing. A waiver of his or her notice may be made if the student so chooses. A full hearing should be held within ten (10) days of the preliminary committee review. If the committee votes that no hearing is warranted, the case will be dismissed. The chair will file the minutes in the permanent files of the Student Conduct and Professionalism Committee and a copy shall be placed in the dean’s office until the student graduates or leaves CPHS. Should additional information become available, the chairperson may reopen the case and ask the committee to consider the new information.

All sessions of the committee will be closed to all individuals except those immediately concerned in the case, except by the expressed wish of the accused that the hearings be open. No attorney shall be present, as this 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 affair’s 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 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 their ability and with the appropriate supervision.
- Undertake clinical duties and persevere until they are complete.
- Notify the responsible person if something interferes with his or her ability to perform clinical or academic tasks effectively.

Professional Demeanor
- Maintain a neat and clean appearance, and dress in attire that is accepted as professional to the population served.
- Be thoughtful and professional when interacting with patients and families.
- Strive to maintain composure during times of fatigue, professional stress, or personal problems.
- Avoid offensive language, gestures, or inappropriate remarks.
- Adhere to the CPHS professional dress code.

Student Rights
In addition to the standards we have adopted for the conduct of ourselves, we expect to be treated with respect as participants in the delivery of health care.

CPHS students:
- Should be challenged to learn, but should not be belittled, humiliated or abused in front of patients, peers or other health professionals.
- Should not be sexually harassed, either verbally or physically.
- Should not be discriminated against on the basis of gender, race, religion or sexual preference.
- Should be a participant in patient care decisions whenever possible.
- Should have his or her health care related education take priority over routine menial tasks.

If a 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 agrees 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.

Trustworthiness
- Be truthful in communication to others.

Welfare of Patients
- Be respectful of all patients, regardless of race, religion, gender, sexual preference or socioeconomic status.
- Respect the patient’s modesty and privacy.

- 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.
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
Lynn Fowle, Admissions Coordinator
Wesley Gaylor, MDiv, Admissions Coordinator
Steph Olson, MS, Director of Student Affairs
Lori McLean, MAT, Admissions Coordinator
Shirl Stamey, MS Student Affairs Coordinator
Kendra Sumler, MDiv, Admissions Counselor
William J. Taylor, PharmD, Director of Recruitment & Retention

Office of Academic Affairs
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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
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Meredith Blalock, Director of Communications & Marketing
Will Bratton, Director of Advancement

Department of Clinical Research
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Melissa Holland, PharmD, Vice Chair of Curriculum and Education Development
Stefanie Twist, Program Manager
April Daniels, MHA, Program Coordinator

Catherine W. Wood School of Nursing
Nancy Duffy, DNP, CNE, Program Director
Tonya Willingham, Assistant Director
Callie Manning, Program Manager

Department of Pharmaceutical Sciences
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Crystal Dark, Office Manager & Program Coordinator
Shanessa 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, Quality-Analytical Labs Manager, Pharmaceutical Education & Research Center
Scott Staton, Manager, Formulation & Operations, Pharmaceutical Education & Research Center

Department of Pharmacy Practice
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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
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Shawn Carrillo, Director of Experiential Education
Samantha Clinton, Assistant Director of Continuing Education
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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

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Kim East, Program Coordinator
Rachel Ennis, Program Manager
Heidi Shearin, PT, DPT, Director of Clinical Education
Jennifer Shewmaker, Clinical Coordinator

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Peter Fenn, DHSc, MPAS, PA-C, Director of Professional & Programmatic Development
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Jennifer Hastings, MSHS, PA-C, Director of Pre-Clinical Education
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

Kendra Sumler
Shirl Stamey
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Office of Interprofessional Education
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Emotional Intelligence, Deep Learning & Positive Mindset
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Shirl Stamey, MS Student Affairs Coordinator
Kendra Sumler, MDiv, Admissions Counselor
William J. Taylor, PharmD, Director of Recruitment & Retention
Ian Ward, MMS, PA-C, Assistant Director of PA Accreditation

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David Tillman, PhD, MEd, Chair of Public Health

David Coniglio, EdD, Director of Doctor of Health Sciences program

J. Kate Thomas, Program Manager

**Faculty**

**Department of Clinical Research**

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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


Matthew Peterson, Associate Professor of Clinical Research; BS, Physical Education, The Ohio State University (1996); MS, Exercise Science, University of Dayton (1999); PhD, Human Movement Science, University of North Carolina at Chapel Hill (2009)

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

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)

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Courtney Calhoun, Instructor; BS, Nursing, University of North Carolina-Wilmington (2017); MSN, Nursing Education, University of North Carolina-Wilmington (2018)

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

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); MS, Psychology, Walden University (2008); BS, Nursing, Winston Salem State University (2012); 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); PhD, Biomedical Sciences/Pharmaceutics, Northeastern University (1983); MS, Radiopharmaceutical Sciences, Northeastern University (1988); CT (ASCP)

C. Scott Asbill, Associate Dean of Academic Affairs and Professor of Pharmaceutics; 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, Biochemistry, University of North Carolina at Chapel Hill (1992); PhD, Pharmacology, Wake Forest University (1998)

Xin Chen, Assistant Professor of Pharmaceutical Sciences; BS, Chemistry, Xiangtan University (1997); Ph.D, Organic Chemistry, Shanghai Institute of Materia Medica (2002)

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, Instructor, Director and Lab Manager of Pharmaceutical Sciences; 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)

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); PhD, Microbiology, North Carolina State University (2020)

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

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)

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

Department of Pharmacy Practice

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 (1991); PharmD, University of North Carolina at Chapel Hill (1993); RPh, NC

Steven M. Davis, Associate Professor of Pharmacy Practice; PharmD, University of Florida at Gainesville (1988); RPh, NC

Richard H. Drew, Vice-Chair of Research & Scholarship and Professor of Pharmacy Practice; BS, Pharmacy, University of Rhode Island (1980); MS, Pharmacy, University of North Carolina at Chapel Hill (1989); PharmD, University of North Carolina at Chapel Hill (1999); RPh, NC, RI

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, Associate 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

Erika McClain, Clinical Assistant Professor of Pharmacy Practice; PharmD, Purdue University (2017); 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, Medical College of Virginia (2001); 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, Clinical Assistant Professor of Pharmacy Practice and Manager, Campbell University Health Center Pharmacy; 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. Wente, Clinical Assistant Professor of Pharmacy Practice; PharmD, West Virginia School of Pharmacy (2002); RPh, KY, NC, WV

Dustin T. Wilson, Associate 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

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)

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

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)

Tamala Marcin, Assistant Professor of Physical Therapy, BS, Physical Therapy, Indiana University (1995); MBA, Indiana Weslyan University (2002); Physical Therapy Transitional Doctorate, University of New England (2010); EdD, University of St. Augustine Florida (2018)

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, Vasser College (1999); DPT, University of North Carolina at Chapel Hill (2010)

Scot Sawyer, Interim Chair and Director, 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)

Alessandra Narciso Garcia Trepte, Assistant Professor of Physical Therapy; BSc, Physical Therapy, Universidade Cidade de Sao Paulo (UNICID), Brazil (2010); Masters in Musculoskeletal Physical Therapy, Universidade Cidade de Sao Paulo (UNICID), Brazil (2012); PhD in Physical Therapy, Universidade Cidade de Sao Paulo (UNICID), Brazil (2017)

Department of Physician Assistant Practice

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)

Nathalie Ortiz Pate, Assistant Professor of Physician Assistant Practice; BA Biology and Anthropology, University of North Carolina at Chapel Hill (2005); MPH, George Washington University (2007); MHS, Duke University (2011)

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 (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)

David Coniglio, Director, Doctor of Health Sciences Program, and Professor of Health Sciences; BA, University of the South (1972); MPA, University of Tennessee (1978); PA (certificate), Medical University of South Carolina (1982); EdD, North Carolina State University (2013)

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); PhD, Research and Policy Analysis, North Carolina State University (2009); MA, East Carolina University (2014)

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)
Dean Emeritus

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)

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)

John H. Mennear (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. Potential Bachelor of Science in Nursing (BSN) students must be admitted to Campbell University as a BSGS: Pre-Nursing student before submission of an application for BSN level coursework is considered.

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.

First Year

<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>HIST 111 or 112 – Western Civilization I or II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>CPHS 100 – Pre-Professional Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>MATH 111 (or greater)</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>CUC 100 – Connections</td>
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</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>
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<td><strong>Total</strong></td>
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Second Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 200 – Connections</td>
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<tr>
<td>SOCI 225 – Principles of Sociology</td>
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<tr>
<td>BIOL 285 – Human Anatomy &amp; Physiology I</td>
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<tr>
<td>PSYC 260 – Developmental Psychology</td>
<td>3</td>
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<tr>
<td>ELECTIVE (Humanities)</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Semester 2 Courses</th>
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<tbody>
<tr>
<td>ENGL 2XX – Literature</td>
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</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>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</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.

First Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
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<tbody>
<tr>
<td>ENGL 101 – Academic Writing</td>
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<td>CHEM 111 – General Chemistry</td>
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<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>CPHS 100 – Pre-Professional Seminar</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></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>
<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>
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<tr>
<td><strong>Total</strong></td>
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</tr>
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Second Year

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<tr>
<th>Semester 1 Courses</th>
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<tbody>
<tr>
<td>CUC 200 – Connections</td>
<td>.5</td>
</tr>
<tr>
<td>CHEM 227 – Organic Chemistry</td>
<td>4</td>
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<tr>
<td>BIOL 334 – Microbiology2</td>
<td>4</td>
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<tr>
<td>PHYS 221 – Physics I</td>
<td>4</td>
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<tr>
<td>MATH 160 – Statistics</td>
<td>3</td>
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<tr>
<td>LANG 201 – Foreign Language</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
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</table>

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<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry</td>
<td>4</td>
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<tr>
<td>PHYS 2xx – Physics II or Biology</td>
<td>4</td>
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<tr>
<td>Humanities/Fine Arts or Social/Behavioral Science Elective</td>
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<tr>
<td>HIST 1XX – Western Civilization I or II</td>
<td>3</td>
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<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</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; completion of the CPHS Moving Forward, Giving Back Leadership Certificate

Application Requirements

Pharmacy Scholar candidates must apply to the Doctor of Pharmacy program utilizing the Early Admissions process and application deadline of October 15th.

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 & 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.
Clinical Research

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

Mission Statement
The mission of the Department of Clinical Research is to educate and train students to meet existing and future clinical research needs and to provide leadership to the Clinical Research industry. The goal is to provide exemplary academic training that directly relates to the professional skill set the Clinical Research industry requires. The training provides diverse topics that comprise the interdisciplinary knowledge required in this unique area of healthcare. Service to patients with the improved treatment modalities that have been scientifically proven should provide the graduates with purposeful professional lives and meaningful service to mankind. The Department of Clinical Research supports the broad mission of Campbell University and the College of Pharmacy & Health Sciences by training students in all aspects of delivering promising healthcare technologies and medicines to the everyday marketplace. The online environment offers enhanced interaction between peers, faculty and industry professionals.

Academic Programs
The Department of Clinical Research offers a Bachelor of Science in Clinical Research and a Master of Science in Clinical Research, as well as a Minor in Clinical Research. The Bachelor of Science in Clinical Research degree is a seated program held at the main campus. The Master of Science in Clinical Research degree is offered as an online program. The Department also offers several Dual Degree Programs.

Bachelor of Science in Clinical Research (BSCR)
The BSCR degree at Campbell University College of Pharmacy & Health Sciences provides students with the curricular, co-curricular, and experiential learning necessary to enter the workforce as an entry-level Clinical Research professional in the contemporary clinical research industry. Students are required to complete an internship which provides experiential training in the Clinical Research field. The Department collaborates with Clinical Research sites primarily located throughout North Carolina and neighboring states to facilitate internship placement.

Master of Science in Clinical Research (MSCR)
The MSCR degree is an online program offered by the Campbell University College of Pharmacy & Health Sciences which provides students with the curricular and co-curricular learning to meet the workforce demands of a mid-level or advanced Clinical Research professional in the contemporary clinical research industry. The online environment offers enhanced interaction between peers, faculty and industry professionals. The MSCR program culminates with a research project based on the student’s interest. Students may work independently or collaborate with another MSCR student. The faculty serve as research project advisors throughout the entire research project experience.

Clinical Research Minor
Students pursuing a degree in another discipline may benefit from a Minor 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 Clinical Research courses.

BS/MS 3+2 Program
The BSCR/MSCR 3+2 Program provides an expedited opportunity 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 allows students to complete the two degrees in five years, by utilizing two summer sessions.

Dual Doctor of Pharmacy (PharmD)/MSCR
The Dual PharmD/MSCR Program provides an expedited opportunity for students to earn both their Doctor of Pharmacy and Master of Science in Clinical Research degrees. This program allows an individual to differentiate themselves in the competitive pharmacy field by expanding career opportunities including positions in clinical development, medical affairs, investigational drug pharmacy, medical information, health economic & outcomes research, pharmacovigilance, product safety, and academia. While the traditional time to earn both degrees is six years, the Dual PharmD/MSCR program allows students to complete the two degrees in five years.

Dual Master of Physician Assistant Practice (MPAP)/MSCR
The Dual MPAP/MSCR Program provides an expedited opportunity for students to earn both their Master of Physician Assistant Practice and Master of Science in Clinical Research degrees. This program allows an individual to differentiate themselves from other Physician Assistants by expanding practice opportunities in areas including academic medical centers, community-based investigative centers, clinical research industry, and academia. While the traditional time to earn both degrees is four years, the Dual MPAP/MSCR program allows students to complete the two degrees in three years.

Dual Master of Business Administration (MBA)/MSCR
The Dual MBA/MSCR Program provides an expedited opportunity for students to earn both their Master of Business Administration and Master of Science in Clinical Research degrees. This program allows an individual to focus the application of both degrees in areas of medical affairs, sales & marketing, health economics & outcomes research, strategic development, leadership & management, and finance. While the traditional time to earn both degrees is four years, the Dual MBA/MSCR program allows students to complete the two degrees in three years.

Policies & Procedures
The following policies and procedures can be found in the General Policies section of the CPHS Academic Bulletin:
- Accommodation
- Anti-Hazing
- Assignment Grade Appeals
- Attendance
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- Grade Reports, Records, and Transcripts
- Health Insurance
- Immunization
- Incident Reporting
- Inclement Weather
Admissions Policies

BSCR
Students in the Pre-Pharmacy or an 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 in the last semester of their Senior year.

MSCR
The MSCR program is a year-round program with applicants considered for admissions in either the Summer or the Fall 1 terms. While the Department operates on rolling admission, individuals should submit their applications by the following deadlines:
- Summer Application Deadline: April 30
- Fall I Application Deadline: July 1
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. It should be noted the Admissions Committee reviews all results of ongoing and 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.
Acceptance into the graduate program is based on the overall record and ability of the applicant. There are several pathways to admission to the MSCR program:
1. An applicant that has completed a Bachelor’s degree from an accredited college or university prior to matriculation and enrollment in any graduate coursework. Individuals may apply prior to completion of their Bachelor degree and gain acceptance contingent upon completion.
2. A Campbell University student pursuing the BSCR/MSCR 3+2 dual degree may apply to the MSCR program with the understanding the student will not have a completed degree prior to enrolling in MSCR coursework as defined in the Academic Bulletin. Accepted applicants would complete the BSCR and MSCR degrees in a five-year period. Please note: The BSCR/MSCR degrees cannot be conferred until all requirements of both the BSCR and MSCR are met. BSCR/MSCR Dual Degree students are required to start their MSCR curriculum in the Summer Term.
3. An applicant accepted into the Doctor of Pharmacy (PharmD) program may apply for the MSCR program to pursue the PharmD/MSCR dual degree. Since applicants matriculating 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. Applicants are required to be accepted into both the PharmD and MSCR programs. Accepted applicants would complete the PharmD and MSCR degrees in a five-year period. Please note: The PharmD and MSCR degrees cannot be conferred until all requirements of both the PharmD and MSCR are met. PharmD/MSCR Dual Degree students are required to start their MSCR curriculum in the Summer Term.
4. An applicant considering the Master of Physician Assistant Practice (MPAP) and the MSCR must apply to both programs simultaneously. Applicants for the MPAP/MSCR dual degree program are advised to refer to the MPAP admission requirements found in the Academic Bulletin. Applicants are required to be accepted into both the MPAP and MSCR programs. Accepted applicants would complete the MPAP and MSCR degrees in a three-year period. Please note: The MPAP and MSCR degrees cannot be conferred until all requirements of both the MPAP and MSCR are met. MPAP/ MSCR Dual Degree students are required to start their MSCR curriculum in the Summer Term.
5. An applicant considering the Master of Business Administration (MBA) and the MSCR must apply to both programs simultaneously. Applicants for the MBA/MSCR dual degree program are advised to refer to the MBA admission requirements found in the Academic Bulletin. Applicants are required to be accepted into both the MBA and MSCR programs. Accepted applicants would complete the MBA and MSCR degrees in a three-year period. Please note: The MBA and MSCR degrees cannot be conferred until all requirements of both the MBA and MSCR are met.

MSCR Admissions Requirements

- Bachelor’s degree or higher from an accredited college or university (Exceptions: BSCR/MSCR 3+2 and PharmD/MSCR applicants)
- Recommended GPA of 3.0 or higher
- International Applicants: 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 an accredited college or university
- All prerequisite courses must be completed with earned grades of “C” or higher

Prerequisites
- Statistics (must be completed prior to enrolling in the CLNR 517: Biostatistical Literacy)
- Science Courses (12 credit hours including 2 lab courses must be completed prior to matriculation)

Application Process
1. Complete application with required $50 fee
2. Submit all official college transcripts
3. Submit two professional/academic letters of recommendation
4. Qualified applicants may be contacted for an interview

Technology Requirements
- Computer can be no more than 5, recommended less than 3, years old
- Stable internet connection with an absolute minimum speed of 6 mega bites per second (6mbps)
- Student’s computer is subjected to a status check (fitness test) by Campbell’s IT to ensure that the machine is capable of running the required applications for the Clinical Research program
- Student must have basic proficiency in Microsoft Office applications
- Student must have access to a printer

Workplace Computers
- If the student uses a computer at their place of employment, he/she must have administrative rights to the machine.
- If using a computer to which you do not have administrative rights (ex.
work computer), you should plan well in advance of any assignments to either receive permission to install the required programs, or make arrangements to use another computer.

Policies
1. Matriculating students must have completed 12 credit hours of science courses, including 2 labs, prior to enrolling in any MSCR courses. Statistics prerequisite must be completed prior to taking CLNR 517: Biostatistical Literacy.
2. 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 Vice Chair of Curriculum and Education Development.
3. Students not seeking a degree can register for courses (see non-degree seeking portion of the Academic Bulletin).
4. International Applicants:
   a. International applicants are eligible for admission if they have completed a bachelor’s degree or higher.
   b. International applicants must have their transcripts evaluated by WES or AACRAO to be considered for admission.
   c. The MSCR program is completely online with no residency required; therefore, international applicants are not eligible to receive US student visas.
   d. 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.

MSCR: Academic Standards

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 remediate the course (repeat the course in its next consecutive offering 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. Failure to complete an academic contract in a timely manner could result in further action from the Academic Performance and Standards (APS) Committee. The APS Committee will review all cases remaining on probation after one year and recommend further action up to and including dismissal from the program.

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 58 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.

Academic 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 Vice Chair of Curriculum and Education Development. 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:
1. Previous course name and graduate level number
2. Semester and year course was taken
3. Educational institution where course was taken
4. Syllabus for the course

5. 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 Vice Chair of Curriculum & Education Development. 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

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry I</td>
<td>CHEM 111</td>
</tr>
<tr>
<td>Basic Biology</td>
<td>BIOL 111</td>
</tr>
<tr>
<td>Academic Writing</td>
<td>ENGL 101</td>
</tr>
<tr>
<td>Intro to Christianity</td>
<td>CHRS 125</td>
</tr>
<tr>
<td>Lifetime Wellness</td>
<td>PE 185</td>
</tr>
<tr>
<td>Pre-Professional Sem.</td>
<td>CPHS 100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry II</td>
<td>CHEM 113</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>BIOL 221</td>
</tr>
<tr>
<td>Calculus</td>
<td>MATH 122</td>
</tr>
<tr>
<td>Academic Writing &amp; Lit.</td>
<td>ENGL 102</td>
</tr>
<tr>
<td>Intro Art/Music/Thea</td>
<td>A/M/T 131</td>
</tr>
<tr>
<td>CU Connections</td>
<td>CUC 100</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

#### Third Year

<table>
<thead>
<tr>
<th>Semester 3 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry I</td>
<td>CHEM 227</td>
</tr>
<tr>
<td>Microbiology</td>
<td>BIOL 334</td>
</tr>
<tr>
<td><em>General Physics I</em></td>
<td>PHYS 221</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>LANG 201</td>
</tr>
<tr>
<td>CU Connections</td>
<td>CUC 200</td>
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<tr>
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<table>
<thead>
<tr>
<th>Semester 4 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry II</td>
<td>CHEM 228</td>
</tr>
<tr>
<td>^Biology Elective</td>
<td>BIOL ____</td>
</tr>
<tr>
<td>Western Civ. I or II</td>
<td>HIST 1XX</td>
</tr>
<tr>
<td>Humanities Elective (see listing)</td>
<td></td>
</tr>
<tr>
<td>Social Science Elective (see listing)</td>
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#### Fourth Year

<table>
<thead>
<tr>
<th>Semester 5 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>PHSC 323</td>
</tr>
<tr>
<td>Biochemistry Lab</td>
<td>PHSC 325/L</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>CLNR 341</td>
</tr>
<tr>
<td>New Product Dev.</td>
<td>CLNR 363</td>
</tr>
<tr>
<td>Princ. Of CLNR</td>
<td>CLNR 364</td>
</tr>
<tr>
<td>Intro to Biostatistics</td>
<td>CLNR 324</td>
</tr>
<tr>
<td>Sci. Lit. Seminar</td>
<td>CLNR 338</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester 6 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro. to Pharmacology</td>
<td>CLNR 328</td>
</tr>
<tr>
<td>Reg Affairs I</td>
<td>CLNR 330</td>
</tr>
<tr>
<td>Man./Mon. Clin. Trials I</td>
<td>CLNR 365</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>CLNR 442</td>
</tr>
<tr>
<td>Sci. &amp; Tech. Writing</td>
<td>CLNR 451</td>
</tr>
<tr>
<td>Literature I or II</td>
<td>ENGL 20_</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester 7 Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Man/Mon Clin. Trials II</td>
<td>CLNR 465</td>
</tr>
<tr>
<td>Reg. Affairs II</td>
<td>CLNR 440</td>
</tr>
<tr>
<td>Data Management</td>
<td>CLNR 450</td>
</tr>
<tr>
<td>Med. Ethics/Clin Res</td>
<td>CLNR 425</td>
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<tr>
<td>Hum/Social Elective (see listing)</td>
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<table>
<thead>
<tr>
<th>Semester 8 Courses</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>^Senior Internship</td>
<td>CLNR 420</td>
</tr>
<tr>
<td>Senior Seminar</td>
<td>CLNR 416</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total credit hours = 124 – 125**

^ Biology electives must be biomedical 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).

*A physics course is required for prospective pharmacy applicants, but it is not for the BSCR degree.

Humans 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
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</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry I</td>
<td>CHEM 111/L</td>
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<tr>
<td>Basic Biology</td>
<td>BIOL 111/L</td>
</tr>
<tr>
<td>Academic Writing</td>
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</tr>
<tr>
<td>Intro. to Christianity</td>
<td>CHRS 125</td>
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<td>Pre-Professional Sem.</td>
<td>CPHS 100</td>
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<table>
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<tr>
<th>Semester 2</th>
<th>Credit Hours</th>
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<tr>
<td>General Chemistry II</td>
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<td>Human A &amp; P BIOL 221/L</td>
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<tr>
<td>Calculus</td>
<td>ENGL 102</td>
</tr>
<tr>
<td>Academic Writing &amp; Lit.</td>
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### Second Year

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<tbody>
<tr>
<td>Organic Chemistry I</td>
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<td>&quot;Biology Elective&quot; BIOL ____</td>
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<td>Western Civ. I or II</td>
<td>HIST 1XX</td>
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<tr>
<td>Foreign Language</td>
<td>LANG 20_</td>
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<tr>
<td>Intro. to A/M/T</td>
<td>A/M/T 131</td>
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<tr>
<td>CU Connections</td>
<td>CUC 200</td>
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<td><strong>Total</strong></td>
<td><strong>16.5-17.5</strong></td>
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<table>
<thead>
<tr>
<th>Semester 4</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Organic Chemistry II</td>
<td>CHEM 228/L</td>
</tr>
<tr>
<td>&quot;Biology Elective&quot; BIOL ____</td>
<td>3/4</td>
</tr>
<tr>
<td>Literature I or II</td>
<td>ENGL 20_</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>(see listing)</td>
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<tr>
<td>Humanities Elective</td>
<td>(see listing)</td>
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<td><strong>Total</strong></td>
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### Third Year

<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Biochemistry</td>
<td>PHSC 323</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>PHSC 325/L</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>CLNR 341</td>
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<tr>
<td>New Product Develop.</td>
<td>CLNR 363</td>
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<td>Princ. of Clin. Research</td>
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<td>CLNR 324</td>
</tr>
<tr>
<td>Sci. Literature Seminar</td>
<td>CLNR 338</td>
</tr>
<tr>
<td>Hum./Soc. Sci. Elective</td>
<td>(see listing)</td>
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<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
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<table>
<thead>
<tr>
<th>Semester 6</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Intro. to Pharmacology</td>
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<td>CLNR 451</td>
</tr>
<tr>
<td>Reg Affairs I</td>
<td>CLNR 330</td>
</tr>
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<td>&gt;Elective(s)</td>
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<td><strong>Total</strong></td>
<td><strong>18</strong></td>
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### Summer 1

<table>
<thead>
<tr>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Intro. of Principles of Clinical Research CLNR 505</td>
</tr>
<tr>
<td>New Product Develop. CLNR 515</td>
</tr>
<tr>
<td>Medical Ethics CLNR 525</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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### Fourth Year

#### Semester 7 – Fall I
- Regulatory Affairs: CLNR 530 2
- Scientific Communications: CLNR 552 2

**Total**: 4

#### Semester 7 – Fall II
- Biostatistical Literacy: CLNR 517 2
- Adv. Data Management: CLNR 520 2

**Total**: 4

#### Semester 8 – Spring I
- Study Design/Analysis I: CLNR 566 2
- Elective: CLNR 5XX 2

**Total**: 4

#### Semester 8 – Spring II
- Clinical Research Seminar: CLNR 606 2
- Elective: CLNR 5XX 2

**Total**: 4

#### Semester 8 – Summer II
- +Senior Internship: CLNR 420 12
- Senior Seminar: CLNR 416 3
- Clinical Trial Operations: CLNR 535 2

**Total**: 17

### Fifth Year

#### Semester 9 – Fall I
- Research Project I: CLNR 690 2
- Elective: CLNR 5XX 2

**Total**: 4

#### Semester 9 – Fall II
- Research Project II: CLNR 691 2
- Elective: CLNR 5XX 2

**Total**: 4

#### Semester 10 – Spring I
- Elective: CLNR 5XX 2
- Elective: CLNR 5XX 2

**Total**: 4

#### Semester 10 – Spring II
- Elective: CLNR 5XX 2

**Total**: 2

**Total = 153-155 Hours**

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*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 biomedical 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: 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
Curriculum for MS in Clinical Research

Students are required to complete the following courses in addition to 14 credit hours of elective courses:

<table>
<thead>
<tr>
<th>Core Curriculum Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CLNR 505 – Principles of Clinical Research</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 515 – New Product Development</td>
<td>2</td>
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<tr>
<td>CLNR 517 – Biostatistical Literacy</td>
<td>2</td>
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<td>CLNR 520 – Advanced Data Management</td>
<td>2</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 535 – Clinical Trial Operations</td>
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<tr>
<td>CLNR 552 – Scientific Communications</td>
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<tr>
<td>CLNR 566 – Study Design &amp; Analysis I</td>
<td>2</td>
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<tr>
<td>CLNR 606 – Clinical Research Seminar</td>
<td>2</td>
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<tr>
<td>CLNR 690 – Clinical Research Project I</td>
<td>2</td>
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<tr>
<td>CLNR 691 – Clinical Research Project II</td>
<td>2</td>
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<td><strong>Total</strong></td>
<td><strong>24</strong></td>
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<table>
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<tr>
<th>Electives†</th>
<th>Hours</th>
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<tr>
<td>CLNR 504 – Special Research in Clinical Research</td>
<td>1-2</td>
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<tr>
<td>CLNR 518 – Biostatistics II</td>
<td>2</td>
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<tr>
<td>CLNR 519 – Physical &amp; Clinical Assessment</td>
<td>2</td>
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<tr>
<td>CLNR 527 – International Clinical Trials</td>
<td>2</td>
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<td>CLNR 528 – Pharmacogenetics</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>
<td>2</td>
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<td>CLNR 553 – Special Topics in Clinical Research</td>
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<td>CLNR 555 – Special Populations in Clinical Research</td>
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<tr>
<td>CLNR 559 – Advanced Managing &amp; Monitoring of Clinical Trials</td>
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<td>CLNR 560 – Pharmacoeconomics</td>
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<tr>
<td>CLNR 561 – Healthcare Economics</td>
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<td>CLNR 562 – Preclinical Drug Development</td>
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<td>CLNR 567 – Study Design &amp; Analysis II</td>
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<td>CLNR 568 – Project Management</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 581 – Pharmaceutical Compliance &amp; QA</td>
<td>2</td>
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<td>CLNR 593 – Leadership Development</td>
<td>2</td>
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<tr>
<td>CLNR 595 – Bioterrorism &amp; Mass Public Health Threats</td>
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<tr>
<td>CLNR 693 – MPAP/MSCR Clinical Research Project II</td>
<td>2</td>
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<td>CLNR 694 – Clinical Research Project III</td>
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<td>CLNR 695 – Clinical Research Project IV</td>
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<tr>
<td>CLNR 696 – MPAP/MSCR Clinical Research Project III</td>
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<td><strong>Total</strong></td>
<td><strong>14</strong></td>
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†Elective courses offered on a rotating basis and subject to change
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 324 – Introduction to Biostatistics  
**Credit: 3 hours**

This course, focused on statistical methods in health sciences, is intended to provide students with a basic knowledge of descriptive statistics, graphing data, probability theory, normal and other common distributions, sampling and estimation, confidence intervals, hypothesis testing, ANOVA and other selected statistical methods.

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.

Prerequisites: BIOL 221 or equivalent

Anatomy & Physiology course, CHEM 227 & 228

Completion of the following courses is strongly recommended: Microbiology, Biochemistry, Calculus and Biostatistics.

Students with other qualifications may enroll with permission from the course director.

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. This is an introductory course where emphasis will be placed on the terminology and basic concepts of pharmaceutical regulations as it applies to drugs, devices and biological products. The course will include discussion of data submission requirements, quality procedure regulations, and marketing considerations. Practical exercises will be representative of tasks assigned to employees seeking entry level positions within the industry.

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 ensure product success in a regulated environment will be provided. Students will be provided with the background necessary to pursue a wide range of additional courses leading to degrees in clinical research.

CLNR 364 – Principles of Clinical Research  
**Credit: 2 hours**

This course will provide a basic understanding of clinical research including purpose, terminology, and methodology. The course will explore basic elements of clinical research including such topics as study design, data management, conduct, and the various roles of those involved in the industry.
CLNR 365 – Managing & Monitoring Clinical Trials I  
Credit: 2 hours  
This introductory course has been designed to provide both a theoretical and practical overview of the principles of managing and monitoring clinical trials. Lectures will focus on the practical aspects of study set-up activities (i.e., study planning issues, data collection strategies, selecting investigators), study conduct activities (i.e., subject recruitment issues and enrollment strategies, obtaining informed consent, monitoring both patient and safety data quality and integrity and conducting site visits for study initiation, periodic monitoring and multiple site closings), and study termination activities. The course also covers responsibilities of sponsors, clinical monitors, clinical research organizations, investigators and institutional review boards. In-class activities will allow students to gain a greater appreciation of operational issues associated with various clinical research-related regulatory documents by working with case studies related to the content studied. Lectures are based on U.S. regulations and guidelines, as well as international good clinical practices and significant clinical research-related documents. Prerequisites: CLNR 363 & 364

CLNR 379 & 379L – Physical & Clinical Assessment with Lab  
Credit: 2 hours  
This course is designed to introduce students to the basic principles of medical terminology, history taking, the basic techniques of physical examination assessment, common diagnostics, and common diseases. 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. Prerequisites: All CLNR courses  
Co-requisites: 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. Prerequisites: Completion of all GCC & BSCR courses and at least a 2.0 major and cumulative GPA  
Co-requisites: 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. Prerequisites: Appropriate progression through the BSCR curriculum

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 330, 363, & 364

CLNR 442 – Interpersonal Skills  
Credit: 2 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 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.

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 on using Excel, SAS, and implemented a survey using 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. Prerequisites: CLNR 338

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 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 is not limited to: literature evaluation, literature search, design of project, development of written and verbal skills, development of technical skills, data acquisition and analysis, use of web-based systems, and data and project management.

CLNR 505 – 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 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: 2 hours*  
In this course, students will explore how new drugs are made available for ultimate use in appropriate patients. Topics covered include unmet medical needs, discovery, pre-clinical and clinical development, regulatory pathways, and the roles of various healthcare professionals. The goal of the course is to provide an opportunity for students to learn the contemporary processes that lead to discovery and development of medications that address unmet medical needs.

**CLNR 517 – Biostatistical Literacy**  
*Credit: 2 hours*  
The course seeks to provide students with a conceptual understanding of the most commonly utilized statistical methods in clinical research. A literacy course, the focus will be on the consumption, not the production, of statistics. That is, provided results (from published research articles and created examples) will be dissected, discussed, evaluated and interpreted. Limited computation is required in this course.  
Prerequisites: CLNR 324, MATH 160 or approved general statistics course

**CLNR 518 – Biostatistics II**  
*Credit: 2 hours*  
The second of the two part biostatistics course sequence, the focus in this elective course will be on the production of statistics. Building off the conceptual learning that occurred in 517, the most common basic statistical methods utilized in clinical research will be revisited. Statistical software will be implemented as the students learn how to analyze data. Topics covered include descriptive and summary statistics, analysis of proportions and count data, one and two-sample means, one-way ANOVA, correlation, and linear and logistic regression modeling.  
Prerequisite: CLNR 517

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

**CLNR 520 – Advanced Data Management**  
*Credit: 2 hours*  
Advanced Data Management is an 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  
Acceptable Co-requisites: CLNR 517

**CLNR 525 – Medical Ethics**  
*Credit: 2 hours*  
This course will use a combination of recorded 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: 2 hours*  
This course provides the student with an overview of regulatory affairs, with emphasis on requirements for initiating clinical trials, developing pharmaceutical products, and gaining approval for worldwide marketing applications. Emphasis will be placed on the practical application of global regulations in the commercialization of healthcare products. This will include regulations for the protection of participants in clinical research, data submission requirements, quality procedure regulations, marketing considerations, and post-approval requirements including safety reporting.  
Prerequisites: CLNR 505 & 515

**CLNR 535 – Clinical Trial Operations**  
*Credit: 2 hours*  
In this course, students will explore the functional aspects of clinical trial operations and will be provided with the knowledge and operational skills necessary to develop, implement, and operationalize clinical trials. Topics covered include site selection and evaluation, trial management and clinical trial management systems, marketing and advertising for subject/patient recruitment, trial audits, trial reporting, and budget and contract negotiations. The goal of the course is to provide an opportunity for students to learn the contemporary processes of clinical trial operations consistent with ethical clinical development that meets quality, safety, and efficiency requirements.  
Prerequisites: CLNR 505

**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 role of psychosocial factors in disease. These include the role of stress, coping, depression, poverty, culture, race and childhood adverse events. The biopsychosocial model will be introduced and evidence discussed for various common diseases such as heart disease, diabetes, cancer, HIV, pain and psychiatric disorders. In addition, the course will evaluate the implications of the biopsychosocial model for randomized controlled trials as well as special considerations for behavioral trials.

**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 clinical researchers. The course content includes a basic knowledge base of public health issues, an exploration
of the various roles that researchers can provide in offering public health services, and comparisons of clinical research with other research methodologies that shape public health practice. Issues in public health are examined both from the clinical research perspective and traditional public health viewpoints.

**CLNR 552 – Scientific Communications**  
*Credit: 2 hours*  
This course reviews written communications in clinical research including regulatory documentation, scientific documentations and communication with patients/research participants. The course provides hands-on practice to further develop the essentials of written scholarly communication and editing.  
Prerequisites: CLNR 505

**CLNR 555 – Special Populations in Clinical Research**  
*Credit: 2 hours*  
This course will use a combination of lectures, interactive discussions, case presentations, and student presentations to explore clinical research in special and vulnerable populations. Populations reviewed will include pediatrics/adolescents, geriatrics, females, and racial/ethnic minorities. Current regulatory mandates and guidance documents will be covered for each special population in addition; pharmacodynamics/pharmacokinetic disparities will be addressed along with clinical recruitment issues.

**CLNR 559 – Advanced Managing & Monitoring Clinical Trials**  
*Credit: 2 hours*  
This course is designed to provide an in-depth introduction to the principles of managing and monitoring clinical trials. The varied environments in which clinical research is conducted as it relates to the role of the Clinical Research Associate (CRA) are described. This course will review elements of clinical research introduced in previous courses including protocols, data collection strategies, and overview of regulations relevant to clinical trials. In addition, students will engage in course activities related to the selection of investigators, conduct of investigator meetings, procedures 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 be able to apply knowledge of Good Clinical Practices (GCPs), Standard Operating Procedures (SOPs), the quality assurance process (QA), and FDA audits.  
Prerequisites: CLNR 505

**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 an overview of modern drug discovery and preclinical development from target identification to preparation of regulatory documents for First in Human clinical trials. Students will attain a thorough understanding of the scientific principles, data and regulatory requirements necessary for initiation of human clinical studies. Particular emphasis is placed on promising approaches and emerging technologies that may alleviate the productivity crisis in drug research and development.  
Prerequisites: CLNR 505 & 515

**CLNR 566 – Advanced Study Design & Analysis I**  
*Credit: 2 hours*  
This course seeks to provide a conceptual understanding of a selection of study designs and statistical analyses that are most relevant to clinical research. The role of clinical research in providing the evidence for evidence-based medicine is considered. The primary goal of the course is to develop the knowledge for the central importance of statistical thinking in clinical research from initial conceptualization of the study, through design rather than to become experts in computation.  
Prerequisites: CLNR 517

**CLNR 567 – Advanced Study Design & Analysis II**  
*Credit: 2 hours*  
The second of a two part study design and analysis course sequence, the focus of this elective course will be on the application of study design and analysis. Building upon the foundation in 566, the course emphasizes the application of these topics beyond just understanding the concepts.  
Prerequisites: CLNR 566

**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.  
Prerequisites: CLNR 505, 535

**CLNR 573 – Evidence-Based Medicine**  
*Credit: 2 hours*  
This course will trace formulation of relevant questions from clinical situations through the methodology required to search the 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 the practice of clinical research.  
Prerequisites: CLNR 505, 517 & 566

**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 simulation modeling, drug discovery, in vivo and in vitro nonclinical research, preapproval clinical research, and post marketing surveillance are fully integrated.

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, Good Laboratory Practices and Good Clinical Practices. Students will gain a practical knowledge of Quality as a scientific discipline.
Prerequisites: CLNR 505, 515, & 530

CLNR 593 – Leadership Development
Credit: 2 hours
This course presents guidelines for effective leadership and applies those guidelines to a weekly selection of leadership vignettes chosen from real-world workplace situations relevant to clinical research. The students will apply the leadership guidelines to each vignette, and these will be compared to the actual solutions chosen in the workplace and the actual outcome of those decisions. The primary goal of the course is to present the concepts for effective leadership in the clinical research environment to better prepare the students for positions within the clinical research profession.

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. Finally, 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.
Prerequisites: CLNR 505, 517, & 566

CLNR 690 – Research Project I
Credit: 2 hours
This course is the first part of the two-part required capstone Research Project course. The student will utilize prior didactic experience in the Clinical Research Program to propose a capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 505, 515, 520, 530, 552, 566, & 606) except listed co-requisites; 3.0 GPA
Acceptable Co-requisites: CLNR 525 & 535

CLNR 691 – Research Project II
Credit: 2 hours
This course is the second part of the two-part required capstone Research Project course. The student will utilize prior didactic experience in the Clinical Research Program to design a capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 690

CLNR 692 – MPAP/MSCR Clinical Research Project I
Credit: 2 hours
This course is the first part of the two-part required capstone Research Project courses. The student will utilize prior didactic experience in the Clinical Research Program to analyze and present the capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 518, 567, & 693

CLNR 693 – MPAP/MSCR Clinical Research Project II
Credit: 3 hours
This course is the second part of the two-part required capstone Research Project course. The student will utilize prior didactic experience in the Clinical Research Program to design and conduct the capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 690
Note: Students must be enrolled in the MPAP/MSCR Dual Degree Program.

CLNR 694 – Research Project III
Credit: 2 hours
Building upon the required capstone Research Project courses, this is a third part elective course. The student will utilize prior didactic experience in the Clinical Research Program to conduct a capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 518, 567, & 691

CLNR 695 – Research Project IV
Credit: 2 hours
Building upon the required and elective capstone Research Project courses, this is a fourth part elective course. The student will utilize prior didactic experience in the Clinical Research Program to analyze and present the capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 694

CLNR 696 – MPAP/MSCR Clinical Research Project III
Credit: 2 hours
Building upon the required capstone MPAP/MSCR Research Project course, this is a third part elective course. The student will utilize prior didactic experience in the Clinical Research Program to analyze and present the capstone research project. The project will be conducted under the supervision of an assigned faculty advisor. The proposed project must meet the requirements of the capstone and be approved by the Program Faculty Research Committee.
Prerequisites: CLNR 518, 567, & 693
Note: Students must be enrolled in the MPAP/MSCR Dual Degree Program.

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.
Doctor of Health Sciences

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
dhsc@campbell.edu

Academic Program
The Department of Public Health, in collaboration with the Campbell University Adult and Online Education program, offers a fully on-line Doctor of Health Sciences degree providing students post-professionals with skills and expertise to positively shape the future of healthcare and health related organizations.

Mission Statement
With deep commitments to service learning and action research, the Campbell University Doctor of Health Sciences program prepares students to function effectively as part of an interdisciplinary team of health professionals to meet existing and future health care needs.

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
• Citizenship Status and Experiential Education
• Complaints/Grievances
• Counseling
• Criminal Background Check & Drug Screen
• Dress Code
• Environmental Health and Safety
• Financial Aid
• 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
• Earned undergraduate degree from a regionally accredited institution
• Three letters of recommendation
• Completed personal statement
• Recommended minimum cumulative GPA > 3.0

Application Process
1. Submit a complete application
2. Submit unofficial college transcripts
3. 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 DHSc 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. A virtual 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 credits are not accepted.

International Applicants
• International applications are eligible for acceptance. No U.S. student visa is required as the program is completely online.
• International applications must complete their application for admission and all supplemental materials must be received 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 to complete degree requirements within the prescribed time.
3. Failure to complete a course with a grade of B or better is grounds for dismissal from the program.

Academic Dismissal
Students who are on academic probation will be subject to being dismissed from the DHSc 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 second course
3. One semester 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 DHSc Academic Performance and Standards Committee Chair reviews the academic performances of all students enrolled in the 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
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:

- Successful completion of all didactic coursework
- Successful completion of research capstone project

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</th>
<th>Credit</th>
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<tbody>
<tr>
<td>DHSC 821 – Health Equity and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>DHSC 833 – Trends in Health Policy</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
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<tbody>
<tr>
<td>DHSC 828 – Interprofessional Education and Practice</td>
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<tr>
<td>DHSC 831 – Community Health</td>
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Second Year

<table>
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<tr>
<th>Semester 4</th>
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<tr>
<td>DHSC 801 – Introduction to Research</td>
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<tr>
<td>DHSC 841 – Safety and Risk Management</td>
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<td>DHSC 843 – Strategic Planning, Monitoring, and Evaluation</td>
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<td>DHSC 815 – Healthcare Research Methods</td>
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<td>DHSC 847 – Innovative Health Care Technology</td>
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| Year Total | 18 |

Third Year

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<th>Semester 7</th>
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<td>Concentration Course 1</td>
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<td>Concentration Course 3</td>
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| Year Total | 18 |

Course Descriptions

Modern Healthcare Courses

DHSC 821 Health Equity and Wellness
Credit: 3 hours
This course in the Modern Healthcare series presents elements of healthcare cost, access, attainment, wellness and prevention in the context of financial, political, social, and economic influence. With a heavy focus on the social determinants of health, students will explore historical and contemporary trajectories and their associated health impact on the national population as well as historically underrepresented populations.

DHSC 823 Behavioral Health Issues
Credit: 3 hours
This course in the Modern Healthcare series provides students the opportunity to explore the complexities of behavioral health access, funding, and multi-level policy governing the delivery of behavioral health services. The course presents the current and projected epidemiological profile of behavioral health issues in juxtaposition to current funding and policy challenges while exploring promising evidence-based approaches to increasing access and quality of behavioral health services.

DHSC 827 Organizational Leadership
Credit: 3 hours
This course in the Modern Healthcare series explores seminal leadership theories and practice in both public and private organizations. With a heavy focus on case application, students will have the opportunity to explore multiple domains of leadership and style while engaging in self-reflection using standardized instruments, qualitative inquiry, and peer feedback in a relevant healthcare related organization.

DHSC 828 – Interprofessional Education and Practice
Credit: 3 hours
This course in the Modern Healthcare series presents the tenants of interprofessional collaboration and practice with an emphasis on cutting edge patient care delivery models. The benefits, challenges, and best practices associated with interprofessional practice will be explored alongside requisite educational elements for health care professionals to become competent, confident members of an interprofessional healthcare team.

Population Health Courses

DHSC 831 Community Health
Credit: 3 hours
This course in the Population Health serves provides students with the knowledge, competencies, and skills to plan, implement, and evaluate health promotion and disease prevention programs for a defined community. Students will select a specific community, research a pressing public health issue, and design an educational campaign based on the population, health issue, and resources available.
DHSC 833 Trends in Health Policy  
*Credit: 3 hours*  
This course in the Population Health series presents the United States healthcare system and examines the structure of the healthcare system including policy process, program management, and evaluation. Particular attention is given to challenges and benefits associated with healthcare reform and Medicaid/Medicare expansion initiatives.

DHSC 837 Innovations in Population Health  
*Credit: 3 hours*  
This course in the Population Health series explores the public health 3.0 model, high achieving public health departments best practices, and the collaborative impact framework for community health. The emphasis in this course is the process of innovation within community and population health as defined by the Public Health National Center for Innovation criteria.

Organizational Improvement Courses  
DHSC 841 Safety and Risk Management  
*Credit: 3 hours*  
This course in the Organizational Improvement series focuses on evidence-based practice aimed at improving and monitoring quality metrics, improving safety for both patients and staff, and managing risks in a dynamic healthcare environment. Students will learn to lead teams in a wide variety of quality and risk management initiatives.

DHSC 843 Strategic Planning, Monitoring, and Evaluation  
*Credit: 3 hours*  
This course in the Organizational Improvement series covers the process, implementation, and evaluation of strategic plans in healthcare related organizations. Divided into phases, students will explore the elements of the strategic planning process, elements of a strategic plan, Key Performance Indicators, Planning within context, Plan communication, Tactical and Action Planning, Plan Integration, and Evaluation.

DHSC 847 Innovative Healthcare Technology  
*Credit: 3 hours*  
This course in the Organizational Improvement series explores the role of technology in healthcare delivery. Specific attention is given to disruptive technologies that have the potential to significantly reduce healthcare associated cost, increase access, and promote positive patient outcomes. Evaluation and implementation considerations of technology are also discussed.

Doctoral Research Courses  
DHSC 801 Introduction to Research  
*Credit: 3 hours*  
This course in the research series introduces the relationship between research and practice, study design approaches and methodologies, and ethical considerations for research. Students will develop research questions and evaluate related literature.

DHSC 815 Healthcare Research Methods  
*Credit: 3 hours*  
This course in the research series extends the focus on the research question developed in DHSC 801 to appropriate methodology and study design selection. Students will draft a methodology including participant recruitment, data collection instrument/method, and appropriate data analysis approach to the refined research question. Quantitative, Qualitative, and Mixed methods approaches will be covered in this course.

DHSC 852 Research Project I  
*Credit: 3 hours*  
This course in the research series builds upon DHSC 815 through implementation of the methodology finalized previously. Students will finalize their literature review, obtain final IRB approval, and collect data according to the approved methodology.

DHSC 854 Research Project II  
*Credit: 3 hours*  
This course in the research series focuses on the analysis and synthesis of data collected in DHSC 852. Students will employ appropriate analytic technique using technological tools for quantitative or qualitative inquiry for analysis.

DHSC 856 Research Capstone  
*Credit: 3 hours*  
This course in the research series represents the final step in the research sequence with an emphasis on dissemination of findings to multiple audiences and through multiple and varied medium. Students will use their findings to aid healthcare related organizations in improvement of organizational, community, and/or patient outcomes.

Concentration Courses: Health Administration  
DHSC 781 Healthcare Marketing  
*Credit: 3 hours*  
This course in the Health Administration series focuses on a customer centric approach for the promotion of health in order to find prospective patients and stay connected with them across various channels. Students will explore various general advertising and branding strategies to facilitate relationships among hospitals, healthcare organizations, physicians, patients, and community.

DHSC 785 Quality Performance  
*Credit: 3 hours*  
This course in the Healthcare Administration series focuses on equipping students to utilize quality improvement tools and techniques to effectively achieve an organization’s mission and strategic goals and improve health outcomes of the community. Strategies and approaches such as coaching, change management, and Lean Six Sigma will be covered.

DHSC 787 Healthcare Informatics  
*Credit: 3 hours*  
This course in the Healthcare Administration series presents information and skills necessary for leadership in informatics roles in healthcare systems. Emphasizes design, implementation, and evaluation of electronic health record systems and clinical decision support systems. Also addresses regulatory, reimbursement, ethical issues, and emerging technology in health care informatics.

Concentration Courses: Interprofessional Education  
DHSC 782 Team-Centered Active Learning  
*Credit: 3 hours*  
This course in the Interprofessional Education series presents the best practices derived from adult learner theories in the context of team centered active learning approaches to both didactic and experiential health professional education.

DHSC 784 Program Planning & Implementation  
*Credit: 3 hours*  
This course in the Interprofessional Education series covers the principles and processes in adult learner programming, including basic theories and support of concepts in programming process. This course gives special attention to general programming framework, organizational needs and program roles of both professional and lay leaders in healthcare.
professions and the science of program implementation for health professions students and faculty.

**DHSC 786 Program Assessment & Evaluation**
*Credit: 3 hours*
This course in the Interprofessional Education series presents educational program evaluation with emphasis on theory and conceptual models of evaluation, evaluation design, and environmental practical factors influencing design and implementation of evaluation studies in the context of health professions education.

**Concentration Rural Health**

**DHSC 771 Rural Health Issues**
*Credit: 3 hours*
This course in the Rural Health series examines the social determinants of health in rural contexts. Specific attention is given to healthcare systems in rural areas, challenges and opportunities with telehealth, and recruitment/retention of healthcare providers.

**DHSC 773 Community Based Participatory Approaches**
*Credit: 3 hours*
This course in the Rural Health series surveys a range of participatory approaches that can be used in community assessment, program planning and evaluation, community-based participatory research, and asset-based community development. Methods will include PhotoVoice, collaborative visualization, asset inventories, and network/power mapping. Students will apply theory from participatory rural appraisal (PRA), participatory learning in action (PLA), and popular education.

**DHSC 777 Innovations in Rural Health**
*Credit: 3 hours*
This course in the Rural Health series explores the fundamentals of cultivating innovation in government and healthcare systems. The course centers on case studies of innovation in rural contexts—across the United States as well as abroad. Special attention will be given to rurality in the context of philanthropic and governmental funding for innovation, implementation science, and adaptive leadership.
**General Sciences**

**Department of Clinical Research**  
Program Coordinator: 910-814-5755

**Department of Pharmaceutical Sciences**  
Program Administrator: 910-893-1712

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**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 who have completed the prescribed pre-pharmacy curriculum, general college curriculum, one year of the B.S. 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 B.S. 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 B.S. after four years of matriculation, including one year of matriculation after acceptance into the Doctor of Pharmacy program. A B.S. degree combined with the Doctor of Pharmacy may provide graduates with additional opportunities.

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**Academic Standards**

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

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**Curriculum**

**Clinical Research Concentration**

### First Year

#### Fall Semester 1  
**Credit Hours**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tr>
<td>CHEM 111/111L – General Chemistry</td>
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</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>
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<tr>
<td>PE 185 – Lifetime Wellness</td>
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<tr>
<td>CPHS 100 – Pre – Professional Seminar</td>
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**Total** 17

#### Spring Semester 2  
**Credit Hours**

<table>
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<th>Courses</th>
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<tr>
<td>CHEM 113/113L – General Chemistry II</td>
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</tr>
<tr>
<td>BIOL 221/221L – Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 – Academic Writing &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122 – Calculus</td>
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</tr>
<tr>
<td>A/M/T 131 – Intro to Art/Music/Thea</td>
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<td>CUC 100 – Connections</td>
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**Total** 18.5

### Second Year

#### Fall Semester 3  
**Credit Hours**

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<tr>
<td>BIOL 334/334L – Microbiology</td>
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<tr>
<td>PHYS 221/221L – Physics</td>
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<tr>
<td>Math 160 – Statistics</td>
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<tr>
<td>LANG 201 – Foreign Language</td>
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**Total** 18.5

#### Spring Semester 4  
**Credit Hours**

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<td>BIOL XXX – Biology Elective</td>
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<td>Humanities Elective</td>
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<td>HIST 1XX – Western Civilization I or II</td>
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<tr>
<td>Hum/Social Science Elective</td>
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**Total** 16-17

### Third Year

#### Fall Semester 5  
**Credit Hours**

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<tr>
<td>PHSC 323 – General Biochemistry</td>
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<td>CLNR 341 – Medical Terminology</td>
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<td>CLNR 363 – New Product Development</td>
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<td>CLNR 364 – Principles of Clinical Research</td>
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<td>CLNR 324 – Intro to Biostatistics</td>
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<td>CLNR 338 – Scientific Literature Seminar</td>
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<td>UNVI XXX – Social Science</td>
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**Total** 17

#### Spring Semester 6  
**Credit Hours**

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<td>CLNR 330 – Regulatory Affairs I</td>
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<td>CLNR 365 – Managing &amp; Monitoring Clinical Trials</td>
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<td>CLNR 442 – Interpersonal Skills</td>
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<td>CLNR 379/L – Physical &amp; Clinical Assessment</td>
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**Total** 17

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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 – Drug Information I</td>
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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 – Drug Information II</td>
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**Total** 19.5
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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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<td>PHRD 533 – Pharmacy Practice Skills III</td>
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<td>PHRD 541 – Integrated Pharmacotherapy II Endocrine</td>
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<td>PHRD 542 – Medical Literature Evaluation II</td>
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<td>PHRD 543 – Pharmacy Practice Skills IV</td>
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<td>PHRD 545 – Pharmaceutics, Pharmacokinetics, &amp; Calculations IV</td>
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Total credit hours earned: 142

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

### Pharmaceutical Sciences Concentration

#### First Year

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</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>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CPHS 100 – Pre-Professional Seminar</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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<table>
<thead>
<tr>
<th>Spring Semester 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113/113L – General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221/221L – Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<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 to Art/Music/Thea</td>
<td>3</td>
</tr>
<tr>
<td>CUC 100 – Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
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#### Second Year

<table>
<thead>
<tr>
<th>Fall Semester 3</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CHEM 227/227L – Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 334/334L – Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221/221L – Physics</td>
<td>4</td>
</tr>
<tr>
<td>HIST 1XX – Western Civilization I or II</td>
<td>3</td>
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<tr>
<td>LANG 201 – Foreign Language</td>
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<td>CUC 200 – Connections</td>
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<table>
<thead>
<tr>
<th>Spring Semester 4</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 228/228L – Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 222 – General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ELECTIVE (Social Science)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE (Humanities)</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Third Year</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Fall Semester 5 (B1 PHSC) Courses</td>
<td></td>
</tr>
<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>CLNR 324 – Intro to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 451 – Scientific &amp; Technical Writing Techniques</td>
<td>2</td>
</tr>
<tr>
<td>PHSC 220/220L – Quantitative Lab Techniques</td>
<td>2</td>
</tr>
<tr>
<td>Elective (SS/Humanities)</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Spring Semester 6 (B1 PHSC) Courses</th>
<th>Credit Hours</th>
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<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>
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<tr>
<td>PHSC 338 – Product &amp; Process Validation</td>
<td>2</td>
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<tr>
<td>PHSC 326 – Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 327/327L – Molecular Biology Prelab/Lab</td>
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<tr>
<td>CLNR 442 – Interpersonal Skills</td>
<td>2</td>
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<td><strong>Total</strong></td>
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#### Fourth Year

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<thead>
<tr>
<th>Fall Semester 7 (P1)</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHRD 511 – Biomedical Foundations</td>
<td>4</td>
</tr>
<tr>
<td>PHRD 512 – US Health Care</td>
<td>1.5</td>
</tr>
<tr>
<td>PHRD 513 – Pharmacy Practice Skills I</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 510 – Personal/Professional Development I</td>
<td>0</td>
</tr>
<tr>
<td>PHRD 515 – Pharmaceutics, Pharmacokinetics &amp; Calculations</td>
<td>1.5</td>
</tr>
<tr>
<td>PHRD 516 – Principles of drug Information I</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 521 – Pharmaceutical Sciences Foundations</td>
<td>3.5</td>
</tr>
<tr>
<td>PHRD 522 – Nonprescription Therapeutics</td>
<td>3</td>
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<tr>
<td>PHRD 523 – Pharmacy Practice Skills II</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 525 – Pharmaceutics, Pharmacokinetics, &amp; Calculations II</td>
<td>2</td>
</tr>
<tr>
<td>PHRD 526 – Drug Information II</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester 8 (P1)</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRD 531 – Integrated Pharmacotherapy I Infection &amp; Immunity</td>
<td>5.5</td>
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<tr>
<td>PHRD 532 – Medical Literature Evaluation I</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 533 – Pharmacy Practice Skills III</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 530 – Personal/Professional Development II</td>
<td>0</td>
</tr>
<tr>
<td>PHRD 535 – Pharmaceutics, Pharmacokinetics, &amp; Calculations III</td>
<td>2</td>
</tr>
<tr>
<td>PHRD 541 – Integrated Pharmacotherapy II Endocrine</td>
<td>5</td>
</tr>
<tr>
<td>PHRD 542 – Medical Literature Evaluation II</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 543 – Pharmacy Practice Skills IV</td>
<td>1</td>
</tr>
<tr>
<td>PHRD 545 – Pharmaceutics, Pharmacokinetics, &amp; Calculations IV</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19.5</strong></td>
</tr>
</tbody>
</table>

Total credit hours earned: 142

For a list of course descriptions please view the clinical research, pharmaceutical sciences and pharmacy sections of this Academic Bulletin.
The framework, designed in 2007 by the Office of Interprofessional Education at Campbell University College of Pharmacy & Health Sciences, is a strategic plan around the Institute for Healthcare Improvement (IHI) Triple Aim. This framework encourages institutions to pursue the development of all of their interprofessional collaborative practice and professional development. It aims to improve the patient experience of care (including quality and satisfaction), improving the health of populations, and reducing the per capita cost of healthcare.

IPEC Competencies
The IPE Office also develops programming grounded in the IPEC Core Competencies for Interprofessional Collaborative Practice. These competencies were created by the Interprofessional Education Collaborative (IPEC) and published in 2011 and updated in 2016. The goal of this collaborative was to promote and encourage the advancement of substantive interprofessional learning experiences. The resulting competencies are organized into four domain areas, which the IPE Office uses as standards of interprofessional education: Values & Ethics, Roles/Responsibilities, Interprofessional Communication, and Teams and Teamwork.

Curriculum & Programming
Core IPE curriculum and programming is developed by the IPE office according to the mission statements of Campbell University, CPHS, and the IPE Office, along with the Triple Aim and the IPEC Core Competencies as stated above. Development involves a stringent process that has been designed to ensure quality IPE programming. This process extends to additional activities submitted by faculty members and students. When individuals or groups submit proposals for new IPE activities, the office uses a rigorous checklist to evaluate each proposal and ensure these additional activities are truly interprofessional in nature and quality experiences for participants.

Annual Events & Activities
- First-Year Event – Fall
- IPE REPS – Fall
- Health Professions PLACES – Spring
- IPE Activity Day – Spring
- Interprofessional Health Sciences Symposium – Spring
- CICS Cases – Fall & Spring

Please see chart below for details on program attendance requirements.

Opportunities for Students & Faculty
- IPE Leadership Recognition Program
- Wallace Servant Leadership Fellows
- IPE Faculty Development Series
- SWIPE

Students interested in pursuing any of these opportunities should contact the IPE Office at ipe@campbell.edu.

Academic Programs
Programs that regularly participate in IPE programming include:
- Clinical Research (MSCR)
- Nursing (BSN)
- Osteopathic Medicine (DO)
- Pharmaceutical Sciences (MSPS)
- Pharmacy Practice (PharmD)
- Physical Therapy (DPT)
- Physician Assistant (MPAP)
- Public Health (MPSH)

Other Campbell University programs outside the health sciences may also participate depending on the activity.

Event & Activity Descriptions
First Year Event
The IPE First Year Event is held every year in the fall and is specifically geared toward first-year students. Students participate in an event designed to introduce them to concepts and goals of interprofessional collaboration. 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.

IPE REPS
IPE REPS is an innovative event that aims to improve student understanding about the roles and responsibilities of the members on the interprofessional collaborative healthcare team. REPS is named for its four components, Reflect, Engage, Practice, and Summarize; these are designed to give students direct instruction on various professions and to give students the opportunity to share knowledge and concepts during an interactive, interprofessional case that highlights the roles and responsibilities of each profession.

Health Professions PLACES
PLACES is a conference-style event that focuses on professionalism, service, and skills. This event offers students invaluable opportunities for networking and professional development. PLACES is a joint effort between the Office of Student Affairs and the Office of Interprofessional Education.

IPE Activity Day
Every year, students of the health science programs at Campbell University gather together for IPE Activity Day in the spring.

IPE Activity Day is largely supported by the faculty of CPHS and CUSOM (Campbell University School of Osteopathic Medicine), who create, design, and facilitate activities based on their own backgrounds 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 iOSEC.

Interprofessional Health Sciences 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 encouraged to attend whether they are presenting research or not.

CICS
CICS, or Campbell Interprofessional Case Studies, are specifically designed 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 are able to share skills and knowledge with one another. Most importantly, the team is able to witness the greater scope of treatment and care across the spectrum of professions. CICS cases are held periodically throughout the year.

IPE Leadership Recognition Program
The IPE Leadership Recognition program presents students the unique opportunity to earn recognition for demonstrating true commitment to the ideals of interprofessional collaboration. Students who pursue certification consistently go above and beyond the typical IPE requirements. These students not only actively engage in IPE programming; they participate in developing new programs and initiatives, take on leadership positions, and enthusiastically promote IPE principles to their fellow classmates, faculty, college, and university. After graduation, these same students, and those they have encouraged, will enter communities as leaders in their profession who will advance the movement of interprofessional collaborative practice, prepared for an ever-changing healthcare landscape that depends more and more on the collaboration and teamwork of all members of the healthcare team and beyond.

Wallace Servant Leadership Fellows
The Wallace Servant Leadership Fellows is a program that began as part of the Gore Center for Servant Leadership in 2016. The program aims to “inform and inspire the calling and commitment to Interprofessional Servant Leadership in Healthcare.” Throughout the program, students participate in book readings & discussions, reflection papers, lectures, one-on-one mentoring appointments with Chancellor Wallace, periodic group meetings with Chancellor Wallace, and other opportunities. At the end of the year, an awards celebration is held to recognize the Wallace Fellows.

Students who participate in this estimable group are appointed by the deans of CPHS and CUSOM at the recommendation of program directors or chairs. Students are typically selected based on their high academic standing and/or their demonstration of superior service and leadership qualities. Students are eligible if they are in their last or penultimate year, and/or in their year of clinical rotations if applicable.

IPE Faculty Development Series
The IPE Faculty Development Series is an opportunity for faculty to become “IPE-certified.” The series involves a series of lunch-and-learns and workshops developed to improve faculty understanding of IPE concepts and competencies, while giving faculty members practice in facilitating interprofessional small groups and teaching about interprofessional collaborative skills.

SWIPE
SWIPE, or Student leadership With IPE, is a student organization devoted to interprofessional education. Students who join SWIPE are passionate about IPE and working with students in other programs. SWIPE members work to provide feedback and ideas to the IPE Office while communicating about upcoming events and programming to fellow students. Members of SWIPE represent each of the on-campus Health Sciences programs in CPHS and CUSOM.

Course Descriptions
IPE 515: New Product Development
In this course, students will explore how new drugs are made available for ultimate use in appropriate patients. Topics covered include unmet medical needs, discovery, pre-clinical and clinical development, regulatory pathways, and the roles of various healthcare professionals. The goal of the course is to provide an opportunity for students to learn the contemporary processes that lead to discovery and development of medications that address unmet medical needs.

Currently available as an online elective for MSCR®, MSPS, and PharmD students.

IPE Attendance & Absences Policy
CPHS graduate and professional students are required to attend multiple IPE events each academic year. Throughout each academic calendar, the Office of Interprofessional Education will offer multiple events. Of these events, several will be deemed as required to attend by both the IPE Office and the respective program. Examples of those events required for participation by CPHS students include but are not limited to: First Year Event (for first-year students), PLACES IPE Activity Day, etc. Any event that is determined to be required by the Office of IPE and each respective program will be clearly communicated as such to the students.

Attendance for each required IPE event will be recorded and maintained by the office of IPE. Students who are unable or fail to participate in the required event must complete the following:

Submit written notice of absence or letter of excuse to the IPE Office either prior to the event or within 48 hours post event. The written notice may be in the form of email communication to the IPE Office at ipe@campbell.edu, and to their respective program director and, if applicable, course director/chair.

Once written notice has been received, the record of absence will be shared with the respective program manager and director/chair.

The student will be required to make-up the hours/event missed. The IPE Office will send a list of options to make up the required event. The final proposal to complete the missed event must be approved by the Assistant Dean of IPE.

Failure to meet the aforementioned requirements will result in a letter to the CPHS Student Conduct Committee from the program director/chair, and may also result in a meeting with the Assistant Dean of IPE and/or the Associate Dean of Student Affairs and Admissions. This letter will be kept in the student’s file until graduation.

*Listed as CLNR 515 in MSCR catalog
## Program Attendance Requirements

<table>
<thead>
<tr>
<th>Program</th>
<th>First Year Event (FYE) (Fall)</th>
<th>IPE REPS (Fall)</th>
<th>Health Professions PLACES (Spring)</th>
<th>IPE ACTIVITY DAY (Spring)</th>
<th>IPE Health Sciences Research Symposium (Spring)</th>
<th>CICS (Fall &amp; Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Research</strong></td>
<td>Not required (Students online)</td>
<td>Not required (Students online)</td>
<td>Not required (Students online)</td>
<td>Not required (Students online)</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Nursing</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Osteopathic Medicine</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for Year-1 Students</td>
<td>Optional</td>
<td>Required for Year-2 Students</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Pharmaceutical Sciences</strong></td>
<td>Required for Year-1 Students</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Pharmacy Practice</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for Year-1, Year-2, and Year-3 Students</td>
<td>Required for Year-1, Year-2, and Year-3 Students</td>
<td>Required for Year-1 and Year-2 Students</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Physical Therapy</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Physician Assistant</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for Year-1 Students</td>
<td>Required for Year-1 Students</td>
<td>Required for Year-1 Students</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
<tr>
<td><strong>Public Health</strong></td>
<td>Required for Year-1 Students</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Required (except students scheduled for clinical experiences)</td>
<td>Required for All (except students scheduled for clinical experiences)</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
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<tr>
<td><strong>Dual Degree</strong></td>
<td>FYE is only required in the student’s first year as a CPHS or CUSOM student</td>
<td>Refer to specific program requirements for current program</td>
<td>Refer to specific program requirements for current program</td>
<td>Refer to specific program requirements for current program</td>
<td>Optional for All Students</td>
<td>Optional for All Students</td>
</tr>
</tbody>
</table>
Nursing

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

Academic Programs
The Bachelor of Science in Nursing (BSN) degree at Campbell University provides the students with the training and education necessary to enter the workforce as a registered nurse. The Essentials of Baccalaureate Education for Professional Nursing Practice [American Association of Colleges of Nursing (AACN), 2008]: Nursing Scope and Standards of Practice (2015) and the regulations from the state of North Carolina provide the framework for the liberal arts and pre-licensure nursing education curriculum and the associated clinical experiences.

The Essentials address the core knowledge required of nursing professionals and concepts of 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
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- 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.
6. Admission and graduation from Campbell University does not guarantee that the student is eligible to sit for the NCLEX-RN exam.

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

BSN Transfer Credit

The Registrar’s Office is responsible for the transferring of credits from other institutions onto the Campbell University transcript.

A transfer student must meet the core requirements and apply to the BSN division, through the electronic college application website.

1. The cumulative GPA from transferred coursework is considered as part of the holistic competitive application to the BSN Degree Program.
2. A grade of “C” or better must have been earned in 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-diphtheria-pertussis, MMR, Hepatitis B, Varicella, two step annual Tuberculin (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.

- 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/transfering 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 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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
</tr>
<tr>
<td>B</td>
<td>85-92</td>
</tr>
<tr>
<td>C</td>
<td>75-84</td>
</tr>
<tr>
<td>D</td>
<td>68-74</td>
</tr>
<tr>
<td>F</td>
<td>&lt;67</td>
</tr>
</tbody>
</table>

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 ≥ 2.75 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>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 – Academic Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 111 or 112 – Western Civilization I or II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111 – Basic Biology</td>
<td>4</td>
</tr>
<tr>
<td>CPHS 100 – CPHS Pre-Professional Freshman Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>MATH 111 (or greater)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</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>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>
</tr>
</tbody>
</table>

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

### Sophomore Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUC 200 – Connections</td>
<td>0.5</td>
</tr>
<tr>
<td>SOCI 225 – Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 285 – Human Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 260 – Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE*(Humanities)</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<table>
<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>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

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

### Junior Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 300 – Professional Nursing Practice</td>
<td>2</td>
</tr>
<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>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 350 – Research &amp; Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 360 – Adult Health Nursing Practice 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>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 400 – Adult Health Nursing Practice II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 410 – Nursing Practice of Women &amp; Children</td>
<td>6</td>
</tr>
<tr>
<td>NURS 420 – Leadership in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 430 – Health Policy</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 450 – Population Health</td>
<td>4</td>
</tr>
<tr>
<td>NURS 460 – Focused Patient Experience Practicum</td>
<td>6</td>
</tr>
<tr>
<td>NURS 470 – Transitions to the Role of the Professional Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 475 – Managing Healthcare for Vulnerable Populations</td>
<td>2</td>
</tr>
<tr>
<td>NURS 480 – Nursing Informatics</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
Course Descriptions

CPHS 100 – CPHS Pre-Professional Freshman Seminar
Credit: 1 hour
This course provides the student with an introduction to the College of Pharmacy & Health Sciences pre-professional programs. The course emphasizes several key concepts necessary to build students’ skill sets for their future endeavors in college as well as their chosen profession in nursing, pharmacy, pharmaceutical sciences, clinical research, physician assistant, physical therapist and public health upon graduation. Initially, emphasis is on success strategies that facilitate student progression both in the didactic and practice experience. Content and concepts central to the health care profession are identified, discussed and framed for awareness and ongoing reflection.

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
Bueys 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 for careers in 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 Pharmaceuticals
- Aurobindo
- Alcami
- Barry-Wehmiller Design Group
- BioAgilix
- Biogen
- Carolina Medical Products
- Catalent
- Fujifilm Diosynth Biotechnologies
- Grifols
- InnoSpec
- LiquiDra Technologies
- Medicago
- Pfizer
- Purdue Pharma
- Sandoz
- State Bureau of Investigation
- Thermo Fisher Scientific
- 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 the pharmaceutical industry doing drug discovery, development, and/or production or further studies at the doctorate level. The degree offers training in each of the major areas of pharmaceutical development: Bioprocessing, Pharmaceutical Analysis, Pharmaceutics and Pharmacology.

Students pursuing their MS in Pharmaceutical Sciences (MSPS) complete one year of core courses, then in their second year complete either a co-op with a pharmaceutical company or a research project on campus, plus at least 8 credits of electives to gain expertise in chosen subjects.

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 outline in this academic bulletin.

MSPS Admission

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

Applicants are only considered for fall enrollment due to the curriculum sequences of the program. Since the program operates on rolling admission and has limited enrollment, individuals are strongly encouraged to submit their applications early in the admissions cycle. The earlier an application is received,
the greater the probability of being admitted. International applicants must apply by April 1 due to additional time required for federal process requirements for international students. Domestic applicants must apply by June 15. There are three pathways to admissions to the MSPS program. Applicants may be considered in one of the following categories:

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

2. A 3+2 program: A Campbell University undergraduate BSPS student may apply to the MSPS 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 years. Applicants are exempted from the application fee.

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

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 MSPS coursework taken prior to admission to be eligible for admission into the program. Admission into the program also requires completion of the admissions requirements not already satisfied.

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

1. Students must have a cumulative GPA of 3.0 in all MSPS courses to graduate from the program, and all courses (Core courses, track-specific course and electives) must be completed with a grade of C or better. Earning any credits of D or F will result in dismissal.

2. Students must maintain a minimum cumulative GPA of 3.0 to remain in good academic standing. Failure to maintain this minimum GPA will result in a probationary period, not exceeding one semester. The student will be dismissed if the required cumulative GPA has not been achieved at the end of the probationary period.

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>
</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>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CPHS 100 – Pre-Professional Seminar</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Spring Semester 2 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 113/113L – General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 221/221L – Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<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>
</tr>
<tr>
<td>CUC 100 – Connections</td>
<td>0.5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
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</tbody>
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### Second Year

<table>
<thead>
<tr>
<th>Fall Semester 3 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 227/227L – Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 334/334L – Microbiology &amp; Immunology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 221/221L – Physics</td>
<td>4</td>
</tr>
<tr>
<td>HIST 1XX – Western Civilization I or II</td>
<td>3</td>
</tr>
<tr>
<td>LANG 201 – Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>CUC 200 – Connections</td>
<td>0.5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>18.5</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Spring 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>PHYS 222/PHYS 222L – General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>UNIV XXX – Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2XX – Literature</td>
<td>3</td>
</tr>
<tr>
<td>UNIV XXX – Humanities Elective</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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</table>

### Third Year

<table>
<thead>
<tr>
<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>CLNR 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>CLNR 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>
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</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: 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; LANG 221, 222, 241, or 242

Social Science Electives: CRIM; ECON; GEOG; POLS; PSYC; SOCI; COMM 240
MS in Pharmaceutical Sciences for the class of 2021

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.

<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 – Biopharmaceuticals &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>1</td>
</tr>
<tr>
<td>PHSC 620 – Research Project OR two Group 1 Electives</td>
<td>4-8</td>
</tr>
</tbody>
</table>

Total 23-27

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>
</tbody>
</table>

Total 15

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>
</tbody>
</table>

Total 14

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>
</tbody>
</table>

Total 15

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. Pharmacology &amp; 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>
</tbody>
</table>

Total 13

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 526/526L – Protein Analysis &amp; Bioassays/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>Group 1 Electives</td>
<td>3-4</td>
</tr>
<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 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.
MS in Pharmaceutical Sciences for the class of 2022 and beyond

Each semester is divided into two 7-week blocks with one week with no class between them.

First Year

All students take the same Core/required courses

<table>
<thead>
<tr>
<th>Fall 1 – Block 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 510 – Professional Pharmaceutical Development 1</td>
<td>0.5</td>
</tr>
<tr>
<td>PSCI 511 – Foundations of Pharmacology and Cell Biology</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 512 – Protein Properties and HPLC</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 513 – Foundational Analytical Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 1 – Block 2</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 510 – Professional Pharmaceutical Development 1 (cont.)</td>
<td>1</td>
</tr>
<tr>
<td>PSCI 521 – Cell Biology and Bioreactors</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 522 – Method Development and Validation</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 523 – Production and Purification of Biologics Lab</td>
<td>1</td>
</tr>
<tr>
<td>PSCI 524 – Method Development and Validation Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 1 – Block 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 530 – Professional Pharmaceutical Development 2</td>
<td>1</td>
</tr>
<tr>
<td>PSCI 531 – Intermediate Pharmacology</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 532 – Foundations of Pharmaceutics</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 533 – Pharmacology Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

| Total credit hours earned | 19.5 |

Second Year

15.5 credit hours; 3.5 credits required, 4 credits for Co-op or Research Project, 8 credits of electives

Students must choose either 1) a Co-op in the pharmaceutical Industry (which starts in the summer and goes through the 1st block of the fall semester), or 2) have no summer courses and do a lab-based research project with a Campbell faculty member. Students may also opt to do both a Co-op in the summer and research project in the year 2 in which case, the research project would satisfy 4 of the 8 credits of electives. Note that the number of credits in each block varies by pathway and the number of elective credits in each block is approximate. However, in order to maintain full-time student status, students must enroll in a minimum of 7 credits every semester, except their final semester in the program, when 3.5 credits of courses is considered full-time.

Co-op pathway

<table>
<thead>
<tr>
<th>Summer</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 611 – Co-op</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2 – Block 5</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 611 – Co-op (continued)</td>
<td>2</td>
</tr>
<tr>
<td>IPE 515S – New Product Development</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2 – Block 6</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused-topic Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2 – Block 7</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 690 – Research Proposal</td>
<td>1.5</td>
</tr>
<tr>
<td>Focused-topic Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2 – Block 8</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused-topic Electives</td>
<td>4</td>
</tr>
</tbody>
</table>

Research Project pathway

<table>
<thead>
<tr>
<th>Summer</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2 – Block 5</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 690 – Research Proposal</td>
<td>1.5</td>
</tr>
<tr>
<td>IPE 515S – New Product Development</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2 – Block 6</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused-topic Electives</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2 – Block 7</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCI 595 – Research Project</td>
<td>4</td>
</tr>
<tr>
<td>Focused-topic Elective</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2 – Block 8</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project (continued)</td>
<td>2</td>
</tr>
</tbody>
</table>
3+2 Program: Class of 2021

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>
</tr>
</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>PHSC 530/531L – Adv. Pharm Analysis-Spec</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 528/529L – 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>

3+2 Program: Class of 2022 and Beyond

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.

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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

Below is the curriculum for the 3+2 program. View the BSPS curriculum section for the first three years of undergraduate coursework.

### Summer after junior year of the BSPS program

<table>
<thead>
<tr>
<th>Courses</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>

After completing the senior seminar and senior internship, then follow the MSPS curriculum.

Please refer to the MSPS Curriculum for more details.
Course Descriptions

BSPS 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 corequisite) to all laboratory courses.

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. 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. It is recommended that a student take Microbiology or Cell Biology before taking this course. Prerequisite: Organic Chemistry I-II; Co-requisite: PHSC 220/220L, PHSC 325/325L

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 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, and surveys all of the major classes of drugs. 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: 0.5-1 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 pharmaceutics and biopharmaceutics. Prerequisites: Enrollees should have completed Laboratory Safety, Quantitative Laboratory Techniques (PHSC220/220L) and Analytical Instrumentation (PHSC 410/411). Concurrent enrollment in Industrial Pharmacy Pre-Lab (PHSC 419) and Industrial Pharmacy Lab (PHSC 419L) is also required. Enrollment is limited to students who have declared Pharmaceutical Science as a major or permission of the course director.

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 troubleshoot 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 trouble shooting techniques.  
Co-requisite: PHSC 438

PHSC 442 – Interpersonal Skills  
Credit: 2.0 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

MSPS course descriptions for the class of 2021

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 research course is intended for the advanced student. It continues the basic science research experience.
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.  
Prerequisite: PHSC 410/411L or equivalent;  
Co-requisite: PHSC 528

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
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 as 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 418/419L 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 561 - Pharmacogenomics
Credits: 1 hour
Pharmacogenomics explores the genetic differences in humans for optimal drug response. It is applicable in drug development and clinical practice. This course will provide the students 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 drug development and clinical drug use.

PHSC 562 - Multicultural Health Practices and Health Disparities
Credits: 1 hour
This course is designed to provide the student with a deeper understanding of the socioeconomic, racial, ethnic, and cultural disparities that can impact receipt of healthcare. Furthermore, this course is designed to help students become more competent in providing compassionate care to the patient populations discussed.

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 students 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 MSPS students 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.

IPE 515S: New Product Development
Credit: 2 hours
In this course, students will explore how new drugs are made available for ultimate use in appropriate patients. Topics covered include unmet medical needs, discovery, pre-clinical and clinical development, regulatory pathways, and the roles of various healthcare professionals. The goal of the course is to provide an opportunity for students to learn the contemporary processes that lead to discovery and development of medications that address unmet medical needs.

MSPS course descriptions for the class of 2022 and beyond

PSCI 510 – Professional Pharmaceutical Development 1
Credits: 0.5 hours
This required course 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.

PSCI 511 – Foundations of Pharmacology and Cell Biology
Credits: 1.5 hours
This course begins with the background material in cell biology necessary for understanding the latter section on pharmacology and bioprocessing. The pharmacology, case studies and production of insulin will be used as a prototype protein drug. The focus will be on experimental methods for discovery of the biochemical mechanisms of cell function and drug action.

PSCI 512 – Protein Properties and HPLC
Credits: 1.5 hours
The lecture 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. Theory and applications of liquid chromatography, appropriate sample preparation techniques, and method justification are discussed.

PSCI 513 – Foundational Analytical Lab
Credits: 1 hour
The course will emphasize the use and application of basic analytical techniques used in the pharmaceutical industry, such as, spectroscopy and chromatography.

PSCI 521 – Cell Biology and Bioreactors
Credits: 1.5 hours
This course continues with more advanced material in cell biology necessary for understanding the latter section on cellular and molecular pharmacology. The focus will be on experimental methods for Bioreactors and Cell culture techniques.

PSCI 522 – Method Development and Validation
Credits: 1.5 hours
The lecture continues the discussion of liquid chromatography delving into the method and techniques of HPLC method development. The lecture continues on the chromatographic concept of adsorption. Aspects of Validation are discussed from a risk based approach and concludes with cleaning validation.

PSCI 523 – Production and Purification Lab
Credits: 1 hour
The course will emphasize the techniques to successfully complete a bioreactor run and maintain a healthy mammalian cell culture line.

PSCI 524 – Method Development and Validation Lab
Credits: 1 hour
The course will emphasize the development, optimization and validation of HPLC chromatography. Aspects of affinity chromatography will also be covered.

PSCI 530 – Professional Pharmaceutical Development 2
Credits: 0.5 hours
This course 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.

PSCI 531 – Intermediate Pharmacology
Credits: 1.5 hours
This course builds upon the background material from previous courses to develop an understanding of cellular and molecular pharmacology. The pharmacology of drugs to treat depression will be used as an example to illustrate drug. The focus will be on theory for discovery of the biochemical mechanisms of cell function and drug action.
PSCI 523 – Foundations of Pharmaceutics  
*Credits: 1.5 hours*  
This course builds upon the background material from previous courses to develop an understanding of pharmacokinetics and introductory drug delivery. The pharmacology of drugs to treat depression will be used as an example to illustrate drug. The focus will be on theory for discovery of the biochemical mechanisms of cell function and drug action.

PSCI 533 – Pharmacology Lab  
*Credits: 1 hour*  
The course will emphasize the use and application of pharmacology laboratory techniques used in drug development involving rodents.

PSCI 541 – Intermediate Biotechnology  
*Credits: 1.5 hours*  
This course builds upon the background material from previous courses to develop an understanding of proteins and HPLC. The focus will be on theory for discovery of the biochemical mechanisms of cell function and drug action.

PSCI 542 – Intermediate Pharmaceutics  
*Credits: 1.5 hours*  
This course builds upon the background material from previous courses to develop a further understanding of the principles of pharmaceutics and dosage formulation.

PSCI 543 – Protein Analysis Lab Techniques  
*Credits: 1 hour*  
The course will emphasize the use and application of in vivo laboratory techniques used in drug development for studying proteins.

PSCI 544 – Drug Formulation Lab  
*Credits: 1 hour*  
The course will emphasize the use and application of in vivo laboratory techniques used in drug development for drug formulation.

PSCI 611 – Co-op  
*Credits: 4 hours*  
The internship provides practical experience in the pharmaceutical, chemical or biotechnology industries. Students and participating industrial facilities are matched to provide a comprehensive work experience. Students present an overview of the companies in which they worked and provide a synopsis of their roles in the organizations during their internship.

IPE 515 – New Product Development  
*Credits: 2 hours*  
In this course, students will explore how new drugs are made available for ultimate use in appropriate patients. Topics covered include unmet medical needs, discovery, pre-clinical and clinical development, regulatory pathways, and the roles of various healthcare professionals. The goal of the course is to provide an opportunity for students to learn the contemporary processes that lead to discovery and development of medications that address unmet medical needs.

**Note:** This is an online course required for all MS in Clinical Research and MS in Pharmaceutical Sciences students.

PSCI 604 – Independent Research  
*Credits: 1-3 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 not related to their Research Project (PSCI 690 / 695). Alternatively, this course may be used for other scholarly pursuits such as a research paper to investigate primary literature for a thorough review of a specific area of scientific inquiry that is timely, rigorous, and novel. This course will involve a minimum of 3 hours per credit hour per block.

PSCI 690 – Research Proposal  
*Credits: 1.5 hours*  
This course is intended to provide students with an understanding and practical experience in rational study design to test a specific hypothesis. It is typically taken in the final block of the program if the student is not taking PSCI 695 Research Project. If the students is planning to execute the proposed project in their final semester, then this course should be taken in the second block of the second year.

PSCI 695 – Research Project  
*Credits: 4 hours*  
This course is restricted to MSPS students in the research tracks who have successfully completed PHSC 690 (Research Proposal) with a grade of B or better, as well as have approval from their research committee. Additionally, students 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

PLO 1: Develop and integrate knowledge across foundational sciences.

PLO 2: Apply foundational science knowledge in patient-centered and population-based environments.

PLO 3: Articulate the evolving role of pharmacists as: caregivers, educators, managers, promoters, and providers as a member of an interprofessional healthcare team.

PLO 4: Design, implement, and document interventions for patients and populations based on assessed needs.

PLO 5: Adapt and apply assessment, communication, critical thinking, and problem-solving skills to solve complex issues.

PLO 6: Demonstrate inclusive considerations for others (patients, fellow providers, and populations) in approach to practice and care.

PLO 7: Develop an informed plan for professional trajectory, development, growth, and lifelong learning.

**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
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- 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, 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 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 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 and maintain 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* (7-8 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** (Note: Prior to matriculation, applicants must have completed a minimum of 64 credit hours, which include the hours earned completing the aforementioned prerequisite courses. The balance of the required 64 credit hours may be completed as electives)
  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.
  Note: The PCAT is not required, but it is recommended for applicants with a GPA below 3.0.
- 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 may be delayed for review 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 and spring courses) must be submitted to PharmCAS.

All college coursework attempted (dual enrollment, undergraduate, graduate, and/or professional) 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 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.

Supplemental Materials

A supplemental application and business headshot must be submitted to CPHS. The supplemental application is available online at www.cps.camphell.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. 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.

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 compounded materials), and patient care demonstrations (physical observation and physical assessment). A candidate/student-pharmacist must be able to observe a patient accurately at a distance and close at hand, noting non-verbal and verbal signals. Observation necessitates functional use of vision, hearing and somatic senses. The candidate/student-pharmacist must be capable of remaining alert and attentive at all times in the clinical setting.

**Communication**

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

**Motor Abilities**

A candidate/student-pharmacist must have sufficient motor function to carry out the basic laboratory experiments and physical assessment. The candidate/student-pharmacist must be able to carry out duties within the classroom, laboratory, pharmacy and clinic settings. Motor function must be sufficient to perform fundamental patient care, such as required for disease prevention, drug therapy monitoring, emergency treatment, general care and basic physical assessment (e.g. blood pressure assessment, palpation for edema, injection of vaccines, cardiopulmonary resuscitation, etc.). Motor function must also be sufficient to perform drug distribution duties in both a community and hospital pharmacy setting. Candidates/student-pharmacists must have the ability to maintain aseptic technique in the preparation of sterile materials. This will require the ability to work under a laminar flow hood and in sterile rooms. Candidates must possess the motor function sufficient to direct and supervise the accurate compounding and preparation of medications for dispensing to patients. A candidate/student pharmacist must be able to safely and effectively operate various types of laboratory and patient care equipment such as weights and balance, a glucose meter, stethoscope and sphygmomanometer. They must be able to use computer-based information systems. These motor actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing. Additionally, some aspects of patient care require that the student-pharmacist be able to act quickly and speed of motor function may be an essential requirement.

**Intellectual, Conceptual, Integrative, and Quantitative**

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

**Behavioral and Social Attributes**

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

**Equal Access to the CPHS Doctor of Pharmacy Program**

In accordance with Campbell University's nondiscrimination policy, the College of Pharmacy & 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
Admission & Matriculation with or without accommodations. The Director of Disability Services will appropriately meet these standards and academic program who lose the ability to meet these standards, they must contact the Director of Disability Services immediately upon accepting the offer of admission. Enrolled students who are found not to meet the Technical Standards, with or without accommodation, will be evaluated by the CPHS Academic Performance and Standards Committee and will use the appeals process for that committee’s work. Student-pharmacists who disagree with an accommodation decision made by the office of Student Success will use that office's grievance process which can be found in the “Student Guide to Accessing Disability Services” on the Student Success website.

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

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 during the process. The accommodation plan will require the approval of the above departments, Student Success, and the student.

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

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

Academic Standards
Retention and Promotion Criteria
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) and a cumulative grade point average (CGPA), and completion of any professional deficiencies and/or required remedial courses in the time and manner prescribed.

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 CGPA of 2.20;
- A failing grade in a professionally required course;
- 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 Support Services 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 for that term is 2.20 or above, and the CGPA is 2.20 or above, the student will be released from academic probation. If SGPA is 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 less than 2.20.

• 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 Support Services 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 less than 2.20;

• 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.

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 appeal to the Academic Performance and Standards Committee. The chair of the Academic Performance and Standards Committee notifies students in writing regarding any decision by the committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the College and informs the associate dean for academic affairs and associate dean of admissions & student affairs.

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

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

• Hold or run for elected office in student professional organizations;

• Represent the University in any capacity either on campus or away from campus (see policy below for additional information);

• Compete for honors and distinctions;

• Participate as an elected representative or member of an honorary organization;

• Obtain reimbursement monies from any funders in the College of Pharmacy & Health Sciences (see policy below for additional information).

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

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

Remediation Policy
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. Failure to pass the course after remediation will result in an F grade in the course and a requirement to retake the course.
6. Multiple course failures in a 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 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.

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

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Delayed Graduation Policy
If a student pharmacist is required to retake 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 may 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.

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 coursework, including Introductory Pharmacy Practice Experiences (IPPE).

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. 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 one or more courses, this includes 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. A student cannot graduate until all coursework (including all experiential training) has been completed and verified by the Registrar’s office. This means a student cannot be enrolled in an APPE in May, August, or December and graduate in that same month/year.

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 of the equivalent 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 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 Scale for Doctor of Pharmacy Program

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-Pt. Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior/Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Below average</td>
<td>2</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>

Grades of “A, B, C, 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 “F” 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, proof of varicella immunity, TD/Tdap, MMR, influenza, and a TB test.
- Incoming P1 student pharmacists are required to have successfully completed the American Heart Association Basic Life Support (BLS) for Health Care Providers certification prior to the beginning of the P-1 year. Only the American Heart Association (AHA) certification is accepted due to requirements set by our clinical affiliates. Incoming P1 student pharmacists who do not have a certification prior to the start of classes will not be allowed to matriculate. Furthermore, all enrolled student pharmacists must complete the AHA BLS re-certification within the appropriate timeframe that prevents a lack of active certification for any period of time. Documentation of BLS Certification must be maintained and approved in the compliance and immunization management system. Failure to meet this standard will delay the start of the Introductory Pharmacy Practice Experiences (IPPEs) or Advanced Pharmacy Practice Experiences (APPEs) and potentially delay graduation.
- 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, a valid American Heart Association Basic Life Support (BLS) Completion Card, background check 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 non-disclosure or falsification may lead to dismissal and disclosure may prevent enrollment. Additionally, in response to requirements in the professional practice environment, facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity; therefore, 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.

Commencement Participation Policy

Doctor of Pharmacy candidates that are on track to graduate in August, who are in good academic standing and missing no more than twelve (12) credit hours of meeting all requirements to graduate with a Doctor of Pharmacy degree may file a “Request to participate in the May Commencement.” Students with more than twelve (12) credit hours remaining at the May ceremony can participate in the next University graduation cycle. Forms requesting participation in the May CPHS ceremony are available in the CPHS office of Academic Affairs. Candidates applying for this exemption must also submit an Application for Graduation through the Registrar’s office. If approved, the candidate will be allowed to participate in only one Commencement program for the degree in question. Candidates participating under this special exemption will not receive a diploma or Certificate of Graduation until all requirements have been met. They must submit a new application for graduation for the term in which the degree will actually be conferred. In addition, students participating also must understand that participating in graduation does not infer that they have met all the requirements for degree certification. A student participating, under this exemption, in the May ceremony would not be eligible for certification by the NC Board of Pharmacy until all requirements have been met and certified by the Office of Academic Affairs and Registrar’s office.

Experiential Training

The Office of Professional Experiential Education (OPEE) within the Department of Pharmacy Practice coordinates all experiential training for the PharmD candidates. Student pharmacists complete introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) so that when combined with their didactic education they graduate as practice-ready pharmacists.

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 OPEE.

Clinical Rotation Sites

Throughout North Carolina there are numerous affiliated training sites ranging from large tertiary care hospitals, such as Duke University Medical Center and Wake Forest 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

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

Introductory Pharmacy Practice Experiences

Student pharmacists who successfully complete all required prerequisite work in the first and second years as well as all on-boarding requirements for clinical training will complete a one month (160 hour, minimum) introductory rotation in community pharmacy and an introductory rotation in hospital pharmacy, respectively. These courses will be completed in either the May, June, or July (summer term) or in December (fall term). Student pharmacists will register for the IPPE in the term the course is completed and the earned grade (pass, P, or fail, F) 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.

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/ fall terms following the second year. 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.

Advanced Pharmacy Practice Experiences

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 I and II or ambulatory care I and geriatrics, internal medicine I, internal medicine II, advanced hospital, and three electives is required. Grades for APPEs are recorded as either Honors (H), Pass (P), or Fail (F). Students usually complete their APPEs in May through April preceding expected graduation.

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 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 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.

Registration of Rotations and Billing

The OPEE will register students and submit grades for all IPPEs and APPEs. Student pharmacists with any CU Business Office hold on their account cannot register for their experiential course; 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.

Students are registered 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 APPES (12 credit hours) will not be considered a full time student and financial aid may be impacted.

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.

It is recommended that once clearance and onboarding procedures are completed for IPPEs or 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 traveling internationally on CU’s behalf or for personal reasons, the OPEE 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.

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 most current ASHP standards for PGY2 residency. A minimum of 8 months will be spent at Benson Health and up to 2 months at Duke Family Medicine. In addition, up to three elective rotations may be selected to be included in the residency program to meet the individual goals and interests of the resident. Upon completion of the residency, the resident should be able to practice as a pharmacist clinician in ambulatory care and have met the requirements to apply for certification as a Board Certified Ambulatory Care Pharmacist (BCACP).

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

**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, inservice presentations, and continuing education seminars.
## Curriculum

### P1 Year

#### P1 Year, Block 1 Courses

<table>
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<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tr>
<td>PHRD 510 – Personal and Professional Development</td>
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<td>PHRD 511 – Biomedical Foundations</td>
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<tr>
<td>PHRD 512 – US Health Care</td>
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<tr>
<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 510 – Personal and Professional Development</td>
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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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<tr>
<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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<td>PHRD 535 – Pharmaceutics, Pharmacokinetics, &amp; Calculations III</td>
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<tr>
<td>PHRD 530 – Personal and Professional Development II</td>
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<td>PHRD 541 – Integrated Pharmacotherapy II Endocrine</td>
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<td>PHRD 542 – Medical Literature Evaluation II</td>
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<td>PHRD 543 – Pharmacy Practice Skills IV</td>
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### P2 Year

#### P2 Summer 1 Courses

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#### P2 Year, Block 5 Courses

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<td>PHRD 610 – Personal and Professional Development III</td>
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<td>PHRD 611 – Integrated Pharmacotherapy III Cardiovascular I</td>
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<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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<td>PHRD 65X – Elective</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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<td>PHRD 621 – Integrated Pharmacotherapy IV Cardiovascular II/Renal</td>
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<td>PHRD 622 – Health Outcomes and Informatics II</td>
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#### 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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<td>PHRD 632 – Pharmacogenomics I</td>
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<td>PHRD 633 – Pharmacy Practice Skills VII</td>
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<td>PHRD 635 – Law &amp; Ethics I</td>
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**Total** 9.5

#### P2 Year, Block 8 Courses

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<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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<td>PHRD 642 – Pharmacogenomics II</td>
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<td>PHRD 643 – Pharmacy Practice Skills VIII</td>
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**Total** 10.5

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<th>P3 Year</th>
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<tr>
<td>PHRD 707 – Hospital: IPPE</td>
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<td>PHRD 710 – Personal and Professional Development V</td>
<td>PHRD 731 – Integrated Pharmacotherapy IX</td>
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<td>PHRD 711 – Integrated Pharmacotherapy VII Musculoskeletal</td>
<td>Dermatology &amp; Nutrition</td>
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<td>PHRD 712 – Research Topics in Pharmacy I</td>
<td>PHRD 732 – Applied Drug Management I</td>
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<td>PHRD 713 – Pharmacy Practice Skills IX</td>
<td>PHRD 733 – Pharmacy Practice Skills XI</td>
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<td>PHRD 715 – Operations I</td>
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<th>P3 Year, Block 12 Courses</th>
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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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<tr>
<td>PHRD 742 – Applied Drug Management II</td>
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<tr>
<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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<tr>
<th>P4 Year – Nine Rotations Required to Graduate</th>
<th>Required Rotations Courses</th>
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<tr>
<td>Required Rotations Courses</td>
<td>PHRD 8XX – Advanced Pharmacy</td>
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<td>Practice Experiences (nine one – month)</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 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 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 pharmaceutical 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 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 biopharmaceutical 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.
PHRD 533 – Pharmacy Practice Skills III  
*Credit: 1.0 hour*  
This course is intended to provide students with practical opportunities 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 – Pharmacometrics, Pharmacokinetics & Calculations III (PPC III)  
*Credit: 2.0 hours*  
This course is designed to provide the student pharmacist with a basic understanding of medicinal products’ physical and chemical properties and how these properties influence the design of dosage forms. It will enable the student pharmacist to become proficient in general compounding techniques and provides a basic knowledge of dosage formulation. A weekly laboratory is designed to enhance the technical capability of student pharmacists in this area of practice.

PHRD 541 – Integrated Pharmacotherapy II: Endocrine  
*Credit: 5.0 hours*  
This course is designed to integrate biomedical sciences, pharmaceutical sciences, and clinical therapeutics with an emphasis on pharmacotherapeutic management of the reproductive, genitourinary and endocrine systems. The student pharmacist will learn about the structure and function of the human body as well as medications and their effects on the body. The student pharmacist will apply this knowledge to develop appropriate, evidence-based pharmacologic and non-pharmacologic therapeutic plans that include monitoring relevant parameters for both acute and chronic disease processes.

PHRD 542 – Medical Literature Evaluation II  
*Credit: 1.0 hour*  
This course is designed to reinforce basic skills and teach intermediate level skills necessary to evaluate and effectively communicate medical literature. Through journal club active learning sessions, emphasis will be placed upon learning how to evaluate medical literature and apply this literature to patient care.

PHRD 543 – Pharmacy Practice Skills IV  
*Credit: 1.0 hour*  
This course is intended to provide students with practical opportunities 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 – Pharmacometrics, Pharmacokinetics & Calculations IV (PPC IV)  
*Credit: 3.0 hours*  
This course is a continuation of PHRD 535, and is designed to provide the student with a basic understanding of medicinal products’ physical and chemical properties of and how these properties influence the design of dosage forms. It will enable the student pharmacist to become proficient in general compounding techniques and a basic knowledge of dosage formulation. A weekly laboratory is designed to enhance the technical capability of student pharmacists in this area of practice.

PHRD 610 – 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  
*Credit: 5.5 hours Module I*  
This course is designed to incorporate the dynamic nature of the profession through an integration of basic science, pharmacology, and clinical therapeutics with a focus on the management of cardiovascular and renal diseases states. 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: 1.5 hour*  
This course is designed to provide students with a basic understanding of pharmacoeconomics, 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 pharmacoeconomic 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 intended to provide students with practical opportunities 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 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 with a focus on the management of cardiovascular and renal diseases states. 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 students 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 students with practical opportunities 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 students with practical opportunities 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.
This course is designed to integrate 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 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 713 – Pharmacy Practice Skills IX
*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 715 – Pharmacy Operation 1 (Human Resource Management)
Credit: 2.0 hours
This course will present principles of management and marketing as applied to pharmacy practice.

PHRD 721 – Integrated Pharmacotherapy (IP) VIII: Pulmonary, Otic and Ophthalmic
Credit: 5.0 hours
This course is designed to integrate anatomy and physiology, pathophysiology, pharmacology and medicinal chemistry with an emphasis on clinical application for the pulmonary, otic and ophthalmic body systems. In learning about structure and function of the human body, as well as medications and their effects on the body, the student pharmacist will be able to determine optimal pharmacologic and non-pharmacologic therapy including monitoring parameters for both acute and chronic disease processes.

PHRD 722 – 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: 732 – 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 725 – Pharmacy Operations II (Financial Management)
Credit: 2.0 hours
The principles of financial management are applicable and necessary for pharmacists, as both professionals and persons. This course covers the basics of financial accounting, managerial accounting, personal finance, professional finance, basic economics, and basic pharmacoeconomics. The course is conducted with a focus on decision-making scenarios in various pharmacy practice settings.

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 application of therapeutic drug monitoring, drug dosing, and the individualization of drug therapy.

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

PHRD 745 – Integrated Pharmacotherapy (IP) XII: Clinical Updates
Credit: 1.0 hour
Following completion of the Integrated Pharmacotherapy Courses I-XI, this course is designed to allow the student pharmacist to determine and apply the most up-to-date treatment guidelines and utilize the most current evidence to develop and prioritize the optimal therapeutic plan for the patient.

PHRD 8XX – Advanced Pharmacy Practice Experiences
Credit: 4 hours per rotation
These rotations are designed to provide the students with an environment where they can integrate the academic knowledge gained during pre-clinical years with professional experience to develop clinical
The purpose of this experience is to develop their professional attitudes, judgment, and skills needed to function in this practice setting. The setting for this type of APPE allows the student pharmacist to apply the scientific and practical information that they can demonstrate various aspects of the art and science of compounding. Students will apply science of compounding. Students will apply 

PHRD 804 – Advanced Community: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to provide future pharmacists with an understanding of how the practice of pharmacy is conducted in the community setting and to further develop their professional attitudes, judgment, and skills needed to function in this practice setting. The setting for this type of APPE is select community pharmacy environments (chain and independent) in which pharmaceutical care services are provided in addition to traditional dispensing and counseling services.

PHRD 805 – Ambulatory Care: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to introduce the student to clinical pharmacy practice in a patient-care setting through the management of common disease states. The setting for this type of APPE provides the opportunity for patient-care activities in medical practice sites such as physician offices and community health centers.

PHRD 806 – Geriatrics: Advanced Pharmacy Practice Experience
Credit: 4 hours
The purpose of this experience is to introduce the student to the philosophies and practice of geriatric medicine through clinically-oriented activities. The setting for this type of APPE provides the opportunity for patient-care with geriatric patients in assisted living, skilled nursing facility or other practice 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

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 applications and thought processes for preparing a sterile dosage form. This course requires an additional fee.

PHRD 656 – Student Leadership
Credit: 1-2 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.

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.
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 666 – 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 recommendation and precautions in the retail setting.

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 – 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 669 – 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 670 – Herbal & Alternative Medicine
Credit: 1 hour
This course discusses herbal remedies recently being used as alternative solutions to treat and prevent different diseases.

PHRD 671 – Medication Therapy Management (MTM)
Credit: 1 hour
This course is designed to provide the student pharmacist with an in-depth knowledge of medication therapy management (MTM) services. 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 student pharmacists 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.

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 continue to be a key focus over the next decade. This course will help prepare student pharmacists to develop skills necessary for success in this field. The emphasis will be on the definition of what it means to be a specialty pharmacist, what is involved in a specialty pharmacy career, and where to find specialty pharmacy opportunities. Also, an emphasis will be made on how to utilize state boards, specialty pharmacy associations and specialty hospital organizations as resources.

PHRD 679 – Introduction to Internal Medicine
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 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.

**PHRD 686 – Lipid Management Elective II**  
*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 in medications for dyslipidemia.

**PHRD 687 – Practical Applications in Pediatric Pharmacotherapy**  
*Credit: 1 hour*  
This course is designed to allow student pharmacists with an interest in pediatrics to further develop skills necessary to make rational choices with regard to pediatric pharmacotherapy. These skills will be developed through didactic teaching as well as pediatric case discussions. Student pharmacists will be presented with case based problems and assigned readings for topics at least one week prior to discussion. Advanced concepts of pediatrics will be emphasized.

**PHRD 688 – Issues in Critical Care**  
*Credit: 2 hour*  
This course is designed to introduce critical care principles. This course will illustrate the appropriate clinical application of pathophysiology, pharmacokinetics and pharmacodynamics in the critical care population.

**PHRD 689 – 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 an 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.

**PHRD 690 – Anticoagulation II**  
*Credit: 1 hour*  
This course is designed to enhance those experiences gleaned in all previous course work regarding the epidemiology, pathophysiology and clinical features of patients with Acute Coronary Syndrome (ACS)/Ischemic Heart Disease/Atrial Fibrillation (AFib) by application of state-of-the art therapeutic techniques for patients with ACS/AFib and outcomes associated for treatment of the same.

**PHRD 691 – Applied Statistical Research**  
*Credit: 2 hour*  
This course offers the student pharmacist the opportunity to learn how to use JMP® Statistical Discovery Software (SAS Institute, Cary, NC) in managing, analyzing, and reporting clinical research pharmacy data. It serves to prepare the student pharmacist for designing their research in clinical study.

**PE 515 – New Product Development**  
*Credit: 2 hour*  
In this course, students will explore how new drugs are made available for ultimate use in appropriate patients. Topics covered include unmet medical needs, discovery, pre-clinical and clinical development, regulatory pathways, and the roles of various healthcare professionals. The goal of the course is to provide an opportunity for students to learn the contemporary processes that lead to discovery and development of medications that address unmet medical needs.

**PHRD 692 – Introduction to Managed Care Pharmacy**  
*Credit: 1 hour*  
The course will include guest speakers, small group activities, presentations, and group discussions. Some topics presented include but not limited to: managed care pharmacy concepts and practices, prescription drug benefit design, formulary management, specialty pharmacy, medication therapy management (MTM), drug use evaluation (DUE). By course completion, the student pharmacist will obtain knowledge of managed care pharmacy principles that will serve as valuable preparation for experiential education and career opportunities in a variety of practice settings (including managed care organizations, hospital administration, pharmaceutical industry, and community pharmacy management).
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. Graduate service oriented individuals primed to practice evidence supported physical therapy serving the individual, employer, and profession
2. Graduate individuals prepared to practice in rural regions
3. Graduate individuals prepared to serve within a comprehensive health care system as members of an interdisciplinary health care team

Upon completion of all the requirements at Campbell University’s DPT program, the graduate will be able to:
1. 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 interdisciplinary health care team, advocating for patient/client and profession, in a variety of health care settings with an emphasis on rural areas
   • Administer, manage, and supervise in a variety of professional settings and regulatory environments

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 multitask.

The goals of the admissions process are:
1. To understand each applicant as a whole person;
2. To evaluate the applicant’s potential for success in the DPT program;
3. To assess the candidate’s commitment and aptitude as a future practicing physical therapist.

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

Prerequisites
1. All prerequisites must be completed no later than December 31 of the year prior to matriculation
2. All pre-professional academic work must be completed at a regionally accredited college or university in the United States
3. Science prerequisite coursework must be completed within the last 10 years
4. All prerequisite courses must have earned college credit hours
5. All prerequisite courses must have an earned grade of “C” or better
Prerequisite Courses
- Two semesters of human anatomy and physiology with labs (this may be taken as two combined A&P courses with lab or one anatomy course with lab and one physiology course with lab)-total 8 credit hours
- One semester of general chemistry with lab-total 4 credit hours
- Two semesters of general physics (algebra-based) with lab-total 8 credit hours
- One semester of upper level biology (300+) with or without lab-total 3-4 credit hours**
- One semester of statistics (math or psychology)-total 3 credit hours
- Two semesters of social sciences (psychology, sociology)-total 6 credit hours
- One semester of math (algebra or higher with trigonometry preferred)-total 3 credit hours
**Up to 3-4 hours of exercise physiology can be applied to and count for the upper biology requirement. The course must be a (300+) level course.

Work/Volunteer/Observation Experience
The DPT program desires that students demonstrate a well-rounded, contemporary knowledge of the physical therapy profession. In order to demonstrate this, students must complete a minimum of 50 hours in a variety of clinical settings. A diversity of experience will be weighted during the application process. Examples of appropriate experience can include:
- In-Patient facilities
  - Rehabilitation facility
  - Acute care hospital
- Outpatient facilities
  - Neurological rehabilitation
  - Pediatric/children
  - Industrial rehabilitation
  - Orthopedic/sports medicine
    - Hospital based
    - Private practice
- Home health
- Long term care facility
  - Skilled nursing facilities
  - Assisted living

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

Admissions Process
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
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- 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 standard procedures and safe handling along with annual calibration and safety review. A log will be kept in the program director’s office of all equipment containing a tag number for each item. This tag will be placed by services and placed in 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
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 Abilities1 in our expected student professional behaviors. Faculty assess progression of professional behaviors from beginning level to entry level using identified criteria as a guide2. These essential behaviors are: Commitment to Learning, Interpersonal Skills, Communication Skills, Effective Use of Time and Resources and Resources, Use of Constructive Feedback, Problem-Solving, Professionalism, Responsibility, Critical Thinking, and Stress Management. Behaviors consistent with the APTA Core Values are essential for doctoral level professional behaviors in physical therapy and are expected of Campbell DPT students. These behaviors are: Accountability, Altruism, Compassion/Caring, Excellence, Integrity, Professional Duty, and Social Responsibility2.

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

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

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

Sensory/Observational Skills
Students in the Campbell University DPT program must be able 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, or as necessary, to discuss the academic and/or professional/behavioral performance of all students. Any discussions regarding type of academic and/or professional/behavioral deficiency and remedy occurs with development of an action plan (if remediation is required; see below for remediation process) and draft of a letter from the program director stating the specific academic standing described in the following sections. The letter will be provided to the student via email and hard copy by mail. The letter will contain the following:

- Description of academic standing (remediation, probation, 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 occur 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 experiences 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 cumulative 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 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 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 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 (IPE offerings while on campus and rural health modules), 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.fspt.org/ForCandidatesAndLicensees/NPTE/FixedDateTestingInfo/index.asp for available testing dates.

Employment while in the Program
- Outside employment during the DPT program is strongly discouraged.
- Required program activities cannot be altered. Outside obligations cannot interfere or impede class attendance or completion of assignments and program requirements.
- Students must not substitute for faculty or staff by performing any administrative, clerical, or clinical duties while on supervised clinical experiences.

Transfer Students
CPHS DPT does not accept transfer students directly into the DPT program. Students currently enrolled in another DPT program in the United States seeking admission into the Campbell DPT program will be asked to apply. Interested individuals must follow the procedures for admission. Applicants must be in good academic standing and have a letter from the dean of their institution supporting the request. These admissions decisions will be handled in the same manner as all other applicants to the College by the actions of the Admissions Committee.

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

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

Grading System
The following arbitrary grading scale is utilized for the DPT program:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B</td>
<td>80-89.99</td>
</tr>
<tr>
<td>C</td>
<td>70-79.99</td>
</tr>
<tr>
<td>D</td>
<td>60-69.99</td>
</tr>
<tr>
<td>F</td>
<td>59.99 or below</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

Grades of “A, B, C, D, F, and 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 course sequence is designed to start with foundation courses in the basic sciences, professional development, and early clinical skills. Following the initial foundational coursework, subsequent courses teach clinical assessment and intervention, medical, surgical and pharmacy concepts in patient management from a population based lifespan perspective. Integrated curricular themes in service-learning and early clinical experiences, therapeutic exercise, and approach to patient care using a lifespan model is designed to enhance student learning and promote confidence in application of skills and didactic knowledge. Clinical reasoning courses are designed to enhance student interaction through problem-based learning, application of concepts/skills, and critical interpretation of evidence. The integrated service learning and clinical experiences are designed to encourage inter-professional interaction and collaboration. Assessment of students in the didactic/classroom years is by written examinations, performance on laboratory practical examinations, OSCE, reflective narrative, professional portfolio, and participation in small group activities.

Three clinical 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 experience 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>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 700 – Clinical Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>DPT 702 – Principles of Inquiry</td>
<td>2</td>
</tr>
<tr>
<td>DPT 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>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

#### Summer 1 Courses
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 704 – Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>DPT 706 – Exercise Physiology</td>
<td>2</td>
</tr>
<tr>
<td>DPT 708 – Human Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>DPT 726 – 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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<td><strong>Total</strong></td>
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### Year 2

#### Spring 2 Courses
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<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 714 – Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>DPT 758 – Neurology Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 766 – Therapeutic Exercise 2</td>
<td>3</td>
</tr>
<tr>
<td>DPT 768 – Cardiopulmonary Practice</td>
<td>3</td>
</tr>
<tr>
<td>DPT 770 – Orthotics/Prosthetics</td>
<td>2</td>
</tr>
<tr>
<td>DPT 800 – Full-Time Clinical Experience 1 (6 weeks)</td>
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<td><strong>Total</strong></td>
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</tbody>
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#### Summer 2 Courses
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>DPT 732 – Part-Time Clinical Experience 2</td>
<td>1</td>
</tr>
<tr>
<td>DPT 772 – Life Span Continuum 2 (pediatric)</td>
<td>3</td>
</tr>
<tr>
<td>DPT 776 – Life Span Continuum 3 (musculoskeletal)</td>
<td>3</td>
</tr>
<tr>
<td>DPT 780 – Life Span Continuum 4 (neurological)</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

### Year 3

#### Spring 3 Courses
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<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT 736 – Administration &amp; Management</td>
<td>3</td>
</tr>
<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>
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<tr>
<td>DPT 797: Independent Study Elective ***</td>
<td>2</td>
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<tr>
<td>DPT 805 – 808 Elective***</td>
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<td><strong>Total</strong></td>
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</tr>
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#### Summer 3 Courses
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DPT 802 – Terminal Clinical Experience 1 (16 weeks)</td>
<td>8</td>
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<td><strong>Total</strong></td>
<td><strong>8</strong></td>
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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 joint systems and applied biomechanics concepts will be discussed. Osteo and arthrokinematic movements within joint systems will be presented and discussed with clinical application in a laboratory environment using surface anatomy/palpation.

DPT 702: Principles of Inquiry (2:2:0)  
Credit: 2 hours  
This course is designed to review current concepts of systematic evidence-based practice and will integrate these concepts to physical therapy clinical practice. Students will apply evidence-based practice to a physical therapy related topic of their choosing. Application of these concepts will include critically evaluating relevant evidence in the literature, preparing literature for presentation to other medical professionals and preparing a decision-making algorithm for use in the clinical setting.

DPT 722: Professional Development (2:2:0)  
Credit: 2 hours  
This course will provide students an overview of the physical therapy profession and prepare them for the principles that direct legal and ethical decisions, professional roles, and professional behaviors related to the practice of physical therapy. Past, current, and future modes of the delivery of healthcare will be discussed. Development of skills related to time management and stress, group dynamics, effective study and test taking strategies, and conflict management will be occur. This course includes discussion of the generic abilities, core values, and the evolution of professional growth with components of self-assessment. In addition to role playing activities and group discussion, students will document aspects of professionalism through the use of a professional portfolio throughout the entire curriculum.

DPT 724: Service Learning 1 (1:0:1)  
Credit: 1 hour  
This course starts a series of integrated service learning and early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Inter-professional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

DPT 750: Lifespan Continuum 1 (3:2:3)  
Credit: 3 hours  
Lifespan 1 will introduce the patient/client as a unique individual possessing various restrictions in their ability to move, and therefore to fully participate in their desired and/or assigned societal roles. Lifespan 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 de-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
will be discussed. Related to wounds including coding principles and fire wounds. Different tools to measure wounds appropriately will be utilized. Various types of treatment such as debridement, protective garments, splinting devices, surgical intervention and chemical agents will be discussed. The student will also develop skills to prepare a sterile versus a clean environment as well as use personal protective equipment. The development of strategies to deal with special populations related to wounds such as obesity, diabetes, amputees and the indigent will be interwoven throughout this course. Finally the management and business details related to wounds including coding principles will be discussed.

**Fall, Year 1**

**DPT 710: Pharmacology (2:2:0)**
*Credit: 2 hours*
This course provides an introduction to pharmacology principles and pharmacokinetics. The focus will be on the effect of drugs (by class) on systems and common side effects. The effects of drugs on the central nervous system, skeletal muscle, cardiovascular, respiratory, gastrointestinal, and endocrine systems will be discussed. Drugs used to treat pain, inflammation, infections, and an introduction to chemotherapy for neoplastic disease will be presented.

**DPT 712: Neuroscience (3:3:0)**
*Credit: 3 hours*
This course provides students with a foundation in systems level neuroscience in coordination with the neurorehabilitation curriculum. A focus on the understanding of normal function and pathology within the central nervous system (CNS) will occur. Functional and regional neuroanatomy will be presented. The course is organized by coverage of review for axon physiology and neurotransmission, anatomical organization of the CNS, sensory and motor functions, and description of frequently encountered neurological disorders relevant to physical therapy.

**DPT 728: Clinical Education (2:2:0)**
*Credit: 2 hours*
This course includes lecture, class discussion, and active learning activities regarding documentation practices and standards in physical therapy; professional behavior and communication in the clinical setting, including communication when dealing with the unusual or unexpected patient situations; generational and cultural differences; teaching and learning principles, including learning styles, as applied to student and patient education; and proper use of the CPI as an assessment tool. Activities to prepare the student for clinical internships include an overview of the site-selection process, documentation activities, and interactive learning styles activities.

**DPT 730: Service Learning 2 (1:0:1)**
*Credit: 1 hour*
This is the second a series of three integrated service learning courses and associated early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Interprofessional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

**DPT 756: Therapeutic Exercise 1 (3:2:3)**
*Credit: 3 hours*
This course is an introduction to the principles of therapeutic exercise to promote strength, balance, stability, endurance, flexibility and function. The ICF model of enablement, the systems model of motor control and the task oriented approach to movement analysis will be used as frameworks for evaluating simple (not complex) movement dysfunction. This will allow for individualized development of corrective exercise plans to address pain and functional mobility losses for sicker patient populations to include hospital, long-term care, sub-acute and post-operative management.

**DPT 760: Hospital Based Practice (3:2:4)**
*Credit: 3 hours*
This course will present educational material related to patient management encountered in diverse hospital settings. Hospital settings to be discussed will include: general medical, surgical, emergency room, intensive care, progressive care, critical care, sub-acute, rehabilitation, cardiac care, labor and delivery, and orthopedic sections. Items related to patient management to be discussed, analyzed and practiced will include chart review, safe patient handling techniques, discharge planning as well as documentation. The process of practicing autonomously within an integrated multidisciplinary team will be emphasized. Evaluation, assessment and treatment techniques typically encountered by physical therapists will be discussed and practiced for patients across the lifespan. The continuum of care model will be utilized. It will be essential for the student to understand how to operate within a complex environment involving instrumentation, life sustaining equipment, tubes, lines and monitoring machines. It will be important to recognize the value of diagnostic testing, lab values, contraindications and precautions.
DPT 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.

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. Interprofessional 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 across the lifespan. 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 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. A variety of learning activities will be incorporated into the presentation of course material, including active learning, demonstration, lab practices, 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 managemen 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. A variety of learning activities will be incorporated into the presentation of course material, including active learning, demonstration, lab practices, case studies, independent problem assignments, and role-playing.

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, arthrogram, 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.

**Fall, Year 3**

**DPT 794: Licensure Preparation (1:1:0)**  
*Credit: 1 hour*  
This course is designed to assist students with formal licensure preparation. Students will review areas of study within the FSBPT content areas and take quizzes with timed limitations that mimic the licensure examination. Questions will be formatted to mimic the licensure examination. Activities may include group discussion, self-study using licensure preparation guides, and self-assessment within FSBPT content areas through quizzes on Blackboard or purchased licensure preparation software.

**DPT 804: 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 806 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.

**Summer, Year 3**

**DPT 802: Terminal Clinical Experience 1 (8:0:24)**  
*Credit: 8 hours*  
Sixteen weeks of full-time experiential training (approximately 640 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 802 may include acute care, musculoskeletal, neuromuscular, general practice, or elective.
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 patient's/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 review.
- 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

Intervention

- 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, payers, other professionals and other appropriate individuals.
- 7D25. Determine those components of the plan of care that may, or may not, be directed to the physical therapist assistant (PTA) based on (a) the needs of the patient/client, (b) the role, education, and training of the PTA, (c) competence of the individual PTA, (d) jurisdictional law, (e) practice guidelines policies, and (f) facility policies.
- 7D26. Create a discontinuation of episode of care plan that optimizes success for the patient in moving along the continuum of care.

Intervention

- 7D27. Competently perform physical therapy interventions to achieve patient/client goals and outcomes.

Interventions include:

a. Airway Clearance Techniques
b. Assistive Technology: Prescription, Application, and, as appropriate, Fabrication or Modification
c. Biophysical Agents
d. Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
e. Integumentary Repair and Protection
f. Manual Therapy Techniques (including mobilization/ manipulation thrust and nonthrust techniques)
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

Department of Physician Assistant Practice
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Phone: (800) 760-9734, ext. 1210

Academic Program
The Physician Assistant Program at Campbell University delivers a patient-centered, clinically practical, evidence-based educational program which will prepare students for the opportunity to enter one of the fastest growing health care professions. Based on the medical model, the Program provides a dynamic, integrated, primary care based curriculum with focus on the medical knowledge and clinical skills necessary for sound medical practice. Students who complete the program will earn a Master of Physician Assistant Practice (MPAP) degree.

Campbell PA Mission
Mission Statement
Built on the tenants of faith, learning and service, Campbell’s PA Program prepares servant leaders to practice compassionate, competent, team-based health care.

Campbell PA Mission
Equipping to serve

Campbell PA Program Values
Campbell’s PA program believes in and supports:
• A diverse, inclusive, Christian environment
• Patient-centered care
• Holistic care of patients – body, mind and spirit
• Interprofessional education and team-based practice
• Primary care focus with emphasis on the needs of rural and underserved populations
• Embracing a service-oriented mindset

Program Goals
• Recruit a diverse student body capable of completing a rigorous didactic and clinical curriculum

• Prepare graduates with the knowledge and skills to deliver primary healthcare to a diverse, underserved population
• Support a culture of Faith, Learning and Service
• Attain PANCE pass rates above the national average
• Secure and support experienced and skilled faculty who deliver a high-quality physician assistant educational experience to students of the program

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/

Admission Policies
The PA program is committed to selecting applicants who have demonstrated academic success and dedication to patient care. In order to be an asset to the physician assistant profession, candidates should also possess integrity, compassion, empathy, flexibility, and the ability to multitask.

The goals of the admissions process are:
• To understand each applicant as a whole person;
• To evaluate the applicant’s potential for success in the PA program;
• To assess the candidate’s commitment and aptitude as a future 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 prerequisites 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 completed at the time of submitting application.
• Hours earned from pharmacy technician, veterinarian technician, or laboratory technician experiences can be used as supplemental hours in addition to the 1,000 hours of direct hands-on patient care experience.
• Hours obtained for course credit during educational training will not count toward the required 1,000 hours.
• Recommended 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 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
• Citizenship Status and Experiential Education
• Complaints/Grievances
• Counseling
• Criminal Background Check & Drug Screen
• Environmental Health and Safety
• Financial Aid
• 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:
A candidate must be able to execute 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.

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.

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.

Exam Protocol – Makeup

Students having academic difficulty can request tutoring by contacting the Coordinator for Academic Support Services. There is no fee for this service. The number to call is 910-814-5693.
Advisors may refer students for tutoring and assessment as part of a remediation plan.

1. Didactic Exam Remediation
   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 Remediation

End-of-Rotation Exam Remediation
The final grade for clinical rotations is a combination of end-of-rotation (EOR) exam grades, preceptor evaluation, written assignments, and the professionalism evaluation, as outlined in the course syllabus. Failure of any EOR exam, with a score of less than 65%, must be successfully remediated with a written exam and 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:

Course Failure: A student who receives a cumulative final grade in a course of less than 70% will initially receive a course failure and be placed on academic probation for the remainder of the Program. 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. If all remediation requirements are met and remediation of the course is completed successfully, the course grade will be advanced to 70% and the student will receive a final letter grade of C on transcript. A student may not progress to subsequent block without successful remediation of course. Failure to remediate the course successfully will result in recommendation to the APSC for dismissal from the Program.

Should a student receive a final cumulative grade of less than 70% in any additional course within the didactic curriculum or less than 65% within the clinical curriculum, it will not be 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 parameters of student’s academic probation. Students who are placed on Academic Probation during the didactic year will remain on Probation for a minimum of the remainder of the first year of the curriculum. Academic Probation status will be reviewed at the conclusion of the didactic year at which time consideration for removal of Academic Probation status will only be considered for students who have shown consistent improvement of academic performance. 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 course while on academic probation for a previous course failure
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.
The curriculum described was designed to meet the accreditation requirements. 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 assessments at the conclusion of the clinical year which are required 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>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
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</tbody>
</table>

<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>
<td><strong>12</strong></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Block 3 Courses</th>
<th>Credit Hours</th>
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</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>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 4 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAP 526 – Clinical Medicine IV</td>
<td>3</td>
</tr>
<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>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Course Descriptions

Didactic Courses

**MPAP 531 – Human Anatomy & Physiology**
Credit: 4 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 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...
This course will focus on the management 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.

**MPAP 526 – Clinical Medicine IV**  
*Credit: 3 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 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 fifth 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 522 – 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: 1 hour*  
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 five 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
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 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. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

**MPAP 522 – Clinical Skills III**  
*Credit: 3 hours*  
This course is the third 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 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 524 – Clinical Skills I**  
*Credit: 3 hours*  
This course is the first 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 529 – Clinical Skills V**  
*Credit: 3 hours*  
This course is the last in the 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, pathophysiologic 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.
This 4-week rotation enables students to apply medical interventions for internal medicine patients in the inpatient setting. Under the direction of 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 surgery units/practices. The student will learn pre-op, intra-operative, and post-operative patient care. The student will scrub into surgical cases and assist the surgeon as indicated. The student will participate in the management of the surgical inpatient, and assist with discharge planning. The student may be assigned to an on-call team and respond to emergency in the ED and OR with the team.

**MPAP 605 – Pediatrics**  
**Credit: 5 hours**  
This 4-week rotation will expose the student to the clinical practice of pediatric medicine. Rotations will be at an affiliated inpatient or outpatient practice. Students will care for infants, children, and adolescents. Duties will include routine health maintenance, physical exams, acute care, and patient education. The student will recognize normal development and appreciate common abnormalities of growth and development. Students will become familiar with the evaluation and treatment of common pediatric disorders. Emphasis will be on preventive care and family dynamics.

**MPAP 606 – Psychiatry**  
**Credit: 5 hours**  
This 4-week rotation enables students to see patients in either outpatient or inpatient mental health facilities. The student will develop skill counseling patients with psychiatric and psychosocial disorders. Under the direction of the preceptor, the student will become familiar with the use of psychotropic therapeutics. Students will learn to identify and refer “at-risk” patients.

**MPAP 607 – Women’s Health**  
**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.

**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
- 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 life-long 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 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
- Citizenship Status and Experiential Education
- Complaints/Grievances
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Financial Aid
- 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 typically 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 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.

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**Curriculum**

**First Year**

<table>
<thead>
<tr>
<th>Semester 1 Courses</th>
<th>Credit Hours</th>
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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>
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<tr>
<td>PUBH 699 – Practicum in Public Health</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<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>
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**Second Year**

<table>
<thead>
<tr>
<th>Semester 3 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 550 – Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 682 – Ethical issues in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 699 – Practicum in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester 4 Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 690 – Research Project</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

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**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 sciences, an understanding the health impact of various environmental exposures, and the public health approach to controlling and eliminating environmental health risks.

PUBH 560 – Principles in Epidemiology
Credit: 3 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 661 – 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-Fettnerman 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. Dual degree students can also apply up to eight credit hours from the MBA program to the PharmD curriculum as didactic elective credit. 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>
</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

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

MBA 790 – Strategic Management “Live Case” Seminar (21 hour pre-requisite) 3

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 775 – Study Abroad</td>
<td>3</td>
</tr>
<tr>
<td>MBA 708 – Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Services Focus Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 732 – Management of Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>TRST 630 – Investment Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TRST 631 – Advanced Investment Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TRST 633 – Advanced Income Taxation</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Management Focus Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 731 – Healthcare Finance</td>
<td>3</td>
</tr>
<tr>
<td>MBA 743 – Healthcare Policy &amp; Law</td>
<td>3</td>
</tr>
<tr>
<td>MBA 754 – Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 771 – Healthcare Strategy and Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Transfer of Courses

Students may substitute up to nine hours of PharmD courses as elective courses to the MBA program. Up to eight hours from the MBA program can be applied to the PharmD curriculum as didactic elective credit.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRD 521 – US Health Care</td>
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</tr>
<tr>
<td>PHRD 635 – Law &amp; Ethics I</td>
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<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/MS in Clinical Research

The PharmD/MS in Clinical Research 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. This program allows an individual to differentiate themselves in the competitive pharmacy field by expanding career opportunities including...
positions in clinical development, medical affairs, investigational drug pharmacy, medical information, health economic & outcomes research, pharmacovigilance, product safety, and academia.

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:

**MSCR Courses**

- CLNR 505 – Principles of Clinical Research
- CLNR 515 – New Product Development
- CLNR 517 – Biostatistical Literacy
- CLNR 518 – Biostatistics II*
- CLNR 520 – Advanced Data Management
- CLNR 525 – Medical Ethics
- CLNR 530 – Regulatory Affairs
- CLNR 535 – Clinical Trial Operations
- CLNR 552 – Scientific Communications
- CLNR 566 – Advanced Study Design & Analysis I
- CLNR 567 – Advanced Study Design & Analysis II*
- 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*
*Recommended electives

**PharmD/MS in Pharmaceutical Sciences**

The MS in pharmaceutical sciences curriculum alone is two years and the PharmD curriculum alone is four years. The PharmD/MS in Pharmaceutical Sciences dual degree program allows elective courses to count in both programs so that both degrees can be completed in five years.

**Admissions Requirements**

Students interested in pursuing the dual degree must gain acceptance into both programs. Applicants must complete all requirements for both programs to qualify for the PharmD/MS in Pharmaceutical Sciences. The dual degree program is open to accepted and enrolled pharmacy students. Interested pharmacy students must complete a separate application. Neither GRE nor PCAT scores are required to apply. Official college transcripts will transfer over from the PharmD application.

**PharmD/MSPS Curriculum**

**Year 1**

All students take the same Core/required courses

**Fall 1 - Block 1**

- PSCI 510 – Professional Pharmaceutical Development 1 0.5
- PSCI 511 – Basic Pharmacology and Cell Biology 1.5
- PSCI 512 – Basic Protein Properties and HPLC Theory 1.5
- PSCI 513 – Basic Lab Skills: Analytical 1

**Total** 4.5

**Fall 1 – Block 2**

- PSCI 510 – Professional Pharmaceutical Development 1 (continued) 1.5
- PSCI 521 – Intermediate Cell Biology & Bioreactors 1.5
- PSCI 522 – Method Development & Basic Validation Concepts 1.5
- PSCI 523 – Intermediate Lab skills 1 1
- PSCI 524 – Intermediate Lab skills 2 1

**Total** 5

**Spring 1 - Block 3**

- PSCI 530 – Professional Pharmaceutical Development 2 1
- PSCI 531 – Intermediate Pharmacology 1.5
- PSCI 532 – Basic Pharmaceutics 1.5
- PSCI 533 – Basic Lab Skills: Biological 1

**Total** 5

**Spring 1 – Block 4**

- PSCI 530 – Professional Pharmaceutical Development 2 (continued) 1
- PSCI 541 – Intermediate Biotechnology 1.5
- PSCI 542 – Intermediate Pharmaceutics 1.5
- PSCI 543 – Intermediate Lab skills 3 1
- PSCI 544 – Intermediate Lab skills 4 1

**Total** 5

**Summer**

- PSCI 690 – Research Proposal 1.5

**Years 2-5**

Students complete Doctor of Pharmacy Program

Each program requires 8 credit hours of electives. Students will be able to count the 8 credit hours of electives they take in both the MSPS and Doctor of Pharmacy programs, decreasing the overall course load for the two programs by 8 credit hours. Student must complete at least 4 credits that are approved as electives for the MSPS program and at least 4 credits of elective that are approved for the PharmD program. PSCI 515 – New Product Development, a required course for the MSPS program, must be taken as 2 of the 4 elective credits for the PharmD program. Also, during years 2-5, student must complete one of these two options:

1. Co-ops in the pharmaceutical Industry. These would be a total of approximately 4 months of full time work, scheduled during the first summer before starting in the PharmD program, and during the subsequent summers or during final year as 1 or 2 of the rotations required for the Doctor of Pharmacy program.
2. A lab-based research project with a Campbell faculty member. This would typically be done during the summers, but work on the research project can continue through years 2-5.

**PharmD/MS in Public Health**

The PharmD/MSPH dual degree program will give students an opportunity to pursue both clinical and public health training so they can function not only as clinicians but also contribute as community health leaders, educators and policy makers, affecting the local, state and national health care systems.

The dual degree program is open to accepted and enrolled pharmacy students. This additional one-year program provides 32 credit hours of public health courses, and both the PharmD and MSPH degrees are awarded after five years of study.

Interested pharmacy students must complete the dual degree PharmD/MSPH application to receive dual degree status. GRE scores will be waived for students who have a letter of acceptance from the PharmD program.

Students who are pursuing the PharmD/MS in Public Health will complete one year
of public health study prior to beginning courses within the pharmacy curriculum. The year as an MSPH student will be solely devoted to public health curriculum.

Program Requirements
A minimum of 32 credit hours of core courses must be completed by all students to earn a MSPH degree.

Fall
PUBH 540 – Statistical Methods I
PUBH 525 – Overview of Rural Health
PUBH 580 – Health Policy & Management
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Spring
PUBH 560 – Epidemiology
PUBH 520 – Health Education & Promotion
PUBH 541 – Community Health Assessment & Evaluation
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Summer
PUBH 682 – Ethical Issues in Public Health
PUBH 550 – Environmental Health
PUBH 690 – Research Project
PUBH 699 – Practicum in Public Health

Electives
In addition to the above core credits, students are required to complete 10 hours of electives from the pharmacy curriculum. The following 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 667 – Pharmacy Christian Missions
- PHRD 664 – Drugs of Abuse
- PHRD 660 – Medication Errors

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.

Program Requirements
A minimum of 32 credit hours must be completed to earn an MSPH degree.

Fall
- PUBH 540 – Statistical Methods I
- PUBH 525 – Overview of Rural Health
- PUBH 580 – Health Policy & Management
- PUBH 502 – Seminar in Public Health
- PUBH 699 – Practicum in Public Health

Spring
- PUBH 560 – Epidemiology
- PUBH 520 – Health Education & Promotion
- PUBH 541 – Community Health Assessment & Evaluation
- PUBH 502 – Seminar in Public Health
- PUBH 699 – Practicum in Public Health

Summer
- PUBH 682 – Ethical Issues in Public Health
- PUBH 550 – Environmental Health
- PUBH 690 – Research Project
- PUBH 502 – Seminar in Public Health
- PUBH 699 – Practicum in Public Health

Electives
In addition to the above core credits, students are required to complete 10 hours of electives from the law program. Students may choose coursework from the approved list below.

In addition, MSPH/JD students may apply for elective credit for completing other courses, participating in faculty-directed public health research independent studies, or completing experiential learning experiences in which there is some clear public health relevance. Students are especially encouraged to consider externships and the Senior Law Clinic, the Community Law Clinic, and the Restorative Justice Clinic. If students wish to have additional learning experiences considered for MSPH elective credit, the student must submit an online application that articulates the manner in which the experience offers the opportunity to demonstrate at least three CUPHP competencies (Foundational and/or Rural Health). Also, the student must submit the manner in which assignments will be 103 modified or tailored to emphasize the public health relevance of the coursework.

- Administrative Law
- Environmental Law
- Family Law
- Health Law Seminar
- Intellectual Property
- Law, Culture, Society and Philosophy
- Law and Medicine
- Local Government Law
- National Security Law
- Scientific Evidence

MSPH Credit Transfers to Law Degree
The law school will count the following six credits (when earned or awarded on the MSPH transcript) toward a law student’s JD degree requirements:
- Health Policy and Management
- Statistical Methods

MS in Clinical Research/MBA
A joint offering with the Lundy-Fettersman School of Business, the MS in Clinical Research/Master of Business Administration dual degree provides students who are interested in both 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. This program allows an individual to focus the application of both degrees in areas of medical affairs, sales & marketing, health economics & outcomes research, strategic development, leadership & management, and finance.

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 core courses (24 credit hours):
- CLNR 505 – Principles of Clinical Research
- CLNR 515 – New Product Development
- CLNR 517 – Biostatistical Literacy
- CLNR 520 – Advanced Data Management
- CLNR 525 – Medical Ethics
- CLNR 530 – Regulatory Affairs
- CLNR 535 – Clinical Trial Operations
- CLNR 552 – Scientific Communications
- CLNR 566 – Advanced Study Design & Analysis I
- CLNR 606 – Clinical Research Seminar
- CLNR 690 – Research Project I
- CLNR 691 – Research Project II

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
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. This program allows an individual to differentiate themselves from other Physician Assistants by expanding practice opportunities in areas including academic medical centers, community-based investigative centers, clinical research industry, and academia. 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, 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, 696 – MPAP/MSCR Clinical Research Project II-III, students matriculate into the MPAP program for a fall semester start. Students complete CLNR693, 696 during the clinical rotation section of the MPAP program.

MSCR Courses

- CLNR 505 – Principles of Clinical Research
- CLNR 515 – New Product Development
- CLNR 517 – Biostatistical Literacy
- CLNR 518 – Biostatistics II*
- CLNR 520 – Advanced Data Management
- CLNR 525 – Medical Ethics
- CLNR 530 – Regulatory Affairs
- CLNR 535 – Clinical Trial Operations
- CLNR 552 – Scientific Communications
- CLNR 566 – Advanced Study Design & Analysis I
- CLNR 567 – Advanced Study Design & Analysis II*
- CLNR 606 – Clinical Research Seminar
- CLNR 690-Research Project I

*Recommended Electives

MPAP

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
- 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

- MPAP 601 – Emergency Medicine
- MPAP 602 – Family Practice
- MPAP 603 – Internal Medicine
- MPAP 604 – Surgery
- MPAP 605 – Pediatrics

MPAP 606 – Psychiatry
- MPAP 607 – Women’s Health
- MPAP 608 – Primary Care
- MPAP 611 – Elective Rotation 1
- MPAP 612 – Elective Rotation 2
- MPAP 613 – Senior Seminar

CLNR 693 – MPAP/MSCR Clinical Research Project II
- CLNR 696 – MPAP/MSCR Clinical Research Project III

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:

<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>
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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)